GREEN RIVER AREA DEVELOPMENT DISTRICT

HAZARD MITIGATION PLAN

2021 UPDATE



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Introduction

Natural Hazards—floods, tornadoes, winter storms, droughts, earthquakes, wildfires, landslides, extreme temperatures—are unfortunate, but are ever-present events that occur every day in the world around us. These hazards pose threats to human life, the safety of the communities, the environment in which we live, the services citizens on, and our very way of life. These occurrences are natural and inevitable and there is limited control over intensity or frequency. What can be regulated is how communities prepare for these events and reduce the effects of disasters. The Hazard Mitigation Plan seeks to do just that—reduce the costs of disaster.

This plan is based around a series of projects designed to reduce that cost of disaster—through education, infrastructure resiliency, capability and capacity improvements, building code enforcement and recovery preparations. The remainder of the plan serves as justification for those disaster mitigation projects, through a comprehensive risk assessment, a systematic mitigation strategy and fostering a coalition of partners that work daily to protect the way of life valued by all citizens. Natural Disasters do not obey jurisdictional boundaries—acknowledging this principle was central to the plan development at the regional level, while ensuring the engagement of each municipality at the community level.

Plan Purpose/Description

The Hazard Mitigation Plan for the Green River Area Development District (GRADD) region seeks to break the cycle of disaster damage—reconstruction—repeated damage. This cycle can only be disrupted through eliciting positive change in the region and driving greater investment in resilient infrastructure through prioritization of projects that do the most mitigation. The plan will ultimately help guide those investment decisions. The process of devising that investment strategy and maximizing federal dollars requires a multi-faceted approach. Vulnerabilities throughout the region must be pinpointed and, scalable, phase-able projects to reduce these vulnerabilities, must be prioritized. This plan demonstrates the exposure and vulnerability of critical infrastructure, people, economy and resources of the region, identifies prioritized projects that will reduce that exposure and finally lists potential funding sources and the methodology that drives the decision-making process.

Since the beginning of this process, the goal of this plan update has been to reduce the cost of disasters in the region—impact on critical infrastructure and the services provided, vulnerable populations, economic stability and the region's resources. This goal focused the development of the Hazard Mitigation Plan Update, with the essential end component being a list of practical, implementable projects that reduce the cost of disasters. The remainder of the plan serves as justification and is produced in a variety of ways: through studying history of natural disasters, guided research and input gathered from local communities about the ways in which their services are provided and studying at a local, versus regional, level on how those vulnerabilities can be ultimately reduced. By engaging support at the local level, this plan is a living document, capable of implementing positive change at the local level.

It serves as a tool and resource for officials involved in the decision-making process. The assembly of this plan centered around the community meetings—open guided forums where local officials, citizens and stakeholders could see the purpose and goals for the plan and how it could impact lives. These critical stakeholders helped to guide the plan through identifying priorities important to their respective communities. In the first round of community meetings, a risk assessment was conducted identifying critical places, people and resources within each specific community. Phase II of meetings identified and prioritized projects to reduce the vulnerabilities of those critical places, people and resources.



Figure 1.1 Pictured above: Community meeting at the City of Uniontown with planning staff and local officials.

In the end, the plan itself was not the most important outcome of the process; instead, the relationships created and the cooperation generated among GRADD communities will generate greater resiliency as the region looks to the future. The lessons learned from the Covid-19 Pandemic changed the approach to the planning process and highlighted the need for stakeholders with different interests to work together to ensure the common good. GRADD is one of 15 area development districts established by statute in the Commonwealth of Kentucky.

The seven counties and 27 incorporated cities served by GRADD are in the northwest region of the state and cover a total geographic area of 2,619 square miles. Hilly land situated on the southern shore of the mighty Ohio River and bisected by the Green River, the GRADD region lies within what is often referred to as the Western Kentucky Coal Field, along the southern edge of the Illinois Coal Basin.

This region in western Kentucky contains vast open fields that are widely used as farmland—corn, soybeans, wheat and burley tobacco remain the staple crops of the area. The land that the Commonwealth of Kentucky was founded on generally slopes from east to west and the GRADD region is no different—Black Mountain in eastern Kentucky at 4,145 feet, is the highest point in the state and the lowest point is 257 feet above sea level—situated in far western Kentucky along the Mississippi River. The GRADD region generally follows the same sloping plain from east to west; elevations of 600 feet above sea level in the east gradually sloping to the shores of the Ohio River along the western border.

Population Projection

Population projections show, however, a decline in totals by the 2040 census. This decline is attributed to the median age of the current population. Some factors of the decline must be a significant focus of local officials moving forward. The continued reduction in the use of coal and the downstream job losses, as well as the increasing efficiency of agriculture and industry, will compound the population trajectory due to residents leaving the area to find employment. The local officials from this region work diligently to attract stable job growth and this Hazard Mitigation Plan must complement that effort. Community and regional resiliency will pay dividends on the investment by creating a safe place to raise a family and this plan must help guide that investment.

The population projections for the region indicate a significant increase in those individuals aged 65 or older, approximately 14 percent of the total population in 2010 to just under 23 percent of the total population in 2040. As evidenced by the significant battles faced during the pandemic, the aging population must be at the forefront of planning for years to come. The COVID-19 pandemic shed light on struggles faced by an aging population and the infrastructure and services built within the region must account for that segment of the population. Special considerations must be addressed to reach the aging and secure their wellbeing.

Economy

Economic profiles of a city, county and region are an integral part of building the Hazard Mitigation Plan and assessing the resiliency of each community. The 2008 economic downturn and housing crisis was a defining moment in this region, as well as the Commonwealth of Kentucky and the United States as a whole. Battling unemployment rates of nearly ten percent, severe wind damage from the remnants of Hurricane Ike in the fall of 2008 and fighting the 2009 Ice Storm, this period was significant during the planning meetings.

Since that period, the region has undergone losses in jobs from coal mining, manufacturing and agriculture, but the unemployment rate today remains lower than it has been since 1990. The median household income for the GRADD region trends like the rest of the Commonwealth but does fluctuate significantly across the seven counties of GRADD. This fluctuation is derived from several factors including the large areas of industry, the loss of coal revenue and jobs, and the large component agriculture plays in our region; however, the larger cities in the region and the heaviest industrial centers tend to influence those levels the most as shown in the chart in the appendix. Part of the resiliency of the region is shown in the diversity of the economy throughout the seven counties. According to the U.S. Bureau of Labor, while the goods-producing jobs in the United States make up 16 percent of the overall economy, in the GRADD region goods-producing jobs represent almost 42 percent of the employment. This trend was especially representative during the Covid-19 Pandemic experienced throughout 2020. GRADD was the only area in the United States where the unemployment rate declined during the Pandemic.

Employment

Though the total labor force has been reduced slightly since 2010, the employed labor force has risen significantly. Combatting the economic downturn in 2010 and with an unemployment rate of 11.5 percent, the region was able to rebound and reduce the unemployment rate to 4.2 percent for the region in 2019 as shown in the chart in the appendix.

Unemployment & Wages

A region's unemployment rate and average wages are important to resiliency planning and the ability to recover from disaster. The cost of living in the region remains low, but the average wages in the region outside of Hancock County remain below the state average. The labor force

has grown modestly in the region overall and the rate for unemployment today is lower in all seven counties than it was in 1990 as shown in the chart in the appendix.

Unemployment Trends

The Great Recession and economic downturn in 2008 impacted the GRADD area significantly, showing no immunity to the effects felt by the rest of the Commonwealth and the country. From 2010 to 2019, the unemployment rate has been cut in half in every GRADD county and generally followed the trend of Kentucky and the United States as a whole. The GRADD counties have also faced a significant reduction in coal jobs and coal revenue. The drop in natural gas prices led to closures of coal mines in the majority of GRADD counties and companies that supported that mining were forced to close or layoff their workforce. Coal remains a vital part of segments of the GRADD region, but the decline in production has impacted unemployment and the economy overall. The unemployment rate in both 2010 and 2019 can be examined further as shown in the charts in the appendix. The Covid-19 Pandemic experienced all over the world had devastating effects in all areas of existence—loss of life, sickness, changes to the grieving process for those experiencing loss, but also change to individual ways of life through the devastating economic impacts. Lockdowns and executive orders to decrease the spread of the disease impacted all segments of the economy.

Some areas of the country and portions of the population were affected in a greater way than others, and the Green River Area Development District were somewhat insulated from some of those damaging effects. The diversity of the economy played a significant role in that insulation. Jobs that were considered essential allowed many employers to remain open and in production.

Wages

There exists a significant discrepancy in average wages throughout the GRADD region. Hancock County is positioned well, due to the existent industrial base. Daviess and Henderson Counties have the highest populations in the GRADD region, and the average wages reflect the business and industry located there. These counties are adjacent to the greater Evansville, IN metro. The following graph and table break down the average yearly wages since 1990 for GRADD. This 2018 data captures coal wages in the region then. Since 2018, average wages have fallen because of the loss of coal production and the high wages associated with that industry as shown in the charts in the appendix.

The loss of coal jobs has been detrimental to the economy as a whole and a way of life for residents throughout the GRADD region and the Commonwealth. In 2001, Webster County had 805 employees in coal mining. Fast forward to Spring 2019, only 237 people were employed in coal mining. In the fall of 2020, Dotiki Mine, the last coal mine in Webster County closed. While other major employers like Tyson Foods and Big Rivers Electric have absorbed some of the cuts to coal mining employment, those job totals cannot be easily replaced. Coal mining remains strong in Union County, with roughly 1,000 employees at Riverview Coal. Union County also remains the Commonwealth's largest producer of coal.

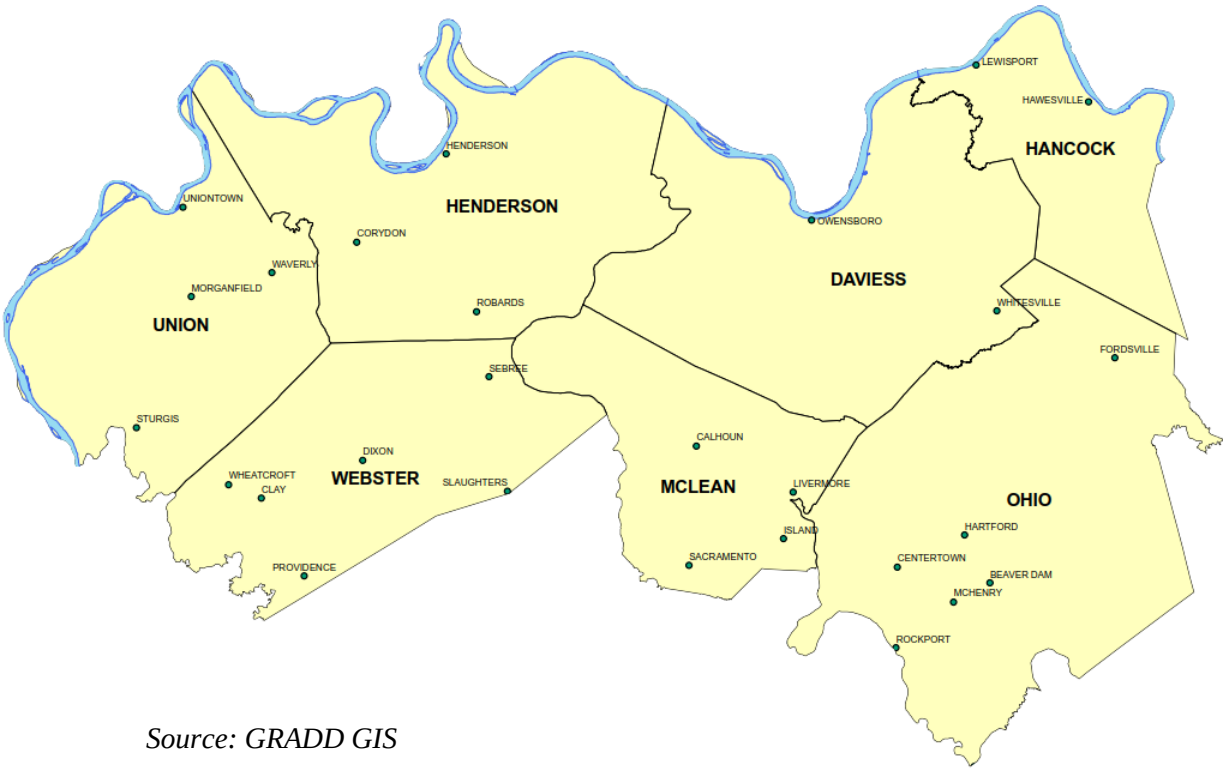
Section 2: Prerequisites

Green River Area Development District

GRADD is comprised of seven counties—Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster, along with 27 municipalities. The district purposes include:

- promote economic development; carry out programs and objectives established by the General Assembly and/or the Governor of the Commonwealth of Kentucky;
- carry out programs established by the U.S. Congress and Executive Orders of the President; promote and advance the commercial, industrial and agricultural growth and development of GRADD;
- promote the commercial, educational, cultural and social interests, growth and development within GRADD;
- promote the general welfare, health, prosperity and quality of life of GRADD; and
- participate in projects promoted and supported by local, state, or federal agencies.

Figure 2.1 - 34 Municipalities of the Green River Area Development District



Source: GRADD GIS

Section 2: Prerequisites

GRADD is governed by a Board of Directors, comprised of elected officials as a majority. The Board of Directors employs an executive director, who retains a leadership team of directors and staff for each department in the organization. Also supporting the mission of the district are a group of functional advisory committees—the Green River Regional Health Council, GRADD Regional Transportation Committee, Green River Council on Aging, Green River Workforce Development Board, Green River Economic Development Corporation and the GRADD Water Management Council. Appointments to these committees are made by the Board of Directors in accordance with its bylaws.

Board of Directors

The GRADD Board of Directors is composed of at least 51 percent elected officials, which includes each county judge/executive, the mayor of at least one incorporated city in each county located within the district, the mayor of each of the two largest cities within the district and a mayor's representative from each county. The bylaws allow for authorized representatives to be appointed for a portion of those seats. The Board of Directors is also comprised of 49 percent citizen members who reside in the district, including public and private sectors, women, minority, low-income and professional services.

The board is served by an executive committee, including the chair, vice chair, secretary, treasurer, minority member of the board, the executive director of GRADD (in an advisory role) and additional members to include at least one representative from each county in the district. Board meetings are open to the public and are held bi-monthly with meetings advertised to the public.

Table 2.1 - Green River Area Development District 2020 Board of Directors

Board Member	Board Position	Entity
David Johnston, Chair	County Judge Executive	Ohio County
Brad Schneider, Vice-Chair	County Judge Executive	Henderson County
Al Mattingly, Secretary	County Judge Executive	Daviess County
Steve Henry, Treasurer/Chairman	County Judge Executive	Webster County
Steve Austin	Mayor's Representative	Henderson County
Lora Basham	Mayor's Representative	Hancock County
Pat Clark	Mayor's Representative	Webster County
Melissa Coker	Citizen's Representative	Union County

Randy Greenwell	Mayor's Representative	Union County
Ryan Hammack	Citizen's Representative	Webster County
Betty Howard	Mayor's Representative	McLean County
Robert Howard	Emeritus Member	Daviess County
Vicki Hughes	Citizen's Representative	McLean County
William Markwell	Citizen's Representative	Henderson County
Patsy Mayfield	Mayor's Representative	Daviess County
Dean Minton	Citizen's Representative	Ohio County
Helen Mountjoy	Citizen's Representative	Daviess County
Janeth Nicolas	Minority Representative	Henderson County
Adam O'Nan	County Judge Executive	Union County
Nate Pagan	Owensboro Mayor's Representative	City of Owensboro
Franklin Powers	Citizen's Representative	Hancock County
Johnny "Chic" Roberts	County Judge Executive	Hancock County
Paul Sandefur	Mayor's Representative	Ohio County
David Sellers	Mayor's Representative	Henderson County
Curtis Dame	County Judge Executive	McLean County
Tammy Belt	Chair--Green River Economic Development Corporation	
Karen Cecil	Chair--Workforce Investment Board	
Pete Conrad	Chair--Water Management Council	
Henrietta Harris	Chair--Council on Aging/Minority	
Blaine Pieper	Chair--Green River Health Council	

GRADD Staff

The Green River Area Development staff is comprised of professionals with diverse backgrounds in areas of human service, aging, workforce development, economic development, infrastructure planning, transportation and GIS mapping. Staff members in the Community and Economic Development Department that were directly involved in the construction of the Hazard Mitigation Plan are listed below.

Community and Economic Development Department

- Joanna Shake
- Blake Edge
- Therese Payne
- Gina Boaz
- Jennifer Alvey
- Jessie Howard,
- Skyler Stewart
- Tom Lovett

Section 2: Prerequisites

Hazard Mitigation Council Overview

The following mission statement of the Hazard Mitigation Council has remained the consistent driving force behind the goal and strategy of the service provided through their work:

> *"Through regular maintenance of, and updates to, the GRADD Hazard Mitigation Plan, the GRADD Hazard Mitigation Council strives to protect citizens, property, and the environment from natural hazard event damages. The council encourages the participation of stakeholders throughout the region in meetings and events designed to increase public awareness. With a commitment to the planning process, the council seeks and identifies resources for risk reduction and determines actions that will protect all aspects of the region for the future."*

The Hazard Mitigation Council's primary focus is the development, maintenance and update of the multi-jurisdictional Hazard Mitigation Plan for the GRADD Region. The purpose of the Council is to work in conjunction with city officials, county officials, Kentucky Emergency Management and the Department of Homeland Security through the Federal Emergency Management Agency, pursuant to the Disaster Mitigation Act of 2000, adopt the plan by all jurisdictions and the GRADD Board of Directors.

Council members includes a representative of each city and county and private sector partners as voting members. The officers of the Council include a chairperson and vice-chairperson servicing bi-annual terms, who preside over Council proceedings. The bylaws of the Council state meetings take place at least one time per year with more frequent meetings held during active plan construction. Meetings held during times not included in active plan construction revolve around education opportunities involving mitigation, maintenance of the plan and opportunities for increased resiliency to natural disasters. Members of the Council, their titles and jurisdictions are detailed below. The Hazard Mitigation Council Bylaws are included in the Appendix of this Plan.

Requirement §201.6 (c)(3)
Multi-jurisdictional plans may be accepted if each jurisdiction has participated in the process.

Section 2: Prerequisites

Table 2.2 - Hazard Mitigation Membership

Jurisdiction	Designated Member	Title
Daviess County	Andy Ball	EM Director
Owensboro	Lelan Hancock	Assistant City Manager
Whitesville	Janet Perez	City Clerk
Hancock County	Kyle Veach	EM Director
Hawesville	Mark Powers	Chief of Police - Hawesville
Lewisport	Brent Wigginton	City Manager
Henderson County	Kenny Garrett	EM Director
Corydon	Ted Self	Mayor of Corydon
Henderson	Buzzy Newman (Vice-Chair)	City Manager
Robards	David Sellars	Mayor of Robards
McLean County	Terry Dossett	EM Director
Calhoun	Ron Coleman	Mayor of Calhoun
Island	Vicki Hughes	Mayor of Island
Livermore	Andrea Shelton	City Clerk
Sacramento	Betty Howard	Mayor of Sacramento
Ohio County	Charlie Shields	EM Director
Beaver Dam	Paul Sandefur	Mayor of Beaver Dam
Centertown	Kim Fleener	Assistant City Clerk
Fordsville	Beatrice Edge	Mayor of Fordsville
Hartford	George Chinn	Mayor of Hartford
McHenry	Dennis Chinn	Mayor of McHenry
Rockport	Robert Harris	Mayor of Rockport
Union County	Greg Noel	EM Director
Morganfield	Randy Greenwell	Mayor of Morganfield
Sturgis	Doug Rodgers	Mayor of Sturgis
Uniontown	Jennifer Buckman	City Clerk
Waverly	Nancy Wolfe	City Clerk
Webster County	Jeremy Moore (Chairman)	EM Director
Clay	Jeremy Moore	Fire Chief – City of Clay
Dixon	Jamie Harkins	Public Works
Providence	Jim Crowell	Public Works
Sebree	Emery Thomas	Public Works
Slaughters	Jeffrey Coomes	Mayor of Slaughters
Domtar	Sean Lane	Major Employer/Safety
Ballard Construction	Mike Ballard	Developer
OMU	Scott Muench	Utility Operations Director
OMPC	Trey Pedley	Planning/Zoning
State Farm	Seth Lawson	Insurance Agent
Red Cross	Linda Porter	Red Cross
KY EM	Pat Hardesty	KY EM

Section 2: Prerequisites

Hazard Mitigation Council Meetings

As part of planning process, Hazard Mitigation Council meetings were convened to outline the preliminary process, receive and guide updates on the development process and to approve the Plan Update for 2021. A brief synopsis of the meetings held during the active planning cycle are included below.

July 10, 2019

> The first meeting of the active plan construction process was conducted. Nick Grinstead, Grants Manager for Kentucky Emergency Management, explained the plan construction process and guided the Council through the various benchmarks required during the planning process. Incorporated into this meeting was an update from the Kentucky Geological Survey on the Seismic Study Risk Assessment Add-on incorporating data and creating seismic mapping for the GRADD region.

January 22, 2020

> The Hazard Mitigation Council met to elect officers. An update was given on the plan construction process by GRADD staff and a presentation on the Seismic Study by Kentucky Geological Survey was showcased. Partners from the Cyber Security and Infrastructure Agency presented infrastructure resiliency and dependency and how their study would lead to improved projects for inclusion in the Mitigation Strategy.

September 2, 2020

> The Council met virtually for an update on the planning process and how Covid-19 had impacted the planning and development process. Blake Edge gave a presentation of the plan contents and updated the Council on the plan's timeline. The approval of the Plan Update 2021 will take place at the final Hazard Mitigation Council meeting during the active phase of this process later in 2020.

February 12, 2021

> The Hazard Mitigation Council reviewed the final draft of the plan and revisions before local government adoption. The Council approved a resolution adopting the plan.

Section 2: Prerequisites

Plan Adoption

Upon acceptance of the plan, the GRADD Hazard Mitigation Plan Update 2021 will be submitted for approval and adoption to each entity represented in the GRADD region. Each entity will be provided an adoption resolution to be executed and these adoption resolutions will be included in the Appendix of this plan upon approval.

Requirement
§201.6 (c)(5)
The local hazard mitigation plan shall include documentation that the plan has been formally adopted by the governing body of the jurisdiction requesting approval of the plan.

Figure 2.2 - Sample Adoption Resolution



Think Progress. Think Tomorrow. Think GRADD.

Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of _____, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunder storms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the _____ desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including _____; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the _____ hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of _____.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the _____ should be developed and presented to the _____ for consideration prior to inclusion in the plan.

Adopted on: _____ Certified by: _____

Attested by: _____

Section 2: Prerequisites

The following table summarizes the governing bodies that have formally adopted previous iterations of the Hazard Mitigation Plan, and the 2021 Update adoption dates will be added to the table upon formal approval. The dates of approval are delayed due to the coronavirus pandemic.

Table 2.3 - Formal Adoption

Jurisdiction	Original Plan Adoption	2011 Plan Update	2016 Plan Update	2021 Plan Update
Daviess County	8/4/2005	11/16/2010	1/21/2016	
Owensboro	9/20/2005	11/16/2010	2/2/2016	
Whitesville	8/3/2005	12/7/2010	1/5/2016	
Hancock County	8/8/2005	11/8/2010	1/11/2016	
Hawesville	9/13/2005	11/16/2010	1/12/2016	
Lewisport	8/18/2005	12/7/2010	1/21/2016	
Henderson County	8/2/2005	11/1/2010	1/19/2016	
Corydon	8/4/2005	11/4/2010	2/9/2016	
Henderson	8/9/2005	11/9/2010	1/12/2016	
Robards	9/14/2005	11/11/2010	1/14/2016	
McLean County	9/14/2005	10/26/2010	1/19/2016	
Calhoun	8/9/2005	10/12/2010	2/9/2016	
Island	9/12/2005	11/1/2010	1/4/2016	
Livermore	10/13/2005	11/11/2010	1/14/2016	
Sacramento	9/6/2005	12/17/2010	1/25/2016	
Ohio County	9/27/2005	11/9/2010	1/12/2016	
Beaver Dam	8/8/2005	11/8/2010	1/11/2016	
Centertown	8/8/2005	11/1/2010	3/7/2016	
Fordsville	8/8/2005	11/8/2010	1/11/2016	
Hartford	7/28/2005	10/28/2010	1/28/2016	
McHenry	8/22/2005	11/23/2010	2/15/2016	
Rockport	8/11/2005	12/9/2010	2/11/2016	
Union County	8/23/2005	10/26/2010	1/12/2016	
Morganfield	9/22/2005	10/28/2010	1/28/2016	
Sturgis	8/8/2005	11/8/2010	1/4/2015	
Uniontown	8/8/2005	11/8/2010	1/18/2016	
Waverly	10/4/2005	11/2/2010	2/2/2016	
Webster County	8/8/2005	10/25/2010	1/11/2016	
Clay	9/13/2005	11/9/2010	1/12/2016	
Dixon	8/8/2005	11/8/2010	1/11/2016	
Providence	9/6/2005	11/1/2010	2/1/2016	
Sebree	8/1/2005	12/6/2010	1/4/2016	
Slaughters	8/2/2005	11/2/2010	2/2/2016	
Wheatcroft	7/16/2005	11/8/2010	1/11/2016	

Section 2: Prerequisites

Community Rating System

The National Flood Insurance Program's Community Rating System is a voluntary incentive program that recognizes and encourages community floodplain management activities that exceed the minimum standards. It rewards those communities who affirm their commitment to raising those standards. Under the CRS program, flood insurance premiums of the community's residents and businesses are discounted to reflect that community's work to exceed the basic standards, including the reduction of flood damage to existing buildings, manage development in areas not mapped by the NFIP, protect new buildings beyond the basic requirements of NFIP and help restore or preserve the natural functions of the flood plain. Each CRS community is assigned a class rating based on the number of credit points it receives after a CRS inspection. Class ratings range from 1 – 10 and determine the level of flood insurance premium reductions for NFIP policyholders. The GRADD Hazard Mitigation Plan acts to fulfill the requirements of CRS program section 510 – Floodplain Management Planning. Four of the 34 jurisdictions in the GRADD region are actively enrolled in the Community Rating System:

- **Daviess County**
- **City of Owensboro**
- **Henderson County**
- **City of Henderson**

The following ten-step list details how the GRADD Hazard Mitigation Plan Update for 2021 addresses each section requirement for these participating communities.

Step 1 – Organize to Prepare the Plan

Daviess County & City of Owensboro

a. The Owensboro Metropolitan Planning Commission, the office responsible for Owensboro and Daviess County land use, was consulted during the update of the Risk Assessment and Mitigation Strategy portions of the plan and the final review of the plan update before local adoption. The Planning Commission members were actively involved in the development of the Mitigation Strategy Project lists, critical facility data for the Risk Assessment and incorporation of NFIP and CRS program information into the plan construction.

Section 2: Prerequisites

b. The planning process is directed by the GRADD Hazard Mitigation Council. Per the Council bylaws, jurisdictions can designate one voting representative to the council but can send as many delegates as needed to the meetings. Furthermore, planning efforts for Daviess County and the City of Owensboro for hazard mitigation and floodplain management were developed at their local community meetings.

   The following were represented at the planning meetings (CRS Step 7 Categories are referenced in parentheses):

   - Daviess County Judge/Executive (Preventative)
   - Owensboro Metropolitan Planning Commission (Preventative)
   - Daviess County Emergency Management Agency (Emergency Services)
   - County-City Geographic Information Systems (Public Information)
   - Daviess County Sheriff's Department (Emergency Services)
   - Daviess County Engineer (Structural Projects)
   - Green River District Health Department (Preventative)
   - Regional Water Resource Agency (Property Protection)
   - Owensboro Police Department (Emergency Services)
   - Owensboro City Engineer (Natural Resource Protection)
   - Owensboro Assistant City Manager (Preventative)
   - Parks & Recreation Director (Natural Resource Protection)
   - Owensboro Fire Department (Emergency Services)
   - Owensboro Public Works (Preventative)
   - Owensboro Metropolitan Planning Organization (Preventative)
   - Owensboro/Daviess County 911 Director (Emergency Services)
   - Housing Authority of Owensboro (Property Protection)
   - Daviess County Extension Office (Natural Resource Protection)
   - Daviess County Parks Department (Natural Resource Protection)
   - Owensboro City Parks Department (Natural Resource Protection)

c. The GRADD Hazard Mitigation Council acts as the primary planning committee for the GRADD Hazard Mitigation Plan. Half of the designated representatives from Owensboro and Daviess County were present at all GRADD Hazard Mitigation Council meetings. Owensboro and Daviess County governing bodies are formal voting members of the council and the mayor and judge/executive each serve as the community representative unless there is a designation of a council delegate.

Henderson County & City of Henderson

a. The Henderson County Planning Commission, the office responsible for the City of Henderson and Henderson County land use, was consulted during the update of the Risk Assessment and Mitigation Strategy construction of the plan and final review of the plan before local adoption. Members of the Henderson County Planning Commission assisted GRADD staff in the development of the Mitigation Strategy Project lists, the addition of critical facility data for use in the Risk Assessment, incorporation of NFIP and CRS program information and review of the plan before adoption.

b. The planning process is directed by the GRADD Hazard Mitigation Council which is comprised of representation from each GRADD city and county. Per the Council bylaws, jurisdictions can designate one voting representative to the council but can send as many delegates as needed to the meetings. Furthermore, planning efforts for Henderson County and the City of Henderson were developed at their local community meetings.

   The following were represented at the planning meetings (CRS Step 7 Categories are referenced in parentheses):

   - Henderson Emergency Management Agency (Emergency Services)
   - Henderson County Judge/Executive (Preventative)
   - City of Henderson City Manager (Preventative)
   - City of Henderson Mayor (Preventative)
   - Henderson Municipal Gas Utility (Preventative)
   - Henderson County Water District (Preventative)
   - Henderson County Planning Commission (Preventative)

- City of Henderson Police Department (Emergency Services)
- Henderson County GIS Department (Public Information)
- Henderson County Fiscal Court (Preventative)
- City of Henderson Public Works Department (Structural Projects)
- City of Henderson Fire Department (Emergency Services)
- Henderson County Engineer (Structural Projects)
- City of Henderson Parks & Recreation (Natural Resource Protection)

c. The GRADD Hazard Mitigation Council acts as the primary planning committee for the GRADD Hazard Mitigation Plan. At least half of the designated representatives from the City of Henderson and Henderson County were present at all GRADD Hazard Mitigation Council meetings. The City of Henderson and Henderson County governing bodies are formal participants of the council, and the mayor and judge/executive are their community's respective members unless there is a designation of a council delegate.

Step 2 – Involve the Public

a. The GRADD Hazard Mitigation Council meets at least once a year (April and/or October) and more frequently during plan update years. For this cycle of planning, the council met in July 2019, January 2020, July 2020, September 2020 and February 2021 as part of the plan process. Members include representatives from each jurisdiction served by GRADD. Members from the public were also invited to be a part of the committee, including private business, private utilities and private stakeholders. Meetings are open to the public and efforts are made by the Council to encourage attendance by publishing public meeting notices on GRADD's social media pages including Facebook, Twitter and Instagram. Meeting notices are also published each month in the GRADD newsletter, and an official meeting notice list is distributed to all major newspapers and publications each month. GRADD also maintains a page dedicated to Hazard Mitigation where meeting times and dates, Council bylaws, meeting minutes and previous iterations of the plan can be found. The link is as follows: http://www.gradd.com/CED/Hazard_Mitigation/.

b. Local community meetings were held in each GRADD jurisdiction during the plan update process to obtain public input on the natural hazards, problems and solutions to include in

the plan update. These meetings were divided into two phases for each community—Phase 1 consisted of conducting a Risk Assessment for each community in the third and fourth quarters of 2019, followed by Phase 2 meetings discussing the Mitigation Strategy for each community in the first and second quarters of 2020. These meetings were advertised to the public and were well attended by both public and private stakeholders.

c. Prior to formal FEMA approval and adoption of the 2021 GRADD Multi-Jurisdictional Hazard Mitigation Plan, drafts of the plan will be distributed to each jurisdiction to allow the public 30 days to submit their comments for review, consideration and potential modification to the plan. The plan update will also be posted on the GRADD website and notice of posting issued.

d. The GRADD Hazard Mitigation Council and GRADD staff utilize several methods to encourage public attendance and participation at all council and local community meetings. Public notices are released prior to meeting dates and notice is placed by each jurisdiction. GRADD also uses its social media presence to inform the public of meeting locations and times. Outreach efforts at increasing perception from the public on the plan were incorporated in this iteration update and included presentations at Chamber of Commerce events, GRADD Board meetings and various committee meetings including: Nursing Home Disaster Preparedness, Economic Development Corporation and Riverport entities. An online survey was distributed to every GRADD jurisdiction and through GRADD itself requesting feedback on the plan contents and Hazard Mitigation Projects. Finally, the Green River Area Development District maintains a webpage to inform the public on council activities including announcements of meetings, minutes of those meetings and updates to the plan itself.

Step 3 – Coordinate

a. The GRADD Hazard Mitigation Plan Update 2021 includes an extensive review of existing plans, studies, reports and technical information already completed for the region. Reference to the amalgamation is detailed in the Hazard Mitigation Plan Section 3: The Planning Process. Specific sources of data for incorporation into the CRS communities of Daviess County, City of Owensboro, Henderson County and City of Henderson include:

Section 2: Prerequisites

- National Climatic Data Center Data
- Floodplain Management Plan
- Comprehensive Plans
- Community & Economic Development Strategy
- 2006, 2011, 2016 Hazard Mitigation Plan Updates
- Presidential Disaster Declarations

b. Agencies and organizations outside of Daviess County-Owensboro and Henderson-Henderson County's governmental structure were contacted for information regarding planning initiatives, hazard data and mitigation strategies. Contacts included:

- The Daviess County Extension Office
- Kentucky Division of Water
- Kentucky Infrastructure Authority
- KY Department for Local Government
- Red Cross of Kentucky
- Kentucky NFIP
- KY Association of Mitigation Managers
- City of Whitesville
- Division of Rural Water
- National Weather Service
- U.S. Army Corps of Engineers
- Kentucky Emergency Management
- FEMA Region IV
- Kentucky Geological Survey

Step 4 – Assess the Hazard

a. Special flood hazard area maps are included for Owensboro, Daviess County, Henderson and Henderson County. Repetitive loss areas within Owensboro, Daviess County, Henderson and Henderson County are identified and addressed in the Hazard Mitigation Plan Section 4: Risk Assessment.

b. Dam and levee failure is an identified hazard within the GRADD Hazard Mitigation Plan. Dam and levee locations within Henderson and Daviess Counties have been identified and mapped as part of the plan's Risk Assessment. The Risk Assessment also includes an analysis of the hazard as it relates to both regions.

c. Changes in land use and demographics are encompassed under Section 4: Risk Assessment.

d. In addition to floods, the GRADD Hazard Mitigation Plan's Risk Assessment section provides an analysis of ten other hazards that affect Owensboro, Daviess County, Henderson

and Henderson County. These hazards include dam and levee failure, droughts, earthquakes, extreme temperatures, landslides, land subsidence, severe thunderstorms, severe winter storms, tornadoes and wildfires; see Section 4.

Step 5 – Assess the Problem

a. The GRADD Hazard Mitigation Plan provides an overall summary of the jurisdiction's vulnerability to each hazard identified within the hazard assessment; see Section 4: Risk Assessment.

b. The Risk Assessment section details the impacts that hazards have on the region; see Section 4.

c. The Risk Assessment section details the number of events and costs of damages of Repetitive and Severe Repetitive Loss properties for Owensboro, Daviess County, Henderson and Henderson County; see Section 4.

Step 6 – Set Goals

a. Goals, Actions and Objectives are identified in the GRADD Hazard Mitigation Plan Section 5: Mitigation Strategy.

Step 7 – Review Possible Activities

Step 8 – Draft an Action Plan

a. As part of the Phase II community meetings during the plan update process, each jurisdiction's Mitigation Strategy from the 2016 GRADD Hazard Mitigation Plan was reviewed for continued inclusion in the plan, actions that were no longer relevant and actions that had been completed since that planning process. In addition to the review, new mitigation actions were proposed for inclusion in the Mitigation Strategy for the Plan Update 2021. Categories for these actions included structural, nonstructural, regulatory and educational. After development of the actions, projects were prioritized and organized to name the entity ultimately responsible for the action, a timeline for completion and potential funding sources. A complete account of the mitigation strategies for Owensboro, Daviess County, Henderson and Henderson County can be found in Chapter 5: Mitigation Strategy.

Step 9 – Adoption of the Plan

a. Upon FEMA review, the 2021 GRADD Hazard Mitigation Plan will be adopted by each participating jurisdiction through local city/county resolutions.

Step 10 – Implement, Evaluate and Revise

a. The GRADD Hazard Mitigation Plan receives a formal update by the GRADD Hazard Mitigation Council every five years. In between update years, the council meets at least once a year to discuss plan initiatives and maintenance. A report which encompasses a review of risk assessment and mitigation strategy data gathered over the past year is also completed annually. A complete review of the plan's maintenance procedures can be found in Chapter 6.

Planning Process

At the core of each phase of the planning process was the goal to produce a living document—a source for elected officials and the public to have as value added to their decision-making process. With the core mission statement specifically addressing leadership and excellence in planning, the plan is never written and stored away. The official launch of the 2021 Plan Update process took place on July 10, 2019, when the Hazard Mitigation Council established the strategy for this plan development.

Requirement §201.6 (c)(1): The plan shall document the planning process used to develop the plan, including how it was prepared, who was involved in the process, and how the public was involved.

Again, for this plan update, staff felt it necessary to arrange the community meetings with each entity in the region. The meetings were arranged in two phases—the first phase of was centered around the risk assessment portion of the plan, while the second phase of meetings analyzed the results of the risk assessment conducted, using those results to develop a mitigation strategy with each community.

Public participation was encouraged through the development of a Hazard Mitigation Survey, distributed to each of the 34 communities using GRADD's social media outlets and news organizations. Survey participation proved to be a well-utilized asset for those unable to attend the physical community meetings and allowed for quantifiable results produced. An additional 285 people were able to participate through use of the survey tool.

This planning process also involved extensive study and research of existing plans, studies, reports and technical information used during community meetings, in preparing the plan itself and further expanding the reach of the mitigation strategy.

Opportunity for Public Comment

The draft plan is distributed to all officials and the public for a 30-day comment period. An announcement for the comment period is placed in the largest circulation newspaper in each county, placed on each municipality's website and social media pages, and the plan is also placed on the GRADD website for comment. Upon conclusion of this comment period, GRADD staff and GRADD Hazard Mitigation Council members review all comments received to determine their impact on the plan content.

Hazard Mitigation Council

GRADD Hazard Mitigation Council meetings were open to the public and announcements were posted in the GRADD newsletter, as well as on the social media pages in advance of the meeting dates. The council meeting on April 27, 2016, served as a forum for GRADD staff to provide an overview of the 2016 Plan Update, the process involved in the plan construction and a review of the comments made by subsequent reviewers of the plan. It also allowed a forum for any maintenance of the plan that was needed to keep it updated. The full minutes of that meeting are included in the Appendix.

The council meeting on November 13, 2017, presented an opportunity for the council to be updated on changes from FEMA that were upcoming on the subsequent Hazard Mitigation Plan. This council meeting also served to fulfill the council bylaws and the FEMA requirement. A representative from the Kentucky Division of Water also made a presentation on the Community Rating System and benefits of joining that program—a significant part of the Hazard Mitigation Plan for some communities. The full minutes of that meeting are included in the Appendix.

During the 2021 Plan Update kickoff meeting held on July 10, 2019, council members and guests were given an update on the Hazard Mitigation Process by Nick Grinstead of the University of Kentucky, Council members voted on plan amendments to add to the 2016 plan and given a briefing on GRADD's process for constructing the plan. The full minutes of that meeting are included in the Appendix.

The January 22, 2020 meeting of the Hazard Mitigation Council allowed GRADD staff to update the Council on Phase 1 meetings and introduce Phase II meetings. Officers for the coming year were also nominated and approved during the meeting. The full minutes are included in the Appendix.

The September 1, 2020 virtual meeting of the Hazard Mitigation Council hosted by GRADD staff, allowed for an update on the impact of the COVID-19 Pandemic on the planning process, the results of the Phase II meetings so far and discussion on the resumption of the final Phase II meetings. The full minutes are included in the Appendix.

Community Meetings

The information for the plan update was determined to be best gathered by separating the agenda for the community meetings. The meetings were arranged in two phases—the first phase of meetings in each community was centered around the risk assessment portion of the plan where past storm data, events, critical facilities, and vulnerabilities were addressed by each municipality and the stakeholders at each meeting. The data analyzed during the Phase 1 meetings was compiled by staff in advance of the meetings to gather a cache of data that could be scaled and parsed by each community.

This analysis included studying previous versions of the Hazard Mitigation Plan and the analysis of other Hazard Mitigation Plans from outside the area in a variety of formats to survey best practices. Also researched were records from participating Emergency Management Directors, data from FEMA and NOAA, SHELDUS Storm Damage totals and firsthand knowledge of events. This wide-range sourcing of data allowed for information to be presented at the community meetings and prompted conversation around events that communities had faced.

Requirement
§201.6 (b)
To develop a more comprehensive approach to reducing the effects of natural disasters, the planning process shall include: 1) an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval; 2) an opportunity for neighboring communities, local and regional agencies, and nonprofit interest to be involved in the planning process; and 3) review and incorporate, if appropriate, of existing plans, studies, reports, and technical information.

At the conclusion of the Phase 1 meetings, the data gathered was used to update files and the GRADD GIS system and distributed to the respective community. During Phase 2 meetings, the risk assessment from the first meeting was reviewed and corrected. The focus of the meeting was then the mitigation strategy for each community.

Mitigation goals and actions, those included in previous versions of the plan, were reviewed as a group and updated to include projects that had been completed or were no longer relevant. Some projects would ultimately stay on the list and may remain in perpetuity—those that require regular attention to complete including education of the public using the school system. Completed on at least an annual basis, schools ensure relevant information is provided to all students and their families. New goals and actions were added to the mitigation strategy for each community. The comprehensive list for each community was prioritized, sometimes by projects

that filled in significant vulnerability gaps, but generally by feasibility, applicability and funding. The prioritization goals are discussed in the Mitigation Strategy section.

These meetings were all open to the public and in total, 379 individuals participated the community meetings during the Planning process. This was in large part due to the Covid-19 pandemic. Invitation numbers were reduced to comply with meeting compliance and social distancing requirements. The number of people participating in these meetings led to very productive discussion. The virtual medium used for 4 meetings during the pandemic proved valuable and increases in broadband coverage because of Covid-19 will, in theory, allow more members of each community to participate during the next update. Moving forward with the next iteration of then plan, a hybrid approach is likely to be used.

Table 3.1 - Phase 1 Community Meetings

Jurisdiction	Date	Attendance
Owensboro	12/18/2019	20
Whitesville	10/16/2019	10
Hawesville	11/4/2019	5
Lewisport	10/4/2019	5
Corydon	12/6/2019	7
City of Henderson	10/30/2019	22
Robards	10/25/2019	3
Calhoun	11/20/2019	3
Island	11/14/2019	8
Livermore	11/14/2019	8
Sacramento	11/20/2019	3
Beaver Dam	11/21/2019	6
Fordsville	2/10/2020	4
Hartford	11/19/2019	9
Morganfield	11/8/2019	10
Sturgis	9/24/2019	11
Uniontown	10/18/2019	8
Waverly	10/18/2019	8
Clay	10/23/2019	6
Dixon	9/12/2019	11
Providence	8/30/2019	10
Sebree	10/23/2019	6
Slaughters	11/6/2019	3
Total	**--**	**186**

Table 3.2 - Phase II Community Meetings

Entity	Date	Attendance
Daviess County	3/10/2020	9
Owensboro	9/29/2020	6
Whitesville	1/24/2020	13
Hancock County	2/25/2020	4
Hawesville	9/25/2020	9
Lewisport	9/10/2020	5
Henderson County	9/18/2020	12
City of Henderson	9/18/2020	12
Robards	9/18/2020	7
McLean County	2/24/2020	3
Calhoun	9/15/2020	3
Island	9/9/2020	5
Livermore	9/9/2020	5
Sacramento	9/15/2020	3
Ohio County	2/22/2020	15
Beaver Dam	9/23/2020	5
Hartford	9/21/2020	6
Union County	2/5/2020	14
Morganfield	9/16/2020	6
Sturgis	3/9/2020	8
Uniontown	3/12/2020	7
Waverly	3/12/2020	7
Webster County	1/23/2020	12
Clay	3/5/2020	7
Dixon	3/3/2020	6
Providence	3/6/2020	8
Sebree	3/3/2020	7
Slaughters	9/2/2020	4
Total	--	**208**

Community Meeting Analysis

The two meeting model allowed for greater stakeholder participation and proved very successful for all cities that joined in the phased meetings—deeper study of the risks and vulnerabilities and a further look into the current capabilities and future mitigation strategy, were achieved. Because a large majority of the critical facilities and hazards posed at each community meeting were already addressed during the citywide meetings, the phased meetings were combined at each county-level meeting.

The outcome of these community meetings was beneficial—each community was able to invite crucial stakeholders from the public and private sectors to have a voice at the meeting, and the partnership and results were greater than the goal anticipated from the outset.

There exists a direct correlation between the attendance of critical stakeholders at each community meeting and the value produced from that meeting. GRADD staff and partners from each municipality worked to ensure the proper stakeholders, both public and private, were given the opportunity to attend. Included on subsequent pages is a table of participants at the community meetings, their roles and agencies represented.

Public Participation Survey

Most community meetings took place during the day, when attendees from utilities, public works and first responders from each jurisdiction could attend. This prohibited some community members from attending. To address this issue and give the public more opportunity for input, a Hazard Mitigation Survey was developed by staff and published on the GRADD webpage, social media and posted on each municipality webpage and social media page.

The results produced from this survey allowed more than 240 additional people to have input regarding not only the vulnerabilities of the region, but also the mitigation strategy to correct those vulnerabilities. The survey results from each county and the region were presented at the second round of meetings to help guide the stakeholders on gaps of information and provide for them a wider audience of views.

The survey asked a variety of questions, focusing on questions discussed in Hazard Mitigation community meetings but also focusing on how best to interact with citizens. Areas of emphasis included how best to disseminate information to each citizen, what disaster type was most relevant to the survey responder and what community assets were most important to the responder. A copy of the survey is included, beginning on the next page.

Figure 3.1 - Hazard Mitigation Public Survey

Green River Area Development District is working in conjunction with the 7 Counties and 27 Cities we serve to create a Hazard Mitigation Plan for our region. This plan ensures our region remains eligible for FEMA disaster funding and will ultimately reduce the cost of disasters. As this plan is created, your input is immensely valuable to ensure this is a community driven, living document that will enable local officials to guide their investment strategy and maximize federal dollars.

1. Have you or someone in your household directly experienced or been impacted by a natural disaster, such as an earthquake, severe weather, flood, tornado, or other type of natural disaster?

- (•) Yes
- ( ) No

2. Please select the TOP THREE (3) natural hazards you think pose the GREATEST THREAT to your community and household.

- [ ] Extreme Temperatures
- [ ] Tornadoes
- [ ] Thunderstorm Winds/Hail
- [ ] Drought
- [ ] Landslide/Subsidence
- [ ] Earthquake
- [ ] Wildfire
- [ ] Severe Winter Storms
- [ ] Medical Pandemic
- [ ] Ice Storms
- [ ] Flooding
- [ ] Dam Failure

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

Please select all that apply.

- [ ] News Media
- [ ] County Emergency Management
- [ ] Government Agency
- [ ] Insurance Agent
- [ ] Utility Company
- [ ] Neighbor/Friend/Family Member
- [ ] Elected Official
- [ ] American Red Cross
- [ ] Social Media
- [ ] Library
- [ ] Unsure

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

Please check up to THREE

- [ ] Schools
- [ ] Television Stories
- [ ] Radio News
- [ ] Television Ads
- [ ] Twitter
- [ ] Facebook
- [ ] Instagram
- [ ] Public Workshops or Conferences
- [ ] Email Newsletters
- [ ] Newspaper Stories
- [ ] Online News Outlets
- [ ] Newspaper Ads
- [ ] Radio Ads

Hazard Mitigation Public Survey

5. Prior to receiving this survey, were you aware of your county's Hazard Mitigation Plan?

- ○ Yes
- ○ No

6. Would you like more information about any of the following:

- ☐ How to prepare a household disaster kit
- ☐ How to prepare a family communication plan
- ☐ How to get involved in community preparedness
- ☐ Mitigation activities and projects in your area
- ☐ Information about hazards
- ☐ Floodplain Information
- ☐ Insurance
- ☐ None

7. In your opinion, which of the following categories is most susceptible to the impacts of natural hazards in your community? Number 1-6, with 1 being the most vulnerable and 6 being the least vulnerable.

___ Human (Loss of life and/or injuries)

___ Economic (Business Closures and/or Job losses)

___ Infrastructure (Damage or loss of bridges, utilities, schools, etc.)

___ Cultural/Historic (Damage or loss of libraries, museums, fairgrounds)

___ Environmental (Loss of forests, waterways, farmland)

___ Governance (Ability to maintain order and provide public services)

8. What specific types of community assets are most important to you?

	Extremely Important	Somewhat Important	Neutral	Not so important	Not Important
Elder Care Facilities	○	○	○	○	○
Schools	○	○	○	○	○
Hospitals	○	○	○	○	○
Major Bridges	○	○	○	○	○
Fire/Police Stations	○	○	○	○	○
Museums/Historic Buildings	○	○	○	○	○
Major Employers	○	○	○	○	○
Small Businesses	○	○	○	○	○
Government Buildings	○	○	○	○	○

Hazard Mitigation Public Survey

	Extremely Important	Somewhat Important	Neutral	Not so important	Not Important
Downtown	○	○	○	○	○
Infrastructure (Water/Electric/Gas)	○	○	○	○	○

9. Many activities can reduce your community's risk from natural hazards.

	Very Important	Somewhat Important	Not Important
Administrative or regulatory actions that influence the way land is developed and buildings are built (e.g. planning & zoning, building codes)	○	○	○
Modification of existing buildings to protect of remove from hazard. (e.g. storm shelters, elevation, retrofit, relocation)	○	○	○
Actions to preserve natural systems. (e.g. forest management, floodplain protection, wetlands protection)	○	○	○
Actions to lessen the impact of the hazard. (e.g. dams, levees, retaining walls, storm sewers/drainage)	○	○	○
Actions that protect people and property during and after a hazard event. (e.g. warning systems, evacuation & response training)	○	○	○
Actions to increase public awareness. (e.g. outreach, school programs, conferences)	○	○	○
Using tax dollars to protect essential services. (e.g. establish interconnects for water)	○	○	○

10.In your household, have you or someone in your household...

	Have Done	Plan to Do	Not Done	Unable To Do	No Interest
Attended meetings on disaster or preparedness	○	○	○	○	○
Talked with members of your household about what to do in case of natural disaster	○	○	○	○	○
Developed Family Emergency Plan	○	○	○	○	○
Prepared Disaster Supply Kit	○	○	○	○	○
In the last year, has anyone in your household been trained in First Aid/CPR?	○	○	○	○	○
Prepared your home by having smoke detectors on each level.	○	○	○	○	○

11. How confident are you at your household's level of preparedness for a natural disaster?

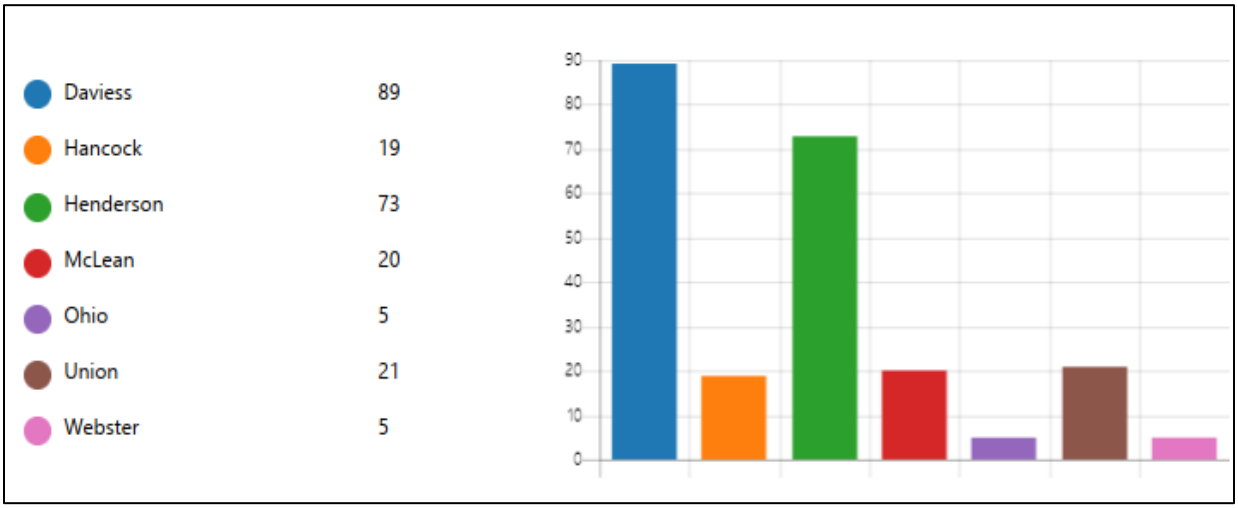
○	○	○	○	○	○	○	○	○	○	○

No Confidence — Extremely Confident

Public Survey Results

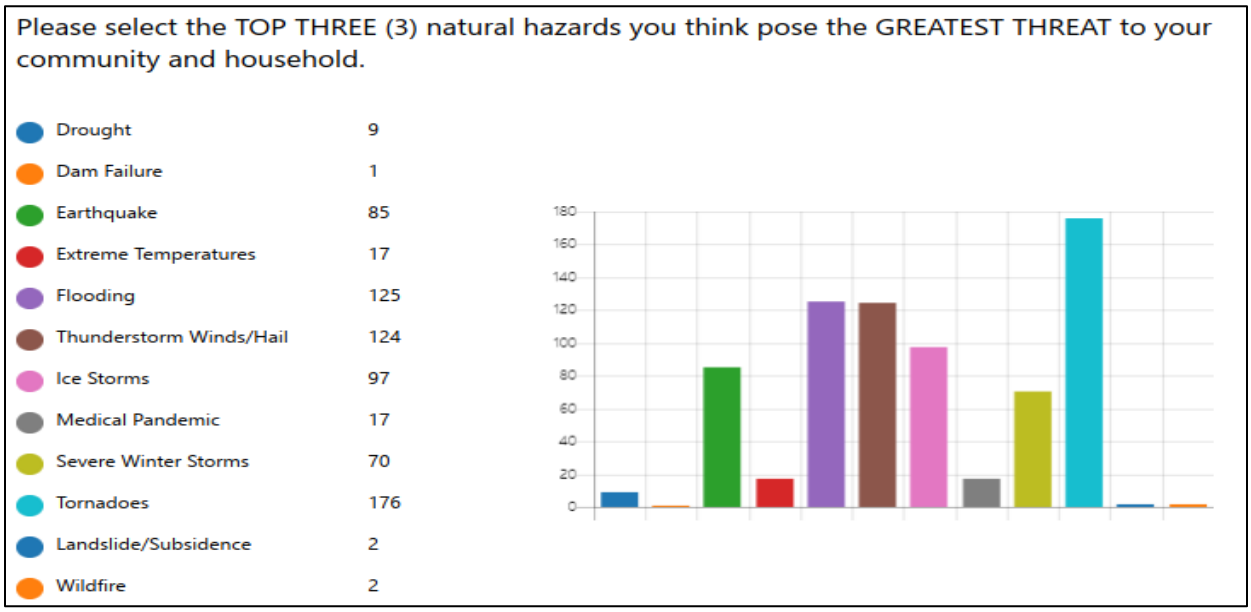
The figure below represents survey participation broken down by county. Response was generally reflective of county population and will prove helpful in future planning with the additional data gathered.

Figure 3.2 - Hazard Mitigation Public Survey Participation by County



Results from questions on the survey were compiled and used in subsequent community meetings and addressed at the Hazard Mitigation Council meetings. As shown in the chart below, it was not surprising to see the number 1 natural hazard that tornadoes was the number one threat. The full results from the survey are available in the Appendix.

Figure 3.3 - Survey Question Response



The twenty-year anniversary of the January 2000 tornado that struck the City of Owensboro and events surrounding it were fresh on the minds of citizens. The November 2005 tornado touched down two miles northwest of Smith Mills in Henderson County, KY and moved northeast, crossing the Ohio River and immediately causing extensive damage to the Ellis Park Horse Racing Track, tore through the Eastbrook Mobile Home Park in Newburgh, IN killing 20 people and continued north killing an additional four people.

In all, the tornado destroyed 500 buildings, killed 24 people, injured 238 people. While this tornado's most impactful damage happened across the river from the GRADD region, the Evansville, IN metropolitan area encompasses almost the entire GRADD region. This tornado is discussed in greater detail in the Risk Assessment section. Below, the only picture known to exist from the deadly 2005 tornado.

Figure 3.4 - 2005 Tornado Evansville, IN



Photo courtesy of Evansville, IN Deaconess Women's Hospital Security Camera, 2005

Public Participation after Plan Approval

After the 2021 Hazard Mitigation Plan Update receives final approval from FEMA and has been adopted by all participating jurisdictions, the final plan will be placed on GRADD's website, as well as each municipality's website. A press release will be published detailing those actions. Subsequent meetings of the Hazard Mitigation Council will be held, and public input will be solicited. The goal will continue that the Hazard Mitigation Plan be a living document used as a resource by both elected officials and the public.

Review of Existing Plans/Studies/Reports/Technical Information

As part of the planning process, GRADD staff researched and acquired existing technical plans from other areas of the region: studies, reports, GIS information, previous plan iterations, mitigation plans from other areas, comprehensive plans, Comprehensive Economic Development Strategy (CEDS) plans, specific project notes and notes from previous planning processes. From a range of sources and partners at the local, state and national level, these documents were used to acquire an assortment of data and best practices to include in the 2021 version of this plan.

The plan is used as a tool and source for other planning processes and projects. The following sources of data and their subsequent updates were used in the previous four editions and new edition of the Hazard Mitigation Plan Process.

Hazard Mitigation Plans

Previous iterations of the Green River Area Development District's Hazard Mitigation Plan were studied and researched along with Hazard Mitigation Plans from other entities to determine best practices, areas for improvement and efficiency. The plans referenced are listed below.

2011 GRADD Hazard Mitigation Plan

2016 GRADD Hazard Mitigation Plan

2018 New York City Hazard Mitigation Plan

2019 Cook County Illinois Multi-Jurisdictional Hazard Mitigation Plan

Emergency Operations Plans (EOP)

Each county creates and maintains an Emergency Operations Plan (EOP) in accordance with KRS Chapters 39A to 39F. These plans were a source for hazard analysis, hazard maps and allowed for consultation with county officials to learn about their plan and what areas need more research. The EOPs include specific emergency communication abilities and severe weather warning systems. These EOPs proved to be valuable sources of information for risk and vulnerability assessments for this Hazard Mitigation Plan along with a starting point to improve Hazard Mitigation Projects.

Daviess County Emergency Operations Plan

Hancock County Emergency Operations Plan

Henderson County Emergency Operations Plan

McLean County Emergency Operations Plan

Ohio County Emergency Operations Plan

Union County Emergency Operations Plan

Webster County Emergency Operations Plan

Commonwealth of Kentucky Emergency Operations Plan

Owensboro Community & Technical College Emergency Operations Plan

Comprehensive Plans

Information in comprehensive plans include land use and development, transportation, community facilities, goals and objectives and demographics.

Owensboro Metropolitan Area Comprehensive Plan

Hancock County Comprehensive Plan

Henderson City and Henderson County Comprehensive Plan

McLean County Comprehensive Plan

Hartford/Beaver Dam Comprehensive Plan

Union County Comprehensive Plan

Kentucky Agricultural Emergency Plan & Strategic Plan

The Kentucky Agricultural Emergency Plan and Strategic Plan were created by the state Department of Agriculture, and these response plans are specifically related to the agricultural community. Both deal with food safety, animal emergencies and environmental emergencies in addition to natural hazards. Agriculture is the largest single economic segment in the GRADD area and these plans provided information on natural hazards related to agriculture.

Long Term Flood Economic Recovery Strategy for GRADD

The Long Term Flood Economic Recovery Strategy for GRADD was prepared in the wake of the severe flooding that affected the GRADD area in 1997. It includes a damage assessment to agriculture, housing, business and industry, infrastructure and public assistance. It also includes a list of potential EDA economic recovery projects that are incorporated in the projects listed in this Hazard Mitigation Plan.

Since this plan was drafted, the GRADD region has experienced many episodes of flooding, yet none as detrimental to the entire area are the 1997 flood. It remains relevant in disaster planning today.

Green River Area Development District Emergency Response Plan Disaster Staff for the Area Agency on Aging

The GRADD Emergency Response Plan applies specifically to the GRADD building and its employees. GRADD houses the disaster staff of the Area Agency on Aging. This staff serves a vulnerable population of the elderly, including those dependent on in-home services and residing in nursing homes. The plan provided information on critical facilities found in the Risk Assessment section and allowed for communication with the Nursing Home Disaster Preparedness Coordinators to improve upon the resources included in the plan.

GRADD Water Management Plan

The GRADD Water Management Plan is prepared and maintained by the GRADD Water Management Council. It includes information about area water resources, water lines and effluent resources. It includes an infrastructure inventory and plans and projects both area-wide and by county and community. The plan was used as a basis for building the list of critical facilities.

Owensboro/Daviess County Storm Water Quality Management Plan

The Owensboro/Daviess County Storm Water Quality Management Plan is updated through annual reports and allows for current research into stormwater-related activities along with GRADD presence on the SWQAC committee.

McLean County Profile

The McLean County Profile, prepared by the UK Center for Rural Health/Madisonville, serves as a comprehensive overview of McLean County and its cities. It discusses the demographics, health care, economy and education and while ten years old, still served as a strong instrument for research into the critical facilities and vulnerability of McLean County.

Natural Hazards and Their Impacts on Agriculture and Urban Development in the Barren River Area prepared by the Kentucky Climate Center

The Barren River is adjacent to the GRADD in south central Kentucky. It shares many types of natural hazards with GRADD. Information in this plan was referred to for descriptions of hazards in the Risk Assessment Section.

GRADD Regional Transportation Plan

The GRADD Regional Transportation Plan is created and maintained by the GRADD Regional Transportation Committee. It includes a six-year plan of transportation projects and allows planning partners to have input on needed changes to increase resiliency.

GRADD Regional Transportation Asset Inventory

The GRADD Regional Transportation Asset Inventory prepared in conjunction with KYTC, inventories the entire GRADD region in relation to transportation with maps and valuable sources of data. It includes major traffic generator locations, rail yards, freight routes and commodities.

Comprehensive Economic Development Strategy

The Comprehensive Economic Development Strategy is prepared and maintained by GRADD. It includes maps lists of information and action plans in areas including:

Area Organizations and Governance Transportation

Natural Resources	Economy
Physical Environment	Infrastructure and Services
Human Resources	Housing
Public Protections	Health

The plan also includes a list of regional projects. It served as a valuable source of information for the vulnerability assessment identifying existing and proposed projects.

The 2020 GRADD Comprehensive Economic Development Strategy Update (CEDS) addresses project priorities through the region. With the broad and serious impact of recent hazard events in the region, the CEDS acknowledges the impacts upon local economies. The economic analysis and project priorities proved essential to the Plan Update.

Documentation of the Planning Process

As part of the Planning Process, GRADD staff attended trainings, applicant briefings, conferences and met with local officials prior to the official start date. These activities helped to increase knowledge, gain understanding of the planning process and keep up to date on current trends.

For the 2021 Hazard Mitigation Plan, GRADD staff attended the following meetings and trainings:

1. GRADD staff attended Hazard Mitigation Plan Training in Lexington, KY May 8-10, 2019 with KYEM staff Geni Jo Brawner and Nick Grinstead.
2. GRADD staff attended the DR4428 Mitigation Applicant Briefing in Madisonville, KY on May 28, 2019.
3. Individual meetings with each of the GRADD region's seven county EM Directors were conducted to discuss Hazard Mitigation needs and assessment during the month of July 2019.
4. GRADD staff attended the Local Issues Conference in Louisville, KY where classes in relation to Hazard Mitigation were attended, August 28-30, 2019.

5. GRADD staff attended the Kentucky Association of Mitigation Managers (KAMM) Conference September 17-19, 2019 at Lake Barkley State Resort Park in Cadiz, KY.
6. GRADD staff attended a PDM Hazard Mitigation Plan Award Briefing with KYEM to discuss the upcoming Hazard Mitigation Plan in Lexington, KY on May 10, 2019.
7. GRADD staff attend the virtual DR4540 Mitigation Applicant Brief on August 27, 2020.
8. GRADD staff attended a virtual Kentucky Association of Mitigation Managers (KAMM) Conference on September 22-23, 2020.
9. GRADD staff attended a virtual training on FEMA's new funding opportunity, Building Resilient Infrastructure and Communities (BRIC) on July 22, 2020.
10. GRADD Staff attended Flood Mitigation Assistance (FMA) and BRIC Training webinar on September 1-2, 2020.

Planning Process Summary

The planning process for the 2021 Hazard Mitigation Plan Update began officially in July 2019 and will conclude with the final adoption of the Plan. While the actual construction process will be complete, the entire goal of this plan update was to create a useful living document that can help guide local officials on where to focus their limited resources. Throughout the five-year cycle of the plan's life, significant steps will be taken to ensure relevancy. Those steps are discussed in greater detail in the Plan Maintenance Section. The steps in the actual construction and planning process required collaboration between Green River staff, Kentucky Emergency Management staff, County Emergency Management Directors, the Hazard Mitigation Council and Green River communities.

The following benchmarks serve as documentation of that collaboration and serve as a summary of the major events in the planning process.

1. April 27, 2016 GRADD staff hosted meeting of the Hazard Mitigation Council to discuss plan amendments and maintenance.
2. November 13, 2017 GRADD staff hosted a Hazard Mitigation Council meeting to discuss maintenance of the plan and council representation.
3. May 6, 2019 GRADD staff began review of the 2016 Hazard Mitigation Plan and current Plan Review Tool.

4. May 8-10, 2019 GRADD staff attended G318 Hazard Mitigation training with KYEM.
5. June-July 2019 GRADD staff met with County EM Directors individually to discuss planning process.
6. July 10, 2019 GRADD hosted the 2021 Hazard Mitigation Plan Kickoff meeting of the Hazard Mitigation Council.
7. August 30, 2019 GRADD staff conducted the first Hazard Mitigation Community Meeting with the City of Providence and conducted remainder of Phase I community meetings concluding in December 2019.
8. January 2020 GRADD staff finalized data from Phase I meetings including disaster data and critical facilities.
9. January 22, 2020 GRADD hosted meeting of the Hazard Mitigation Council to receive an update on the planning process and results of the community meetings so far.
10. January 23, 2020 GRADD staff conducted the first Phase II Community meeting with Webster County.
11. March 13, 2020 COVID-19 Pandemic shuts down Phase II community meetings process with 14 meetings remaining.
12. September 1, 2020 GRADD staff hosted virtual meeting of Hazard Mitigation Council to provide update on planning process and discuss resumption of Phase II meetings.
13. September 9, 2020 GRADD staff resumed the Phase II community meetings utilizing CDC recommended practices of mask wearing and social distancing guidelines. Staff also significantly reduced the number of invitees to limit attendance to 10 or fewer.
14. October 2020 GRADD staff finalizes Prerequisites, Planning Process, Risk Assessment, Mitigation Strategy, Plan Maintenance, & Executive Summary for internal review.
15. November 2020 Hazard Mitigation Council meets to approve draft plan, and draft plan is distributed to local officials for review.
16. April 2021 Draft Plan is submitted to UK Planning Grants Manager.
17. May 2021 Revised Plan is submitted for FEMA Approval.
18. June 2021 Plan is presented for adoption to each city and county in the GRADD Region.
19. June 2021 Hazard Mitigation Plan Update 2021 is live and plan maintenance period begins.

Section 4: Risk Assessment

Introduction

From the beginning of the Hazard Mitigation Plan Process in July 2019, the goal of GRADD staff, the Hazard Mitigation Council and those involved stakeholders was the comprehensive compilation of information and data. The premise: study the previous iterations of the Hazard Mitigation Plan and develop strategies to further the data compiled into the plan. Much of this data is included in the appendix of this plan; however, the accumulation of the data allows stakeholders and staff to develop a narrative that shows the true impact of risk for the GRADD area.

Requirement
§201.6 (c)(2)
The plan shall include a risk assessment that provides the factual basis for activities proposed in the strategy to reduce losses from identified hazards. Local risk assessment must provide sufficient information to enable the jurisdiction to identify and prioritize appropriate mitigation actions to reduce losses from identified hazards.

This compilation of data provides a resource for elected officials to supplement their decision-making process and serves each stakeholder as a comprehensive foundation to validate investment decisions.

The risk assessment section is divided into the following subsections:

1. Approach and Methodology: This subsection includes an exploration of the approach used for data collection and the theory behind that approach. It also includes the methodology of why some hazards were profiled and others were excluded because of historical insignificance.

2. Hazard Profiles: This subsection includes a profile for each hazard, including a background of the hazard, extent, probability, vulnerability and historical significance.

3. Vulnerability Analysis and Assessment: This subsection serves as the primary emphasis for the risk assessment section and is the foundation for the mitigation strategy. It includes analysis of assets in the GRADD region. While much of the data is included in the Appendix during this Plan Iteration, the evaluation and vulnerability analysis are included.

Section 4: Risk Assessment

Approach

To accomplish this goal of comprehensive data collection, several practices were employed. GRADD staff met with each County Emergency Management Director at the beginning of the planning process to determine their respective familiarity with the Process and discuss hazards that affected their county. The importance of the community meetings and the need for assistance with stakeholders' recruitment was discussed.



Figure 4.1 *Whitesville Community Meeting January 24, 2020*

As referenced in Section 3: Planning Process, the community meetings were divided into two phases. The first phase of meetings was devoted specifically to the collection of data for the risk assessment. These Phase I meetings were scheduled with each incorporated city in the Green River District except for Rockport, McHenry and Wheatcroft. These communities chose to have their interests represented by their respective counties.

This separation of community meetings and devotion of the first meeting to the risk assessment allowed for detailed conversation and data collection. The picture above was taken during a group activity in which the wastewater treatment plant and sewer pump station vulnerability and resiliency were being studied.

Critical Facility Methodology

Prior to Phase I meetings, GRADD GIS staff used previous hazard mitigation critical facilities lists and existing GIS system data to create an inventory of critical facilities within each community. Planning staff and partners deemed it essential to ensure all critical facilities were inventoried and added to the GIS database. These critical facility updates are crucial for Emergency Planning and Mitigation Planning. The following exhibit illustrates the impact of the community meetings on the compilation of critical facility data. Using these records, the City of

Section 4: Risk Assessment

Providence examined a current inventory of critical facilities. This list was printed and displayed on a large map for use, and stakeholders used it to study missing data and identify critical facilities.

The updated inventory of critical facilities following the meeting is displayed in the following table and highlights the additions either previously unknown to staff or not compiled in GIS systems. Additional critical facilities gathered at the community meeting are highlighted in italics.

Table 4.1 - Critical Facilities Inventory Following Community Meeting

Infrastructure		
Water Supply	**Address**	**Notes**
WTP	*625 Cedar Road*	*Diesel Generator*
City Lake Pump Station		Pumps from Tradewater River
Water Tank		
Interconnect		*Webster County Water*
Interconnect		*Nebo Water*
Waste/Storm Water		
(6) Sewer Lift Stations		
WWTP	Cedar Street	
Electric Power Supply		
2 KU Substations		
Natural Gas		
Pipeline	Hwy 109/Roy Allen Road	Texas Gas Transmission
Airport		
Providence Airport	US HWY 41A N	
Emergency Response		
Government Buildings		
Providence City Building	*201 E. Main Street*	
Commission Chambers	*230 N. Willow*	
Police		
Providence Police Dept	200 N Willow Street	
Fire		
Providence Fire Dept	200 Willow Street	
Ambulance		
Helipad	*Airport*	
Communications		
Police Repeater	*McElroy Drive*	*No backup Power*
Shelters		
First Baptist Church	*214 S Broadway*	
Life Center Church	*630 Edgewood Drive*	
Providence Church of Christ	*2500 Jolly Liberty Road*	
Providence Comm. Center	*211 Wallace Street*	*Backup Power--Yes*

Table 4.1 - Critical Facilities Continued

Churches		
First Baptist Church	*214 S Broadway*	
Victory Baptist	*501 S Broadway*	
Second Baptist Church	*700 Langley Avenue*	
Pleasant Hill Baptist Church	*821 Westerfield Drive*	
Providence General Baptist	*309 W Main Street*	
Healthcare		
Health First	*215 E Main Street*	
Vulnerable Population Centers		
Schools	**Address**	**Notes**
Providence Elementary	470 S Broadway	
Apartment Buildings		
Saddle Club Apartment	*216 Gulf Street*	*60 Units*
Providence Municipal Housing	*434 Center Ridge Drive*	*64 Units*
Greenbrier Apartments	*314 N Willow Street*	*40 Units*
Big Hill Apartments	*307 Marlin Street*	*16 Units*
Marlin Garden Apartments	*500 Marlin Street*	*60 Units*
Elk Rentals	*714 N Broadway*	*12 Units*
Elk Rentals	*911 S Broadway*	*8 Units*
Palmer Place I	*500 US Hwy 41A N*	*40 Units Assisted Living*
Nursing Homes		
Shemwell Healthcare	*805 Princeton Street*	*20 Beds*
Economic Recovery		
Major Employers	**Address**	**Notes**
S&S Salvage	*501 US Hwy 41A N*	
Smith Metals		
Time well Drainage	*201 Donan Drive*	
Other		
Providence Entrance Arch		*Cultural Critical Facility*
Webster County Food Bank	*110 US Hwy 41A North*	
Sureway	*501 US Hwy 41A*	*Grocery Store*
Providence City Park	*Cobb Drive*	

In addition to identification of additional critical facilities, information about each critical facility was collected. In the period since these meetings, the data has been used in a variety of ways:

- Grant applications to purchase generators at some critical facilities identified during community meetings as lacking backup power.
- Development of Mitigation Projects identified through study of the critical facilities such as the Hawesville Levee and Levee Stormwater Pump Station.
- Emergency Operations Plan updates—the City of Sturgis' new Superintendent for Public Works who used this data to immediately improve his emergency operations plan for city services.

Section 4: Risk Assessment

Phase I Community Meetings—Risk Assessment

Agendas, an example of which is shown below, laid out a specific plan to obtain as much information as possible from the stakeholders and contributed to the positive outcome from each meeting.

Figure 4.2 - Hazard Mitigation Phase I Community Meeting Agenda

Green River Area Development District
City of WHITESVILLE Community Meeting for Hazard Mitigation 2021 Update
WEDNESDAY October 16, 2019—8:30AM-9:30AM

AGENDA

1. INTRODUCTION

2. GRADD HAZARD MITIGATION PLAN

A. Why do we do this?

a. Essentially an argument to justify projects for federal dollars

b. Hurricane Maria/Hydro Cyber Attack

3. RISK ASSESSMENT

A. Identify Hazards—What hazards can affect us and how do we rank them?

a. NOAA/NCDC Storm Data & Impact on services

b. Cyber Security

B. Identify Assets—What are we trying to protect?

a. Infrastructure

What do we depend on to function?

b. People

Who is the most vulnerable?

c. Economy

What places are crucial to our economy?

d. Natural

What can we protect in our environment?

C. Analyze Risk—What can cause us the most damage and why?

a. Flood Plain

What is at risk here?

b. Historical Analysis

Where was the most damage done and why?

c. Scenario Analysis

Earthquake/Tornado/Flooding

Worst possible cases—how can we prevent the most damage?

D. Summarize Vulnerability

Devise Problem Statements

What assets are vulnerable here?

What makes our community vulnerable?

4. ADJOURNMENT

Section 4: Risk Assessment

Community Meeting Facilitation

Question sets were created through a partnership with Kentucky Emergency Management (KYEM), Cybersecurity and Infrastructure Resiliency Agency (CISA) and the Green River Area Development District (GRADD). This partnership and pilot project will produce a "risk-assessment" add-on for the Hazard Mitigation Plan during 2021 focused on lifeline dependencies. These question sets discussing recent experiences, critical infrastructure, and dependencies were used to facilitate conversation during the community meetings to explore resiliency. Conversation sparked by the "Recent Experiences" question set that can be found in the appendix, helped stakeholders explore certain incidents faced in communities at a deeper level. It enabled participants to think outside their individual position as a stakeholder and explore the cascading effects of a disaster.

The question sets, "Critical Infrastructure in the Community" and "Dependencies" that can be found in the appendix, explored the FEMA Life Lines and interdependent critical infrastructure within the community. Communication infrastructure became a major topic of conversation during many of the community meetings—in large part to the experience of the 2009 Ice Storm that devastated the GRADD region. Communication lines and towers were incapacitated. Further exploration of the lifelines and the effect of critical infrastructure sparked in-depth discussion of emergency operations plans and possible mitigation activities that were assessed during the Phase II meetings in each community.

These question sets proved valuable during the community meetings by encouraging participants to reexamine previous perceptions of mitigation and disaster while exploring the disaster at a level of dependency and systems approach. The strategies used during these meetings will be explored further during next year's "risk assessment add-on" project.

Presidential Disaster Declarations

As part of the Risk Assessment Process, relevant Presidential Disaster Declarations affecting all or part of the GRADD region were analyzed and summarized. Specific impacts will be discussed by location in the Hazard Profiles Section later in this section of the Plan. Financial impacts of each Declared Disaster were analyzed through the NOAA and NCDC Storm Events Database in addition to Arizona State University's SHELDUS Storm Data Research and the data compiled.

As found in the appendix, narratives for each Presidentially Declared Disaster gives a high level overview of the impact on the GRADD region.

Identifying Hazards

The GRADD region sits geographically in an area susceptible to a wide variety of hazards that affect infrastructure, property and life of its 220,000 residents. The original Hazard Mitigation Plan identified and reviewed a list of natural hazards that affected the GRADD region. Subsequent updates reviewed and updated those included natural hazards. After review of the identified hazards from the 2016 version of the Plan, writers of the 2020 update chose to approve the list of natural hazards as previously stated and to include a new category of hazards—Manmade. The addition was included as response to recent events that will serve as a benchmark for future emergency planning, such as the COVID-19 Pandemic.

Requirement §201.6 (c)(2)(i)
The risk assessment shall include a description of the type of natural hazards that can affect the jurisdiction.

Pandemics have occurred before and Kentucky was not immune, as evidenced by the 14,000 Kentuckians who died during the Spanish Flu of 1918. This COVID-19 pandemic had effects that were felt worldwide as families, communities, states and nations were forced to quarantine at home. The effects on personal lives were felt through sickness, death and the economy. All will be studied extensively in the decades to come. Much as the Ice Storm of 2009 served as a benchmark for emergency preparedness in the Commonwealth of Kentucky. COVID-19 will also serve as a benchmark for emergency preparedness and response worldwide. The impacts and requirements of local governments and local officials to facilitate a response provides justification for inclusion in the identifiable hazards for the GRADD region.

As evidenced on the following table, Pandemic is included on the list of hazards identified for the region, along with those hazards not profiled for the region and justification for each group. The first table provides a list of the applicable natural hazards for the GRADD region and the justification for inclusion.

Table 4.2 - Hazards Profiled for the Green River Area Development District

Hazard	How Identified	Why Identified
Dam / Levee Failure	Local Emergency Management records; Public input	The number of high-risk dams in the region; The potential for failure and the extent of possible damages
Drought	Local news articles; Local Emergency Management records; Extension offices; USDA	Many past events in the region; Potential negative economic impact
Earthquake	Center for Earthquake Research Institute; Historical damage; Local Emergency Management records	Active faults in the region including the New Madrid and Wabash
Extreme Temperatures	Local Emergency Management records; News articles; Public input	Many past events in the region; Significant threat to human health; Often coupled with drought or winter storm events
Flooding / Flash Flooding	Local Emergency Management records; Public input; Review of FIRM maps; Review of previous projects in local jurisdictions; Road closures	Floods frequently affect the region; Geographic features of the region include streams and rivers; Maps show many flood prone areas; Existing reports indicate flood issues
Landslide	Local Emergency Management records; Public input	Local records identified events; Landslide areas in the region identified according to the Kentucky Geological Survey
Land Subsidence	KY Division of Mines website; Local news articles	Every county has undermined areas; Documented damages in several counties
Thunderstorm Wind / Hail / Lightning	Review of past disaster damages from FEMA; Input from the public and planning committees; News articles; Insurance records	Many past events in the region; Widespread nature of the hazard; Availability of substantial NOAA information
Tornado	Review of past disaster damages from FEMA; Review of FEMA hazard maps; Public input; Wind zone maps	Documented past damages; Wind zone maps show the region in Zone IV
Severe Winter Storm	Review of past disaster damages from FEMA; Input from the public and planning committees; News articles; Local Emergency Management	Many past events in the region; Significant variety of event types in the region, including snow and ice storms
Wildfire	Review of maps from Division of Forestry; Public input; Review of past damages	Local records identified several events; Region regularly experiences extreme heat and drought.
Pandemic	Widespread availability of data showing the impact of damages.	Once in a generation event that has affected every citizen of the region and will serve as a benchmark for disaster response.

Table 4.3 - Hazards Not Profiled

Hazard	How Identified	Why the Hazard is Not a Threat to the GRADD Region
Hurricane	Review of past disaster damages; Local Emergency Management records; Public input; Review of existing reports	Geographical location of the region is not coastal; Region is affected, however, by storm systems (thunderstorms, wind events) generated by hurricanes
Tsunami	Tsunami hazard map	Tsunamis directly affect coastal areas
Volcano	Research on volcanoes; Local community meetings	No active volcanoes in GRADD according to FEMA hazard maps
Fog	Tsunami hazard map	Fog does not cause direct property damage

Prevalence of Hazards

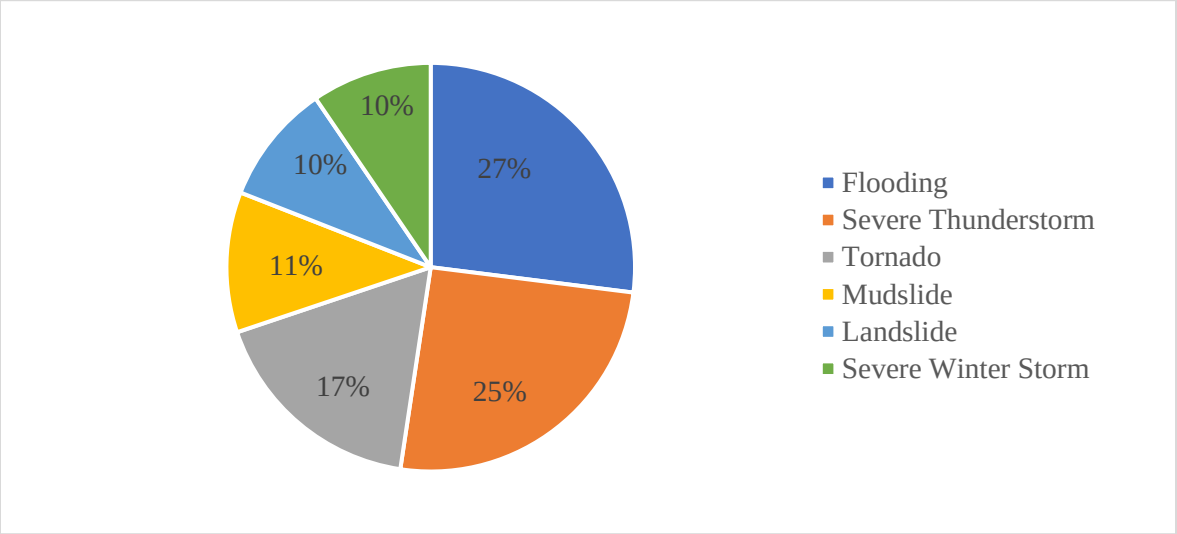
The following table displays the prevalence of hazards for the GRADD region from 1996 to 2019.

Table 4.4 - Prevalence of Hazards

Hazard	Number of Events	% of Total Events
Earthquake	0	0%
Drought	136	7%
Extreme Temperatures	336	19%
Flooding / Flash Flooding	261	14%
Lightning	22	1%
Hail	317	17%
Severe Thunderstorm	117	6%
Land Subsidence	0	0%
Severe Winter Storm	526	29%
Tornado	63	3%
Dam / Levee Failure	0	0%
Landslide	36	2%
Wildfire	0	0%
Total	1814	100%

Source: NCDC Storm Events Database

Figure 4.3 - Prevalence of Hazards – GRADD Region 2015-2019

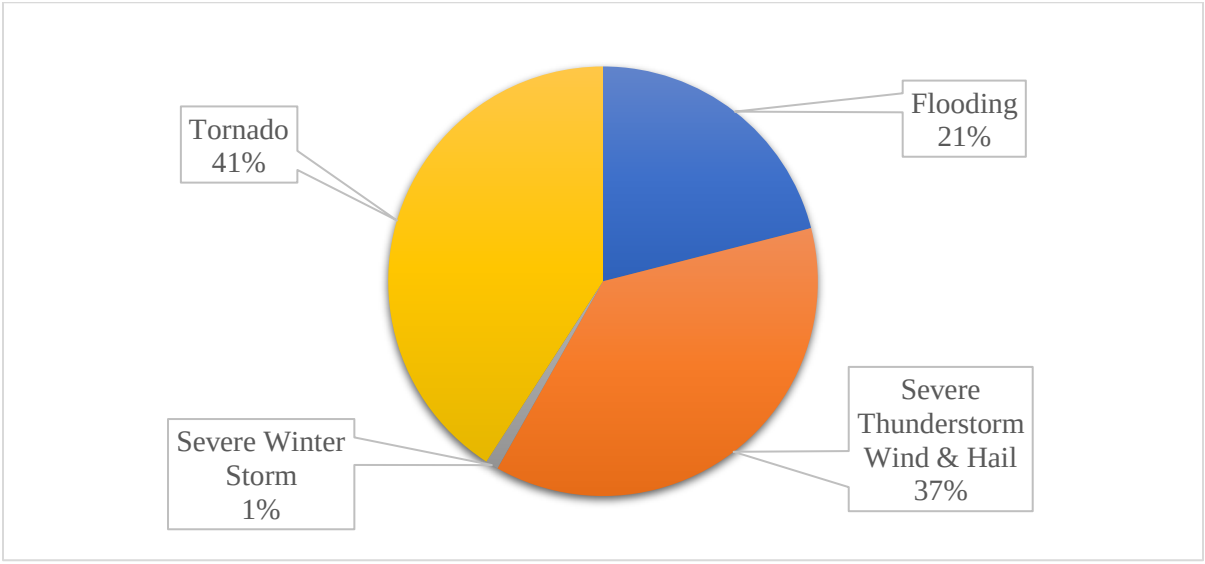


Source: NCDC Storm Events Database

Prevalence of Property Damage

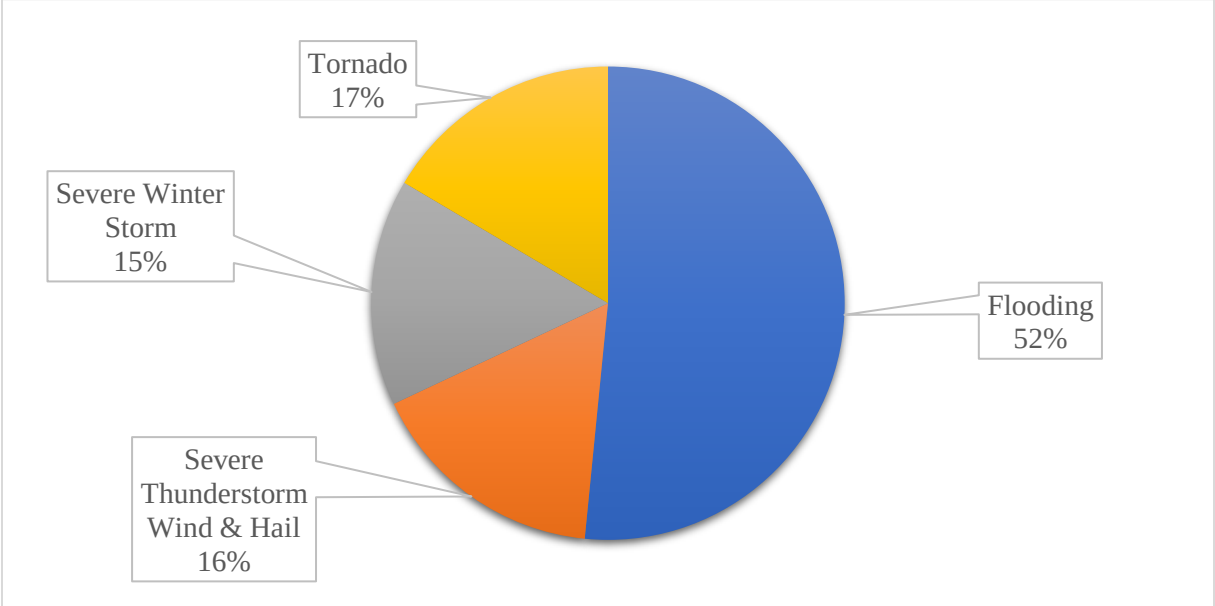
The following figures display those same hazards experienced by the GRADD region, but in terms of total property loss and damages caused by natural hazards, both since 1950 and more specifically from 2015-2019.

Figure 4.4 - Property Damage by Hazard 1950-Present



Source: NCDC Storm Events Database

Figure 4.5 - Property Damage by Hazard 2015-Present



Source: NCDC Storm Events Database

Probability

In the individual Hazard Profiles that comprise the majority of the Hazard Mitigation Plan, the probability of each event is expressed as the likelihood of the hazard occurring within a given span of years. Probability was calculated as using the past frequency of storm events as a predictor of future probability. NCEI Storm Data has been recorded with various start dates according to Hazard. The probability for each hazard category is therefore recorded as frequency of events for the number of years of available data.

Requirement
§201.6 (c)(2)(iii)
For multi-jurisdictional plans, the risk assessment Must assess each jurisdiction's risk where they vary from the risks facing the entire planning area.

Storm Data are geographically categorized by county or by NWS Forecast Zone - Heat, Cold, Drought, Flood, Tropical & Winter Weather. Storms with smaller coverage areas are collected by county - Tornado, Thunderstorm Winds, Flash Floods and Hail.

The following table categorizes the probability used for each profile type and will calculate the annual chance for an event in each specific profile according to the data found.

Table 4.5 - Future Probability Classification

Probability	Unlikely	Less than one percent probability of occurrence in the next year or a recurrence interval of greater than every 100 years.
	Occasional	One to ten percent probability of occurrence in the next year or a recurrence interval of 11 to 100 years.
	Likely	Ten to ninety percent probability of occurrence in the next year or a recurrence interval of one to ten years.
	Highly Likely	Ninety to hundred percent probability of occurrence in the next year or a recurrence interval of less than one year.
Overall Significance	Low	Two or more criteria fall in lower classifications or the event has a minimal impact on the planning area. This rating is sometimes used for hazards with a minimal or unknown record of occurrences or for hazards with minimal mitigation potential.
	Medium	The criteria fall mostly in the middle ranges of classifications and the event's impacts on the planning area are noticeable but not devastating. This rating is sometimes used for hazards with a high extent rating but very low probability rating.
	High	The criteria consistently fall in the high classifications and the event is likely/highly likely to occur with severe strength over a significant to extensive portion of the planning area.
Extent	Weak	Limited classification on scientific scale, slow speed of onset or short duration of event, resulting in little to no damage.
	Moderate	Moderate classification on scientific scale, moderate speed of onset or moderate duration of event, resulting in some damage and loss of services for days.
	Severe	Severe classification on scientific scale, fast speed of onset or long duration of event, resulting in devastating damage and loss of services for weeks or months.
	Extreme	Extreme classification on scientific scale, immediate onset or extended duration of event, resulting in catastrophic damage and uninhabitable conditions.

Source: GRADD Staff using NCEI Data

Section 4: Risk Assessment

Hazard Profiles

Requirement
§201.6 (c)(2)(iii)
The plan shall include information on previous occurrences of hazard events and the probability of future hazard events. The risk assessment shall include a description of the jurisdictions' vulnerability and an overall summary of each hazard and its impact on the community.

The following hazard profiles were developed through research of past Hazard Mitigation Plans, community meeting and stakeholder input, data from the Internet, courthouses and city halls and the public. Each profile was reviewed and revised during the planning and writing process. The profiles are included in alphabetical order only. All event types present a serious threat to the people, places and infrastructure in the GRADD region. Each profile must be studied and reexamined to understand their effects and risk of future probability. Much of the basic profile information for each of the hazards is unchanged since the 2016 edition of the plan. The classifications of data, scales used to measure intensity. The definitions of hazards are all profiled in the same way as the 2016 Update.

A significant amount of the data normally compiled in this Risk Assessment Section is now included in the Appendix of the Hazard Mitigation Plan. The hazard profiles will focus on the community findings and the impact each poses for individual jurisdictions. This analysis will be displayed in several forms—narratives, tables, graphs to display as comprehensively as possible, the ground level impact of hazards in the region.

Hazard Profile: Dam and Levee Failure

A dam is defined by KRS 151.100 as any artificial barrier that compounds or diverts water and is either 25-feet in height from the downstream toe to the crest of the structure or has a maximum water storage elevation capacity of 50-acre feet or more. Dams serve a multitude of purposes, including human water supply, irrigation, energy generation, recreation and flood control.

Table 4.6 - Dam Types

Type	Description
Gravity Dams	Constructed with concrete or masonry, these dams rely upon the weight of the material used and internal strength for overall stability.
Arch Dams	Made of concrete, masonry, or timber, these dams are curved upstream to transition the water load to the abutments.
Coal Impoundments	For this type, an embankment of coarse coal refuse serves as the dam, standing 20 feet high or capable of impounding 20 acre-feet of water. Ultimately, they store the wastewater and impurities that emerge from coal processing.
Embankment Dams	These dams are constructed out of excavated natural materials, such as earth fill or rockfill, or waste materials such as mining or milling tailings.

Source: The Association of State Dam Officials

The Association of State Dam Officials (ASDO) explains that a dam is defined by six characteristics: the materials of which it is composed, the methods used in construction, how it opposes the water pressure behind it, the mechanism by which it controls seepage and its purpose. There are two primary types of dams: embankment and concrete. Embankment dams are the most common and are constructed using either natural soil or rock or waste material from a mining or milling operation. They are often referred to as “earth-fill” or “rock-fill” based upon which of those two types of materials is used to compact the dam.

Concrete dams are generally categorized as either gravity or buttress dams. Gravity dams rely on the mass of the concrete and friction to resist the water pressure. A buttress dam is a type of gravity dam where the large mass of concrete is reduced, and the force of water pressure is “diverted to the dam foundation through vertical or sloping buttresses.” Typical materials for dam construction include rock, earth, tailings from mining or milling, concrete, masonry, steel, timber and other materials, such as plastic and rubber.

Classification

Under KRS Statute 151.293, Section 6, the Energy and Environment Cabinet through the Kentucky Department of Environmental Protection is authorized to inspect all Commonwealth-owned dams and issue classifications. The classification given to a dam is based on the potential impact of its failure, including loss of human life and property and economic consequence. The classification is used to determine the frequency of dam inspections. Dams that are classified as "A", or a low-risk dam, are inspected every five years. "B" or "C" class dams, moderate and high hazard, respectively, are inspected every two years. Inspectors use a standardized method to evaluate the safety of each dam, and at the end of inspection, provide a report that makes recommendations for any modifications needed.

Table 4.7 - Hazard Classification

Classification	Description
Low Hazard (Class A)	The structure is located such that a failure would result in the loss of the structure itself; however, there would be little or no damage to the other properties.
Moderate Hazard (Class B)	The structure is located such that failure could result in significant damage to property and project operation, but loss of human life is not anticipated.
High Hazard (Class C)	The structure is located such that failure could result in loss of life and/or substantial damage to residential properties, industrial or commercial buildings, public utilities, main highways, or railroads

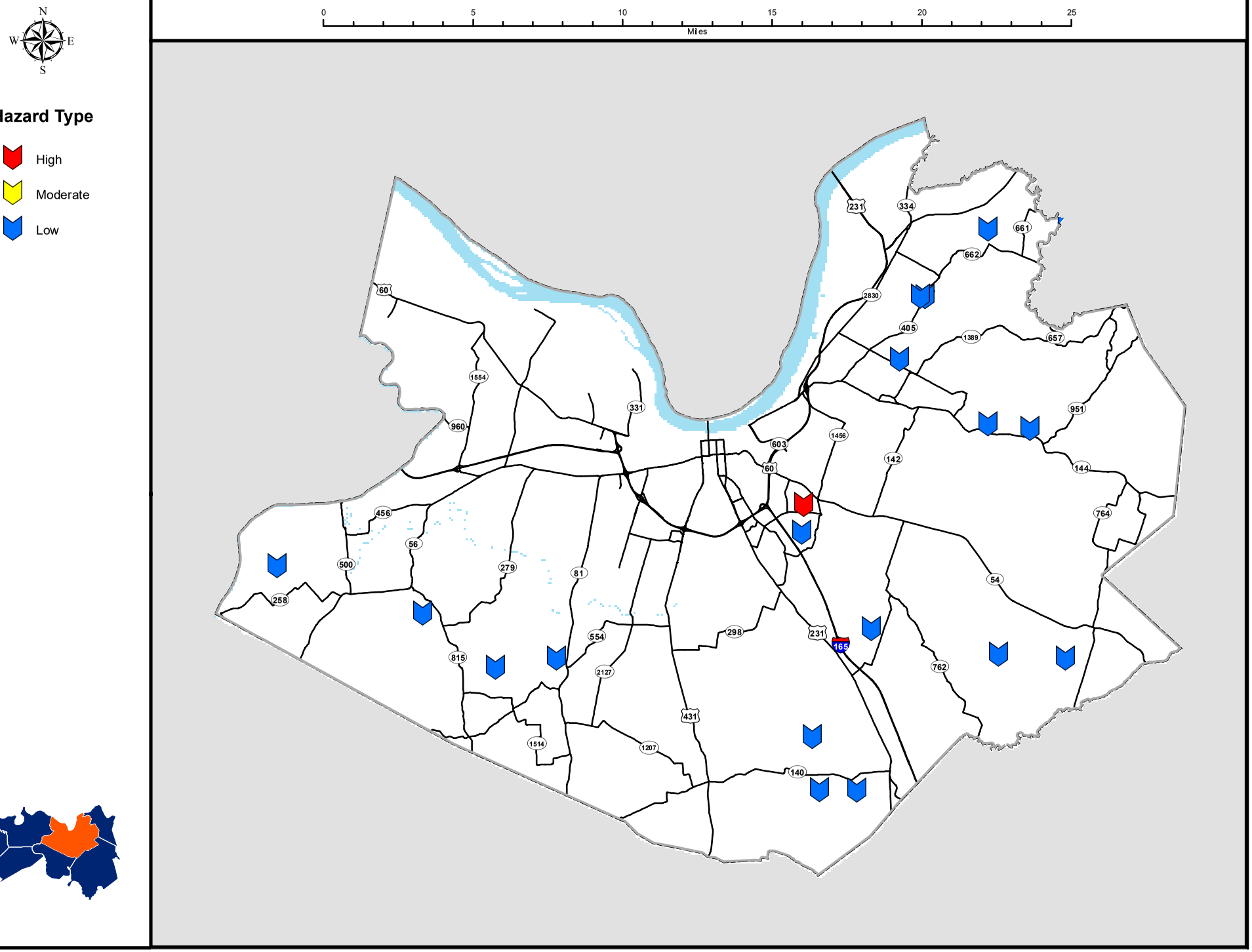
Source: Kentucky Association of Mitigation Managers

Table 4.8 - Dam Classifications in the GRADD Region

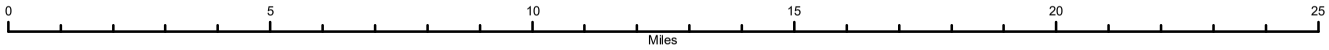
Location	Class A (Low)	Class B (Moderate)	Class C (High)
Daviess	10	1	1
Hancock	8	5	1
Henderson	5	4	1
McLean	2	0	1
Ohio	14	4	1
Union	15	12	3
Webster	4	3	1

Source: Kentucky Division of Water, 2019

Daviess County



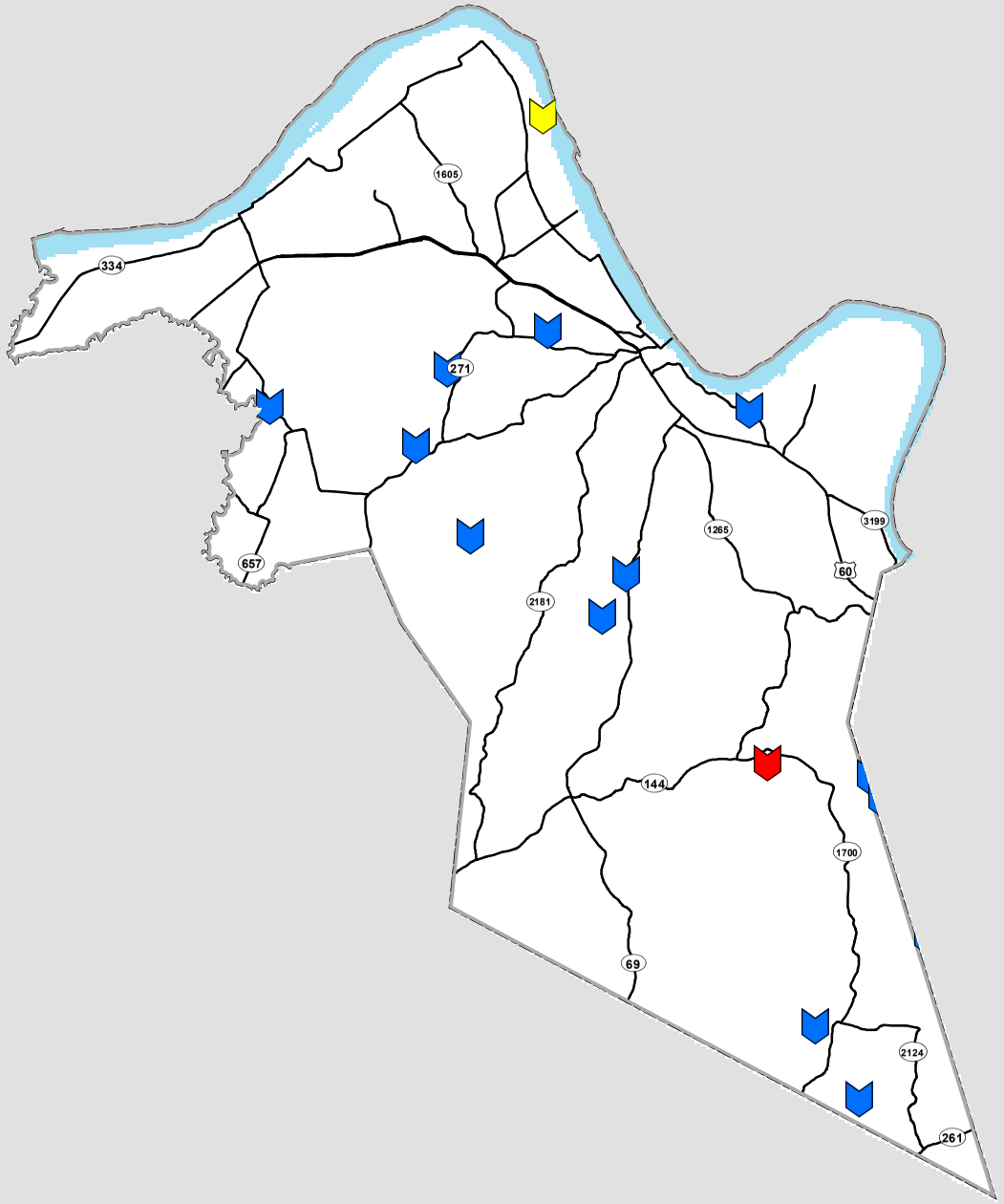
Hancock County

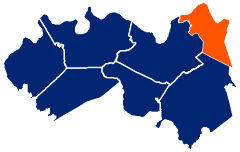




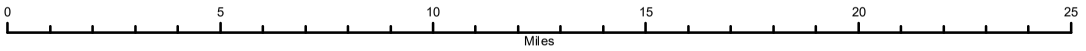
Hazard Type

- High
- Moderate
- Low





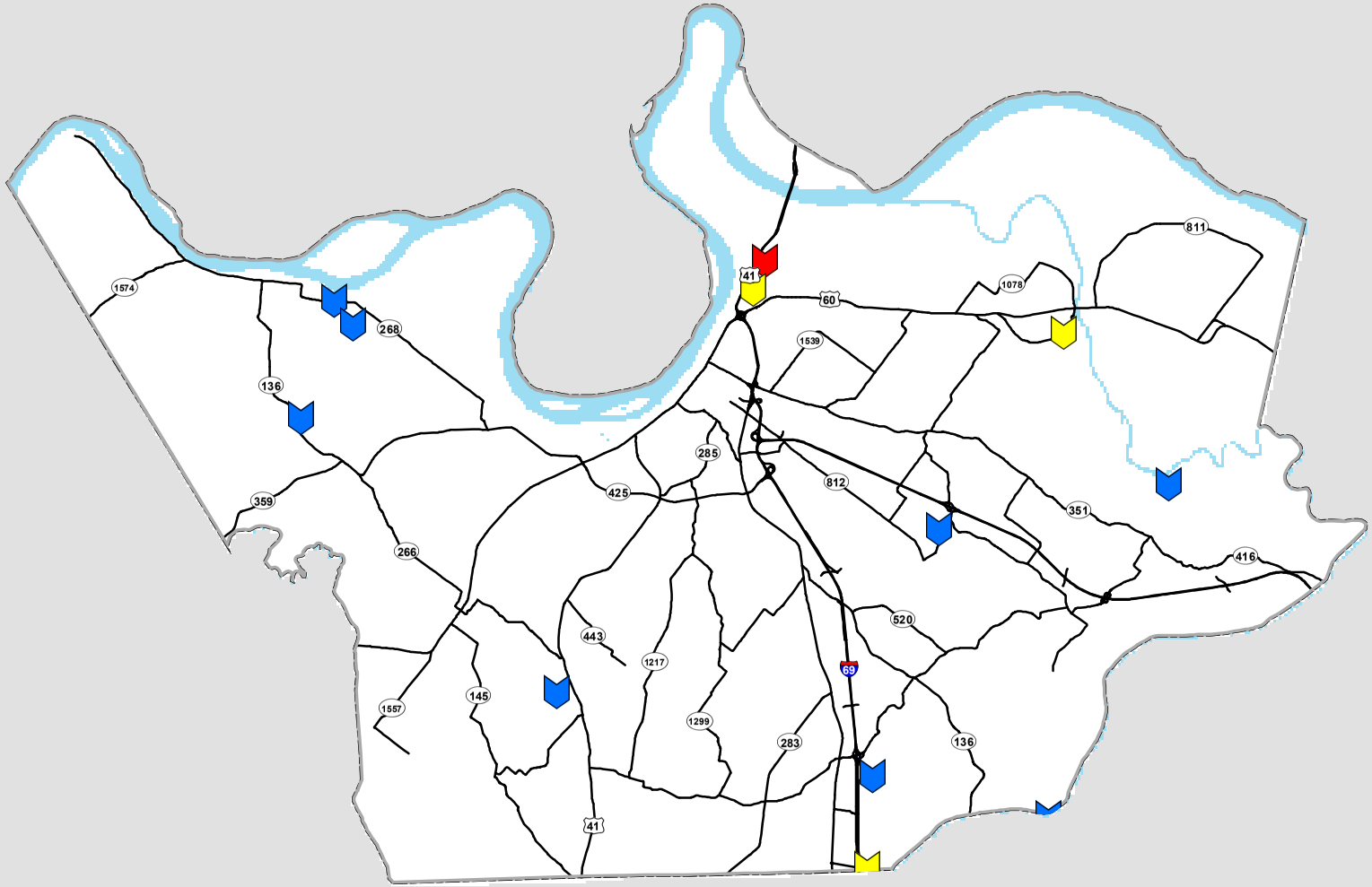
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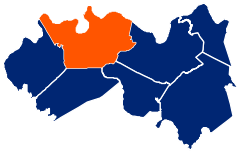




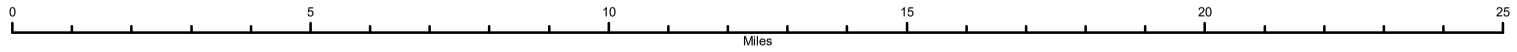
Hazard Type

- High
- Moderate
- Low





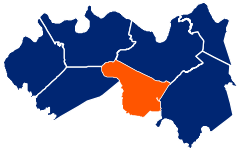
McLean County





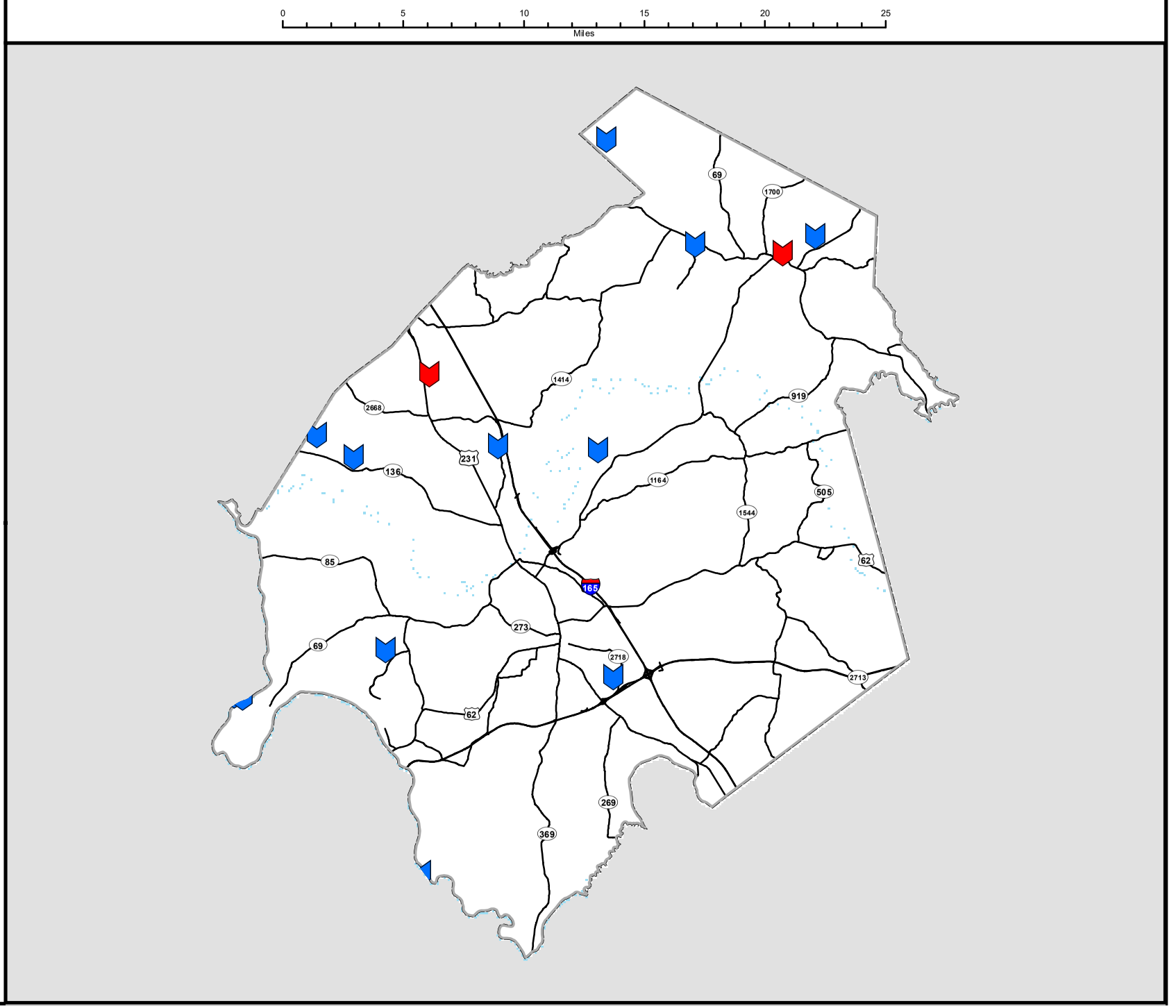
Hazard Type

- High
- Moderate
- Low

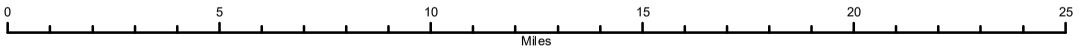




Ohio County


N
W
E
S
0
5
10
15
20
25
Miles
Hazard Type
High
Moderate
Low
69
1700
1414
2668
919
231
136
1164
505
1544
85
62
165
273
69
2718
2713
62
269
369

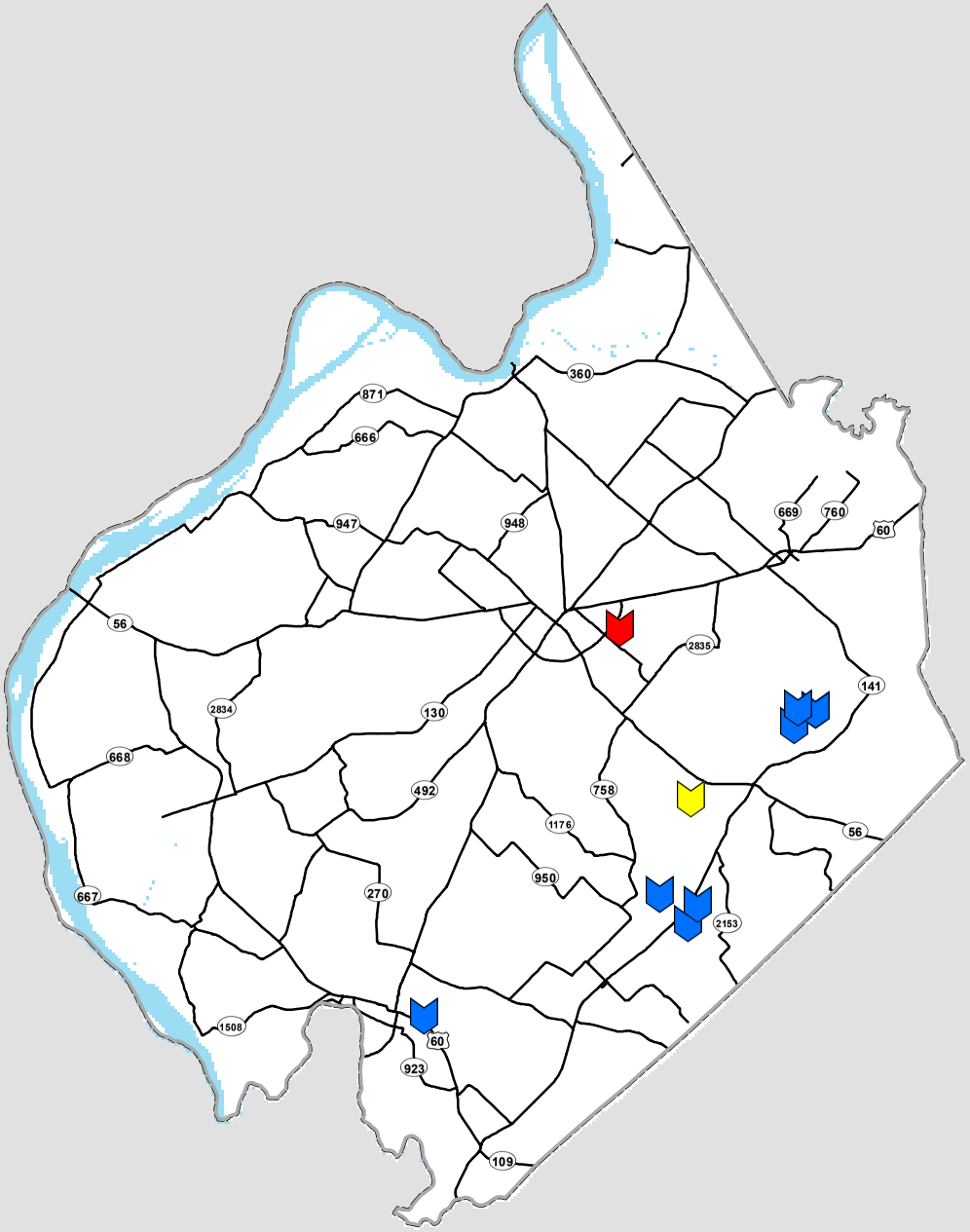
Union County

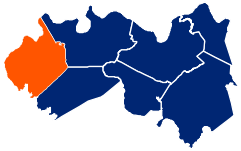




Hazard Type

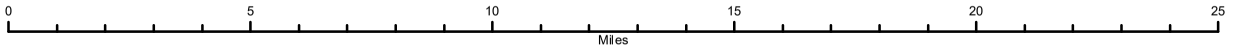
- High
- Moderate
- Low





T9

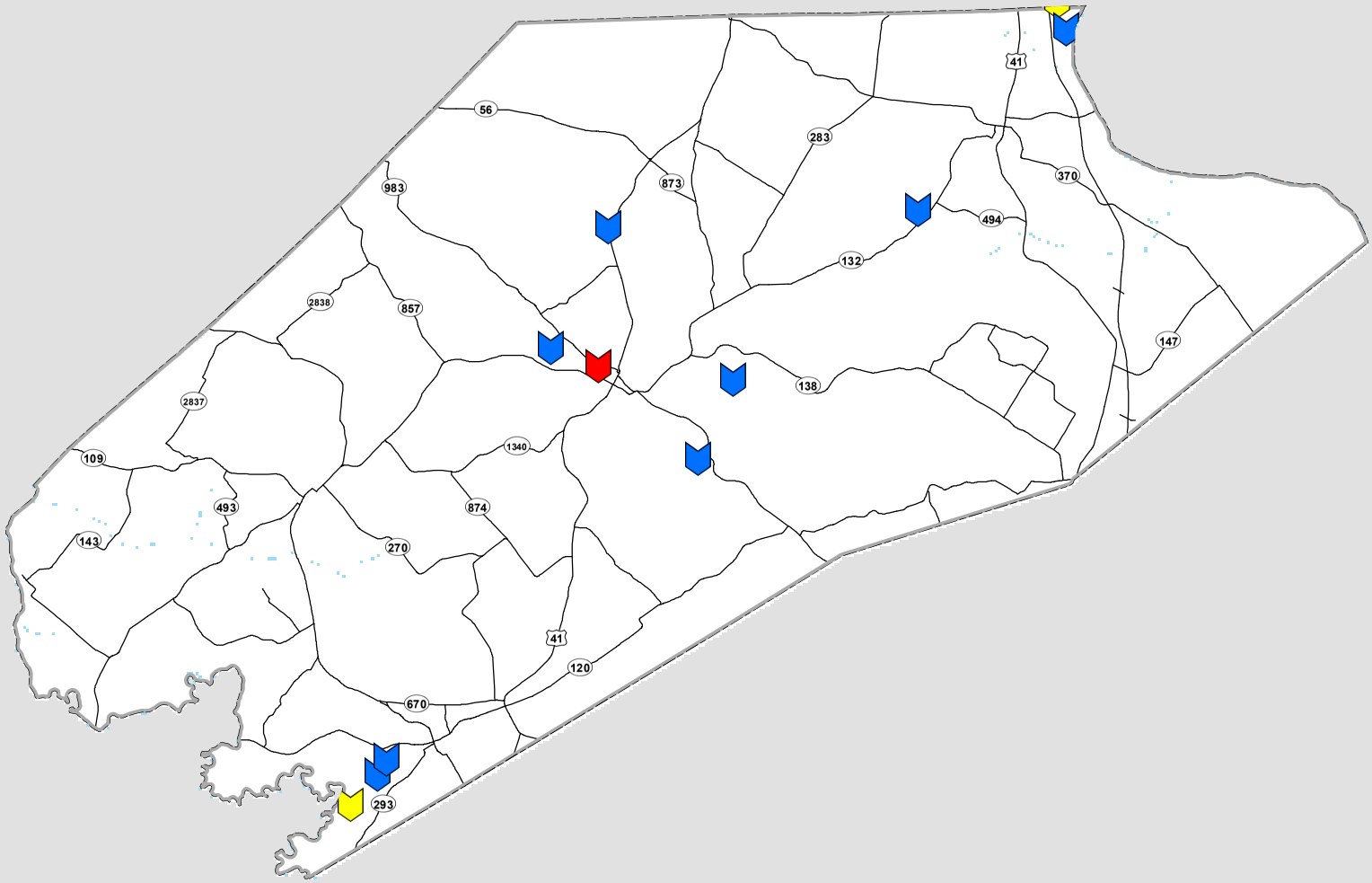
Webster County

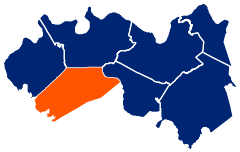




Hazard Type

- High
- Moderate
- Low





62

Dam Vulnerability

The National Performance of Dams Program maintains a listing of dam incidents and dam failures that is referenced in the table below for the Commonwealth of Kentucky.

Table 4.9 – National Performance of Dams Program Kentucky Incidents

Dam Name	Kentucky County	Incident Date	Incident Type	Uncontrolled Release
Hematite Lake Dam	Lyon	6/11/1998	Not Known; Seepage; Piping	Yes
Guist Creek Lake Dam	Shelby	3/1/1997	Inflow Flood - Hydrologic Event	No
Kincaid Creek Dam	Pendleton	3/1/1997	Inflow Flood - Hydrologic Event	No
Mud River Mps 6a	Logan	3/1/1997	Inflow Flood - Hydrologic Event	No
Lake Genevieve	McCracken	9/5/1985	Inflow Flood - Hydrologic Event	Yes
Indian Lake Dam	Hancock	1/1/1983	Piping	Yes
Eastover Mining Company Dam	Harlan	12/18/1981	Sabotage - Other	Yes
Samsel	Unknown	2/2/1979	Seepage	No
East Fork Pond River Frs. No. 4.1	Christian	12/8/1978	Foundation Failure	Yes
Camp Ernst Dam	Boone	9/15/1978	Embankment Slide	Yes
Caulk Lake Dam	Taylor	12/16/1973	Seepage	Yes

Source: National Performance of Dams Program

Rochester Dam



Figure 4.6 *The Rochester Lock and Dam. Shown here: the original lock constructed in 1834. Photo courtesy of the United States Corps of Engineers*

The Rochester Dam lies on the Green River in Ohio County, served as a critical piece of transportation infrastructure, and today still serves as a critical water source for 3 counties. Constructed in the 1834 as a rock filled timber-crib dam, the Rochester Lock and Dam, along with other lock and dams allowed boats traveling along the Green River to move people and cargo from Evansville, IN to Bowling Green, KY. In 1906 it was possible to leave Calhoun, KY at five in the evening and arrive in Evansville, IN at daylight, according to the Ohio County Historical Society. As roads improved and railroad infrastructure in the region was added, commercial traffic on the Green River dwindled. In 1965, the Woodbury Dam upriver from Rochester failed and severely lowered the water level. With no way to move heavy boats between Lock 4 and 5, the entire lock system was crippled and the Lock at Rochester Dam was put out of use.

As a source of drinking water for more than 50,000 people in three counties, the Rochester Dam still was a critical piece of infrastructure. It serves as the source of drinking water for the Ohio County Water District serving Muhlenberg, Ohio and Butler Counties. In 2004, plans were developed to repair the aging and leaking dam to ensure access to drinking water for these residents. The Rochester Dam Regional Water Commission was established to oversee the dam and in 2016 the Water Resources Development Act paved the way for the repair of the dam using $3 million in funding from the Economic Development Administration. Finished in November 2020, the dam will continue to serve the 50,000 people dependent upon it.

Table 4.10 - Probability of Dam & Levee Failure Events in the GRADD Region

County	Probability of Future Events	Vulnerability
Daviess	Moderate	Moderate
Hancock	Moderate	Moderate
Henderson	Moderate	Moderate
McLean	Low	Low
Ohio	Moderate	Moderate
Union	Moderate	Moderate
Webster	Low to Moderate	Moderate

Causes of Dam Failure

- Structural: This common cause is responsible for nearly 30% of all dam failure in the United States. Structural failure of a dam occurs when there is a rupture in the dam or its foundation.
- Mechanical: Refers to the failure or malfunctioning of gates, conduits, or valves.
- Hydraulic: Occurs when the uncontrolled flow of water over the top, around and adjacent to the dam erodes its foundation. Hydraulic failure is the cause of approximately 34% of all dam failures.

Summary

While historical data does not exist for actual events occurring in the GRADD region for Dam and Levee Failure, the threatening nature of the hazard warrants inclusion in the Hazard Mitigation Plan. As shown in the maps and data in this section, possible failure from some of these structures would result in catastrophic damage and loss. Some structures are owned by the federal or state government, but many of these structures are maintained independently or controlled by local officials. With that ownership comes great responsibility and necessary planning for maintenance and accreditation to maintain the integrity of the levees and dams that citizens depend on to protect their homes, businesses and way of life.

Hazard Profile: Drought

A drought is a prolonged period with less-than-average amounts of rain or snow in a particular region. The severity of a drought depends on the amount of time that a region receives below-average precipitation. A drought is caused by drier than normal conditions that can eventually lead to water supply problems. The lack of adequate precipitation, either rain or snow, can cause reduced soil moisture or groundwater, diminished stream flow, crop damage and a general water shortage. According to NOAA's National Integrated Drought Information System, droughts are the second-most costly weather events after hurricanes with 26 droughts recorded across the nation since 1980 with an average cost of $9.6 billion each.

Unlike a tornado or hurricane, it is difficult to determine when a drought starts or ends, with initial effects taking months to identify. This difficulty remains true for the GRADD region, where several counties do not have recorded drought events, because most drought events have a region-wide effect, all counties in the GRADD region experience drought as a hazard event.

Agriculture remains a substantial part of the economy in the Green River region with approximately 1,736 square miles of farmland comprising 3,733 farms (2017 Census data). Agriculture sales from the region make up 14% of Kentucky's total agriculture sales, while Daviess and McLean counties rank 5th and 6th in the state in sales according to the United States Department of Agriculture. The 2020 of the Comprehensive Economic Development Strategy Update for the Green River region includes the following chart listing the market value of agriculture products sold, highlighting the importance agriculture plays in the area.

Figure 4.7 - Total Agriculture Sales by GRADD County

	Sales ($1,000)	Rank in State
Daviess	185,879	6
Hancock	11,597	77
Henderson	97,697	20
McLean	190,838	5
Ohio	135,769	11
Union	108,853	16
Webster	141,882	10

Source: United States Department of Agriculture Statistics Service, 2017 Census

Drought

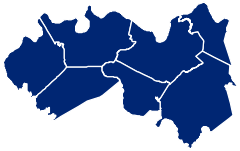
0 5 10 15 20 25
Miles

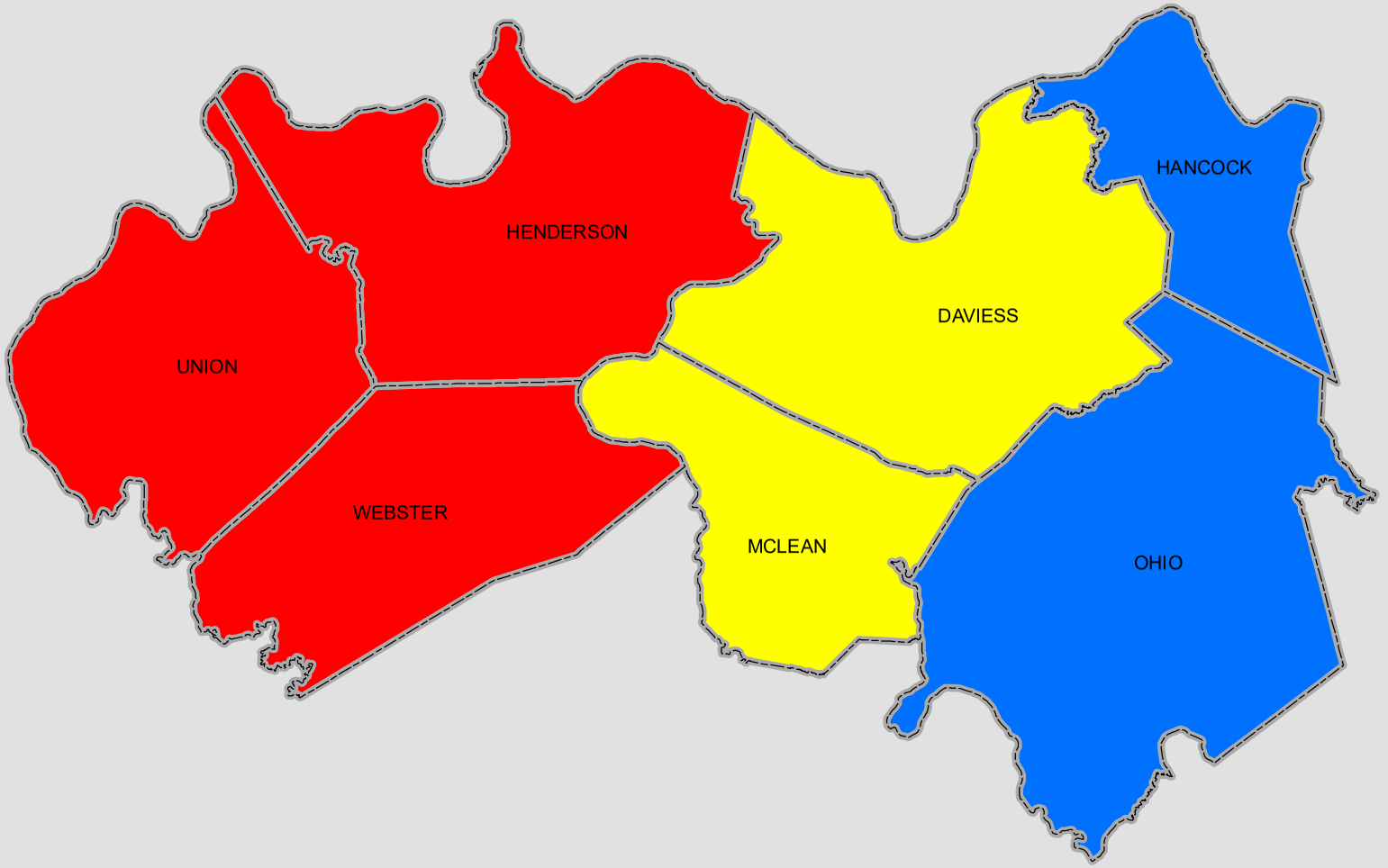
N
W E
S

Hazard Type

Drought Vulnerability

- High
- Moderate
- Low





Severity

The U.S. Drought Monitor began in the year 2000. Since 2000, the longest duration of drought (D1-D4) in Kentucky lasted 46 weeks beginning on May 22, 2007 and ending on April 1, 2008. The most intense period of drought occurred the week of October 16, 2007 where D4 affected 16.15% of Kentucky land. There are 5 main categories the drought monitor uses to classify drought. These categories are captured in the table below.

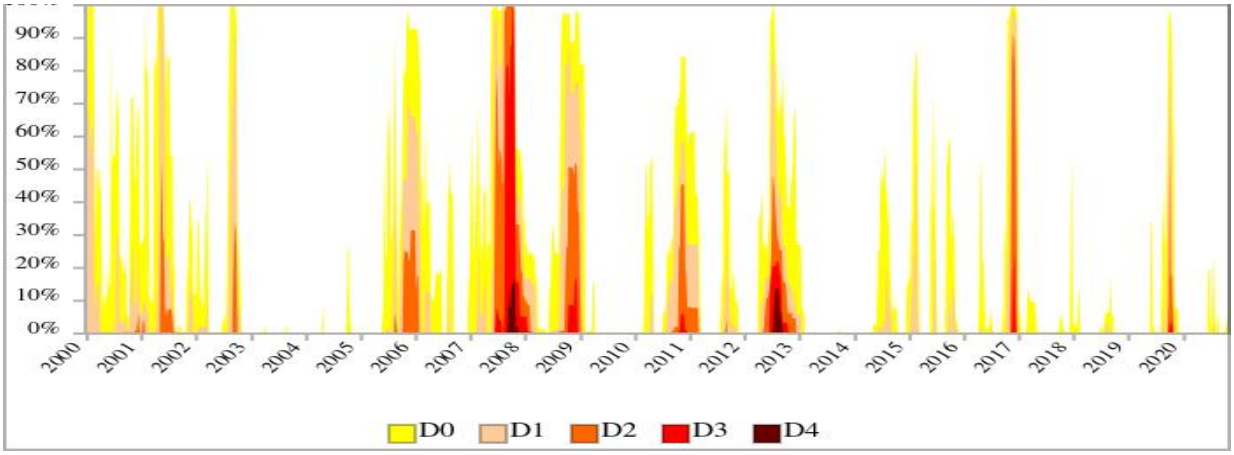
Table 4.11 - U.S. Drought Monitor Categories

Category	Description	Possible Impacts
D0	Abnormally dry	Going into drought: short-term dryness, slowing planting or growth of crops or pastures. Coming out of drought: some lingering water deficits; pastures or crops not fully recovered.
D1	Moderate drought	Some damage to crops or pastures; streams, reservoirs, or wells low; some water shortages developing or imminent; voluntary water use restrictions requested.
D2	Severe drought	Crop or pasture losses likely; water shortages common; water restrictions imposed.
D3	Extreme drought	Major crop/pasture losses; widespread water shortages or restrictions.
D4	Exceptional drought	Exceptional and widespread crop/pasture losses; shortages of water in reservoirs, streams and wells, creating water emergencies.

Source: NOAA

The U.S. Drought Monitor data is available for download and the graph on the following page references the categories of drought experienced by Kentucky since the year 2000 through display of the percentage of Kentucky experiencing each category of drought.

Figure 4.8 Kentucky Drought 2000-2020



Source: United States Drought Monitor, 2020

Impact

NCEI Storm Data records for drought were first captured in 1996; the GRADD region has experienced over $9.2 million in drought related crop damage since that time. Some estimates from the USDA show western Kentucky has experienced over $1 billion in crop damages since 1996. The 2007 drought caused over $2 million in crop damage alone for the GRADD region. Recorded data from the NCEI database calculates drought on a regional level without using specific geography.

Figure 4.9 Recorded Years with Drought in the GRADD Region 1996-2020

Year	Drought Events
1996	1
1998	1
1999	1
2002	1
2004	1
2007	1
2008	1
2010	1
2011	1
2012	1
2015	1
2016	1

Source: National Climatic Data Center, Storm Events Database, 2020

Though no recorded "drought" data was found for Hancock and Ohio counties in the NCEI database, as shown in the full list of events found within the appendix, drought events are recorded in zones and therefore impacts, and probability are recorded at a regional level.

Table 4.12 Drought Event Probability as Frequency of Event Occurrence

County	1996-2020 Frequency	Probability of Future Frequency	Vulnerability	1996 - 2020 Impact
Daviess	12 events	1 event every 2 years	Moderate	$9.2 Million in broadly estimated crop damages over 24 years in the GRADD Region
Hancock	No recorded data			
Henderson	12 events	1 event every 2 years	Moderate	
McLean	12 events	1 event every 2 years	High	
Ohio	No recorded data			
Union	12 events	1 event every 2 years	Low	
Webster	12 events	1 event every 2 years	High	

Source: National Climatic Data Center, Storm Events Database, 2020

Summary

Full data of the drought events affecting the Green River region since 1996 are available in the appendix. Agriculture, still the largest sector of the economy in the GRADD region, is victimized by drought every couple of years on average and significantly at least once per decade. Decline in crop yields, additional costs to provide water to livestock and wildfire risk are all significant negative results from drought. Historical data provide evidence for planners and local officials to keep drought as a hazard in the front of their planning strategies.

Hazard Profile: Earthquake

The Special Publication of *Earthquakes in Kentucky*, a 2014 document on Emergency Preparedness and Mitigation produced by the Kentucky Geological Survey and the Kentucky Division of Emergency Management, states an earthquake occurs when a fault suddenly ruptures and releases elastic energy in the form of seismic waves. Rupture begins at the hypocenter and if it continues to the surface, it creates a surface rupture hazard. This rupture can cause damage to any building or structure built on it. Strong seismic waves propagating along the ground surface create a ground-motion hazard that can cause damage or even result in collapses of buildings and other structures. Surface rupture and ground motion are the primary hazards generated directly by an earthquake.

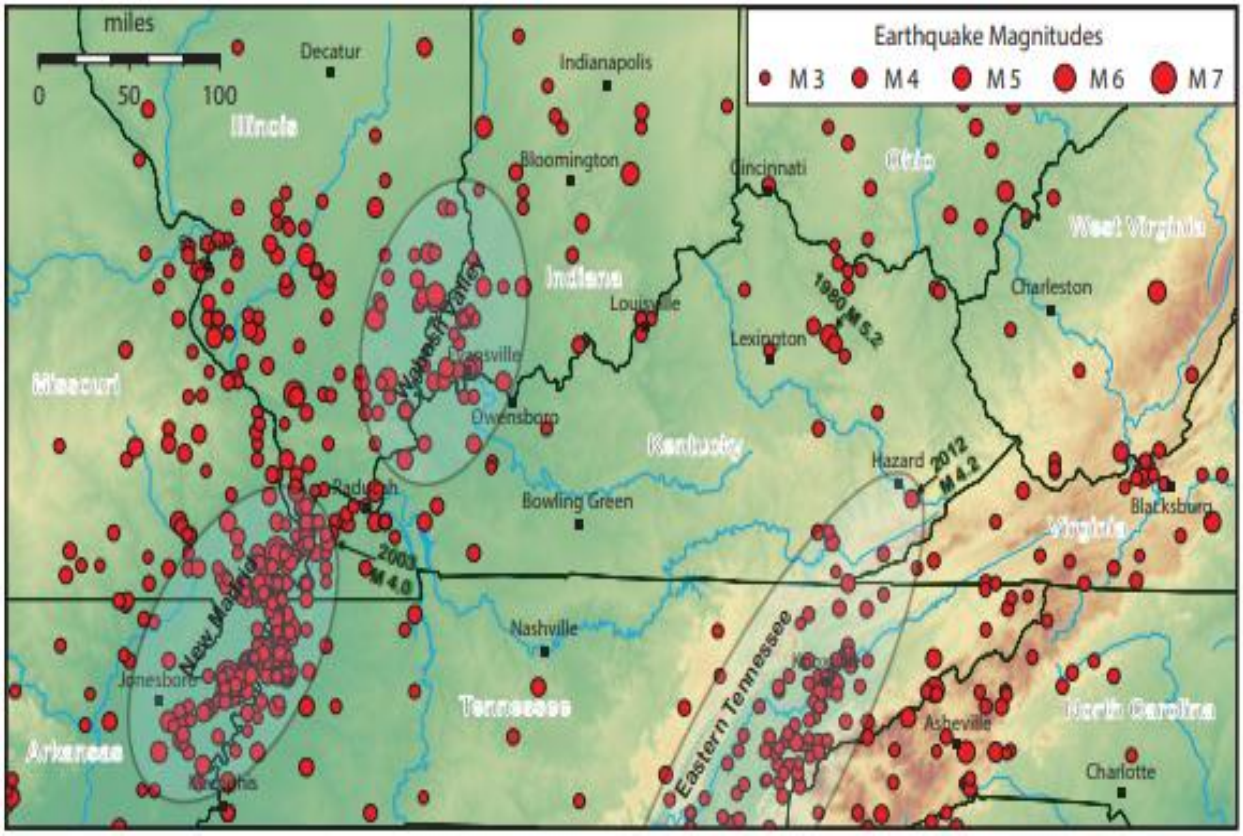
Ground motion can also result in secondary hazards at sites with certain conditions. Soft sediments overlying hard bedrock along river valleys tend to amplify ground motion, which is known as amplification hazard. Soft and saturated sandy soils can be liquefied by strong ground motion, a process called liquefaction. Liquefaction can cause damage by destabilizing foundations of buildings, bridges and other facilities.

This liquefaction in relation to the Green River region is currently being examined as part of a seismic study through a grant from Hazard Mitigation Grants Program award in 2019. The maps and data produced as part of this study by the Kentucky Geological Survey have been presented to the Hazard Mitigation Council for their review. The maps will be distributed to all cities and counties upon completion. This data will be valuable in planning and zoning, building code enforcement and mitigation planning in the region.

Seismic Zones

Earthquakes affecting Kentucky primarily occur in two seismic zones, the New Madrid and Wabash Valley Seismic Zones in the west and the Eastern Tennessee Seismic Zone in the east. The seismic zones are identified as ovals, and earthquakes with a magnitude of 3 or greater are shown as red dots in the graphic on the following page.

Figure 4.10 Seismic Zones Affecting Kentucky



Source: Kentucky Geological Survey, 2019

Extent

The Modified Mercalli Intensity Scale measures the extent to which an earthquake impacts the people and infrastructure of the area where an earthquake occurs. The scale was developed by seismologists Harry Wood and Frank Neumann in 1931. As opposed to the Richter scale, which has a scientific and mathematical basis for its earthquake rating, the Mercalli scale is more qualitative in nature, as it refers to the observed effects.

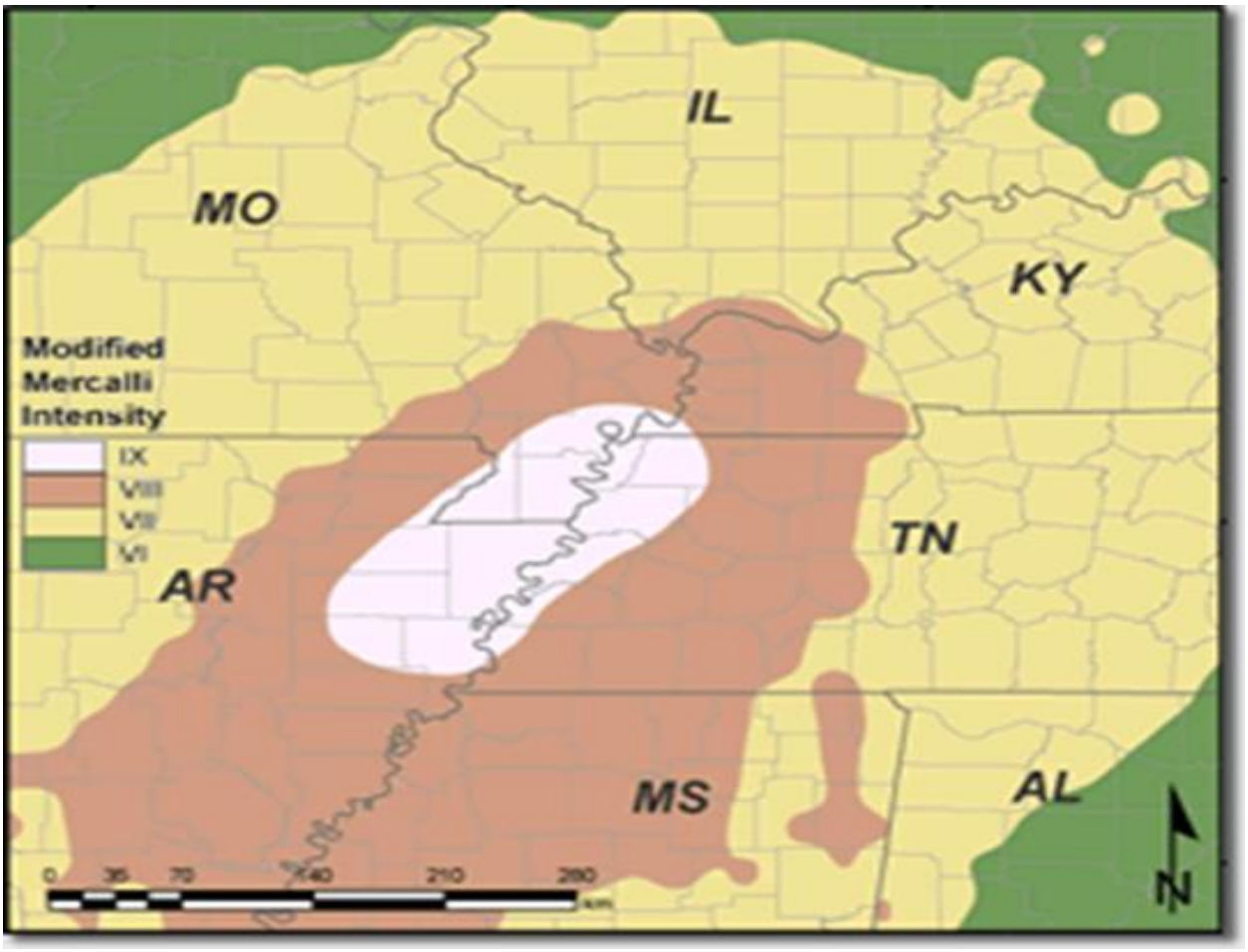
Table 4.13 - Modified Mercalli Intensity Scale

Scale	Intensity	Description
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing vehicles may rock slightly. Duration estimated.
IV	Light	Felt by individuals indoors and some outdoors during the day. Awakens some if at night. Indoor objects disturbed. Stationary vehicles move noticeably.
V	Moderate	Felt almost universally; many awakened at night. Indoor objects disturbed, broken.
VI	Strong	Felt universally; many frightened. Some heavy furniture moved. Damage slight.
VII	Very Strong	Damage negligible in buildings of good design and construction; considerable damage in poorly built structures; some chimneys broken.
VIII	Severe	Structural damage slight in ordinary structures and considerable in poorly built structures.
IX	Violent	Slight damage to specially designed structures and significant damage to well-built structures. Damage great in poorly built structures. Indoor furniture overturned; fallen monuments, walls, columns, etc.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

Source: U.S. Geological Survey, 2020

This map from the USGS shows estimated levels of shaking from a hypothetical M7.7 earthquake along the southwestern portion of the New Madrid Seismic Zone. The GRADD region lies in the eastern most section of the map identified in the yellow of VII zone.

Figure 4.11 - M7.7 Earthquake Hypothetical Ground Shaking

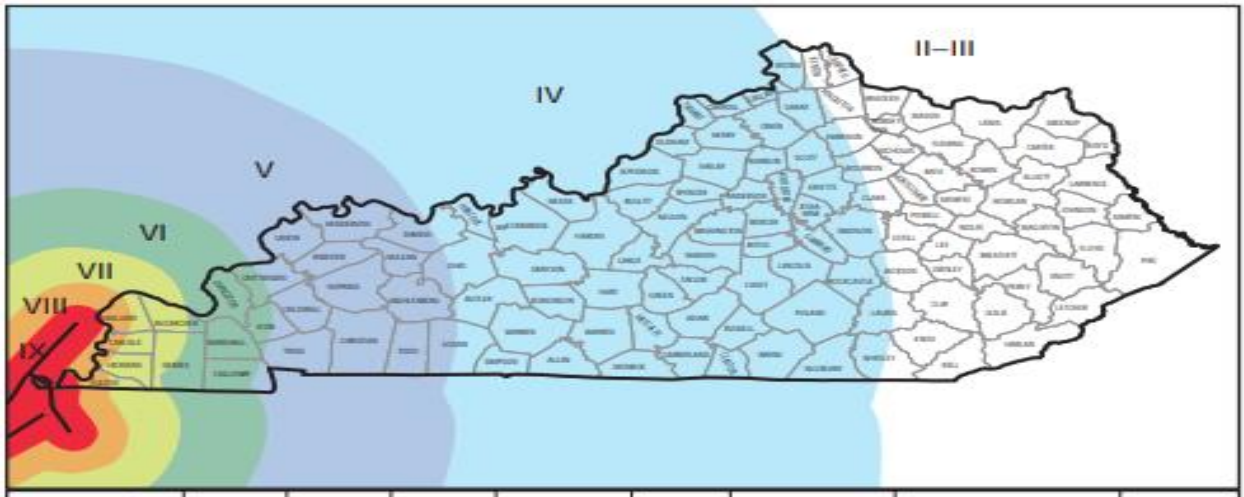


Source: https://cusec.org/new-madrid-seismic-zone, 2020

Peak Ground Acceleration

Peak ground acceleration is defined as the acceleration of the ground expressed as a percentage of the acceleration of gravity and expresses the level of ground motion. This information can be estimated from scientific information about earthquakes. The following figure shows the ground acceleration that could be expected throughout the Commonwealth from a magnitude 7.5 earthquake in the New Madrid Seismic Zone.

Figure 4.12 - Predicted Peak Ground Acceleration

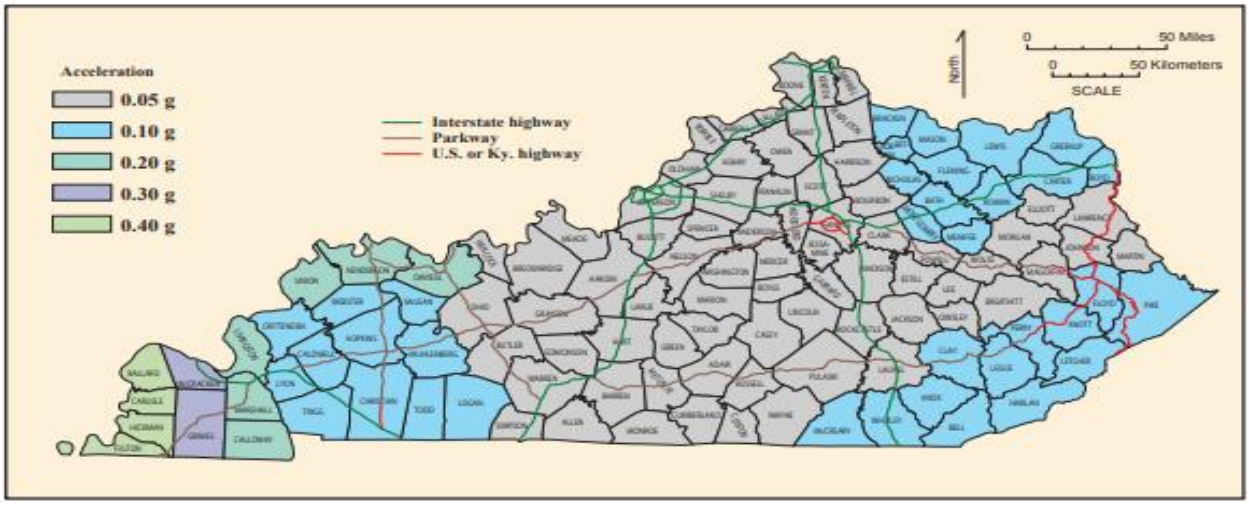


Perceived Shaking	Not Felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent
Potential Damage	None	None	None	Very Light	Light	Moderate	Moderately Heavy	Heavy
PGA (%g)	< 0.17	0.17–1.4	1.4–3.9	3.9–9.2	9.2–18	18–34	34–65	65–124
Instrumental Intensity	II	III	IV	V	VI	VII	VIII	IX

Source: Kentucky Geological Survey, 2020

The following figure identifies ground motions for each county, calculated at the county seat, that would result from the largest credible earthquakes in and around the state, according to the Kentucky Geological Survey.

Figure 4.13 Peak Ground Acceleration by County



Source: Kentucky Geological Survey, 2020

Historical Events

On September 2, 1925, an area estimated at 75,000 square miles in Kentucky, Illinois, Indiana and Tennessee were struck by a magnitude 4.6 earthquake centered just south of Henderson, KY. The earthquake caused landslides in the Henderson area. No dollar figures in damages are available.

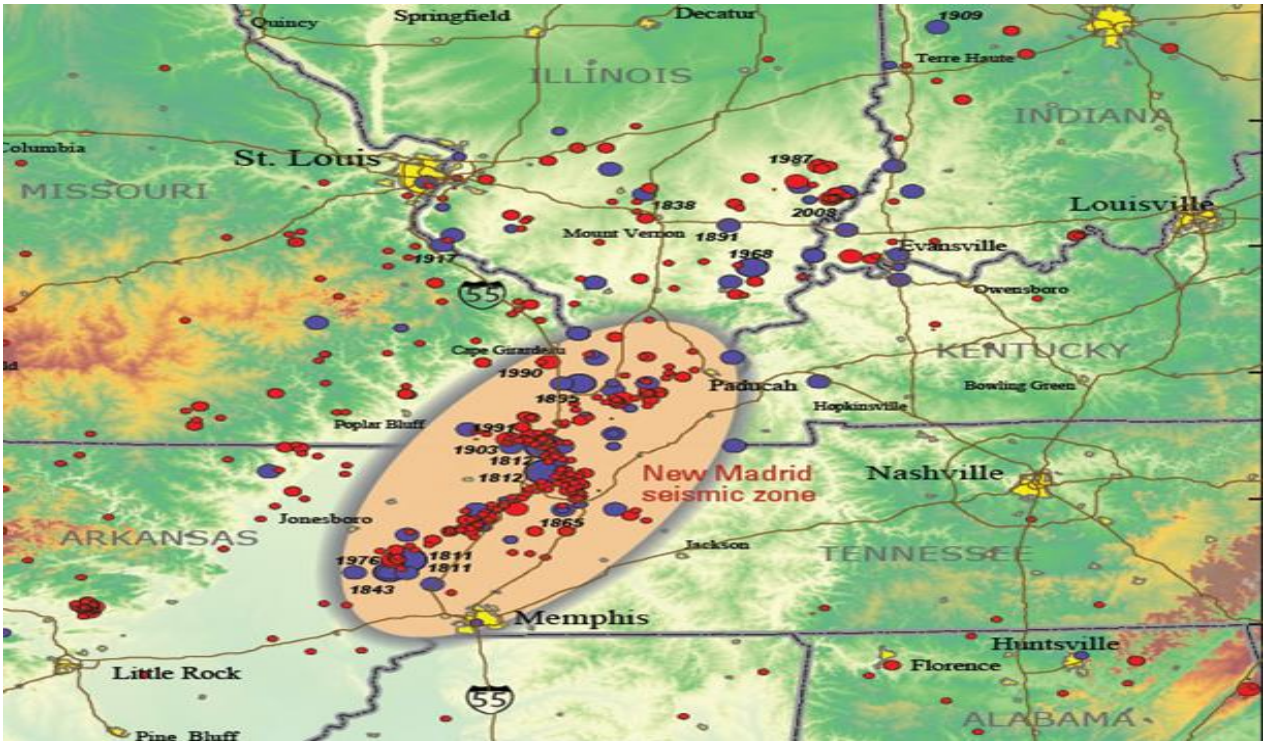
The largest recorded earthquake inside Kentucky's borders was the Sharpsburg earthquake of July 27, 1980, in Bath County. A magnitude of 5.2, the earthquake caused an estimated $3 million of damage in Maysville.

Table 4. 14 - Largest Earthquakes in the Contiguous United States

Rank	Date	Location	Magnitude
1	1/26/1700	Cascadia Subduction Zone	9
2	12/16/1811	New Madrid, Missouri	8.1
3	2/7/1812	New Madrid, Missouri	8
4	1/9/1857	Fort Tejon, California	7.9

Source: U.S. Geological Survey, 2020

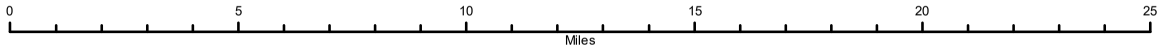
Figure 4.14 New Madrid Seismic Zone Historical Earthquakes



Source: U.S. Geological Survey

The topographic map of the central United States (above) displays earthquakes greater than magnitude 2.5. Red circles are earthquakes that occurred after 1972, and blue circles are earthquakes that occurred before 1973 from the USGS Preliminary Determination of Epicenters catalog. Larger earthquakes are represented by larger circles.

Daviess County

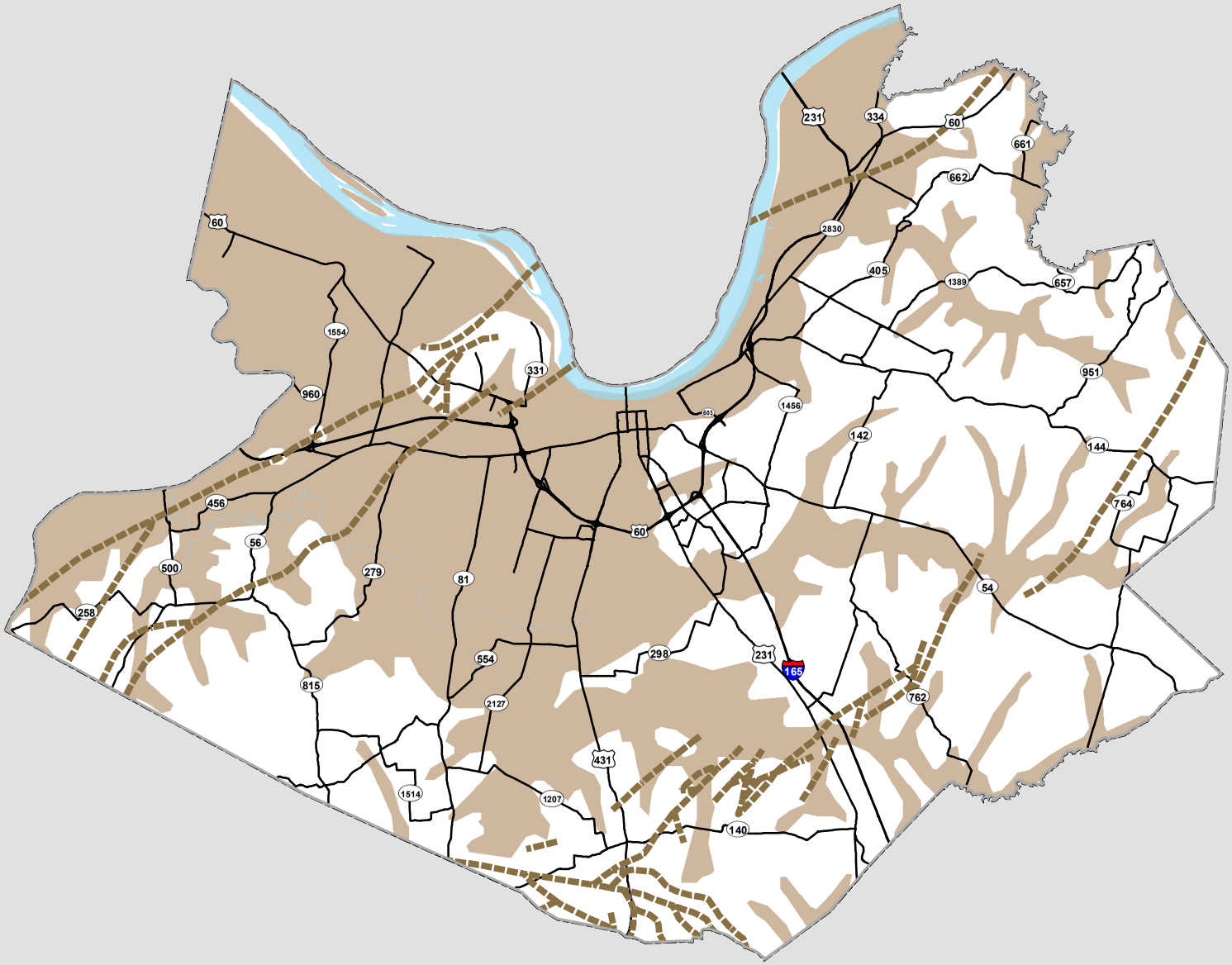


N
W
E
S

Hazard Type

- Fault Line
- Alluvium Sediment





City of Owensboro

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Government Bldg
- Correctional

Transportation

- Riverport
- Airport
- Public Transit
- Railroad

Hazard Type

- Fault Line
- Alluvium Sediment

0 2 4
Miles

N
W E
S



City of Whitesville





0 0.25 0.5
Miles

Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Health Clinic
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTank

Communications

- ConnectGRADD Tower

Vulnerable Population Centers

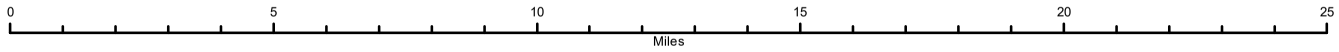
- Apartments
- Senior Center
- School
- Religious

Civic Facilities

- City Hall
- Public Works



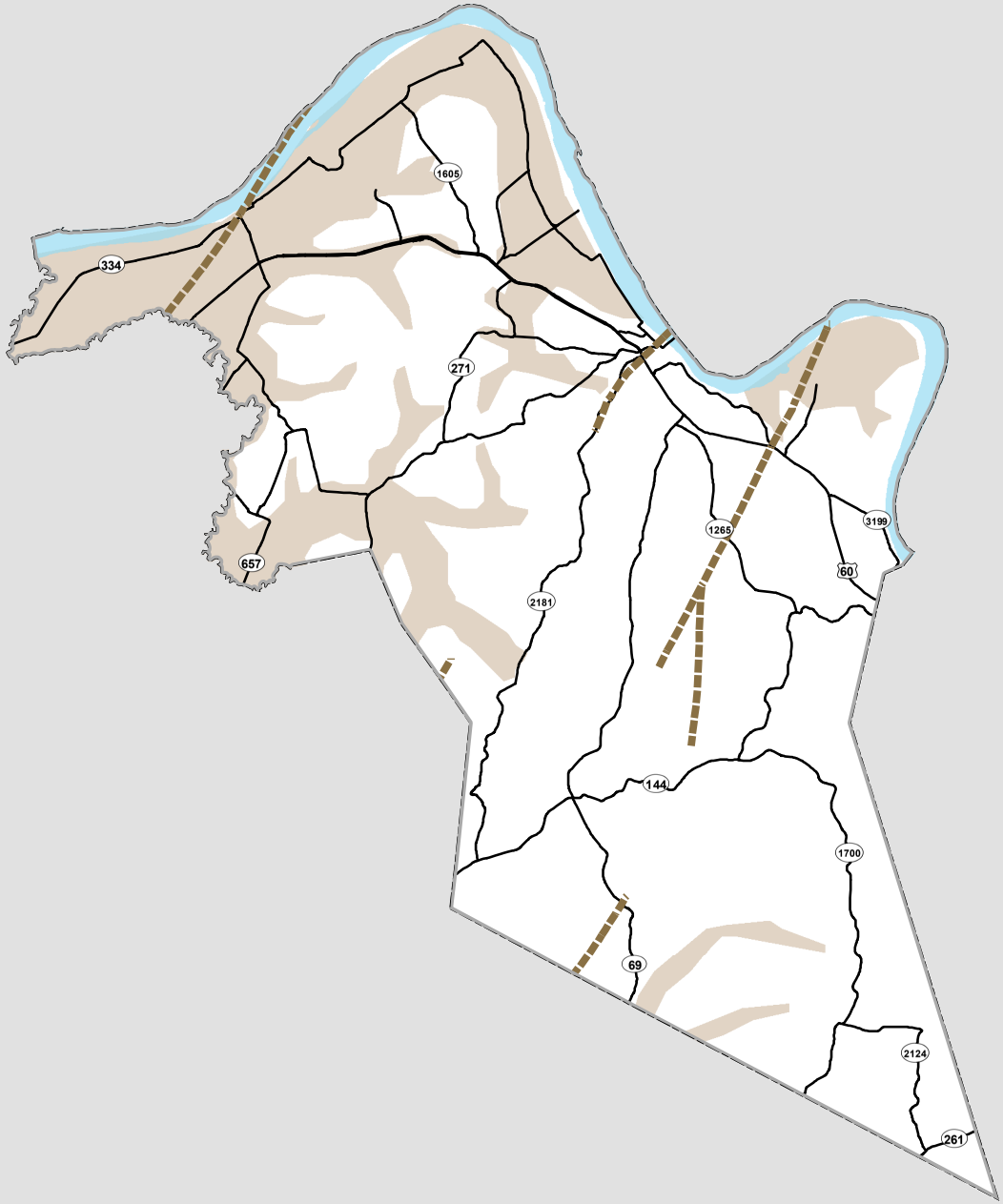
Hancock County

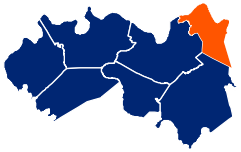




Hazard Type

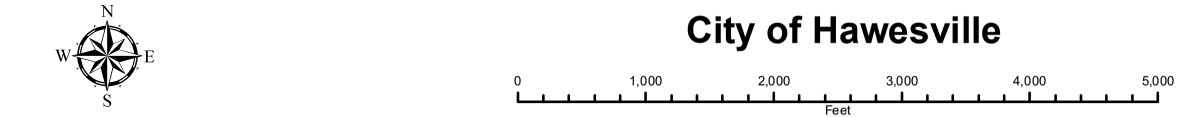
- Fault Line
- Alluvium Sediment

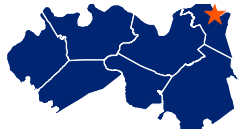




61

City of Hawesville





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- AM Radio Antenna

Vulnerable Population Centers

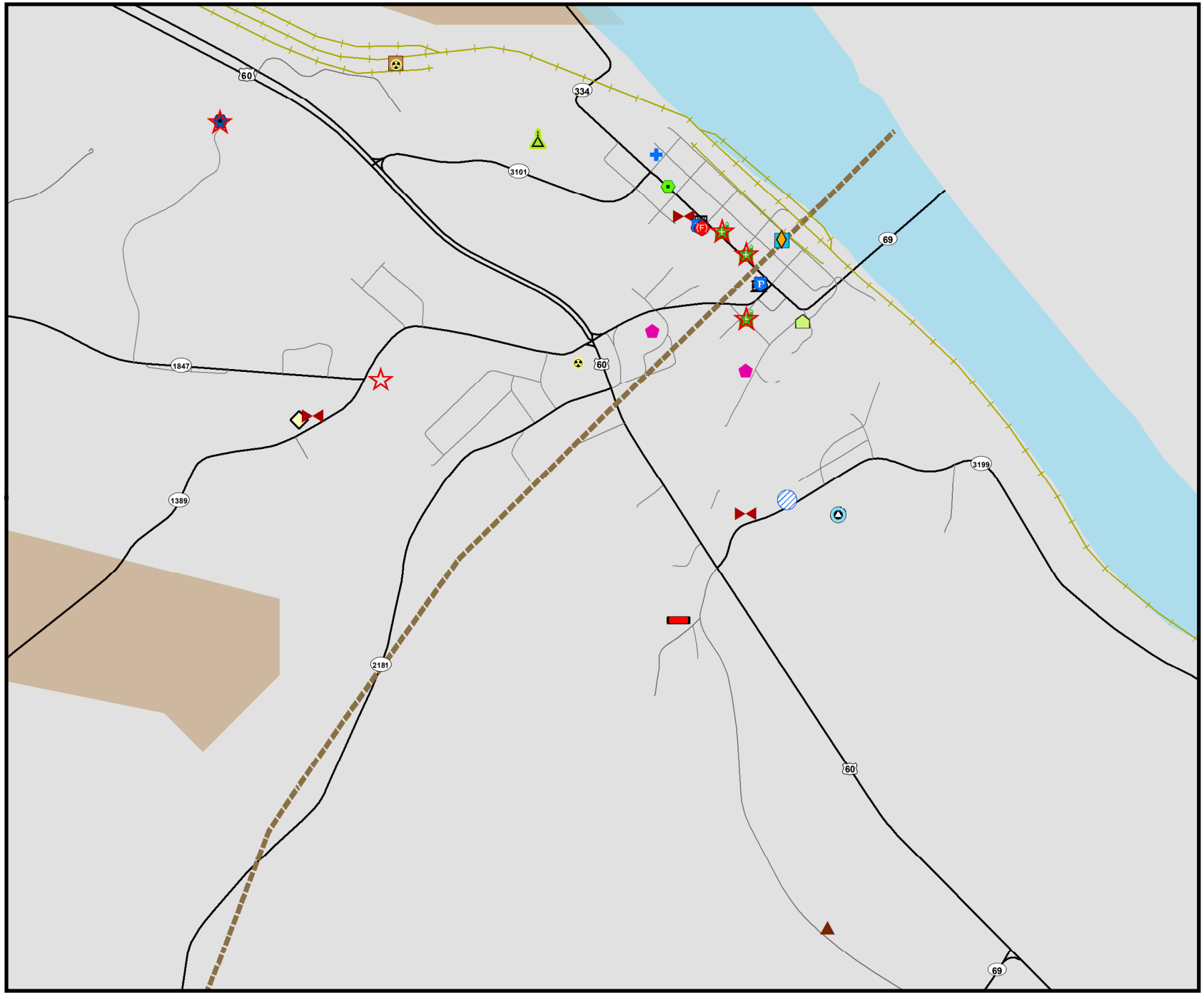
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Religious

Civic Facilities

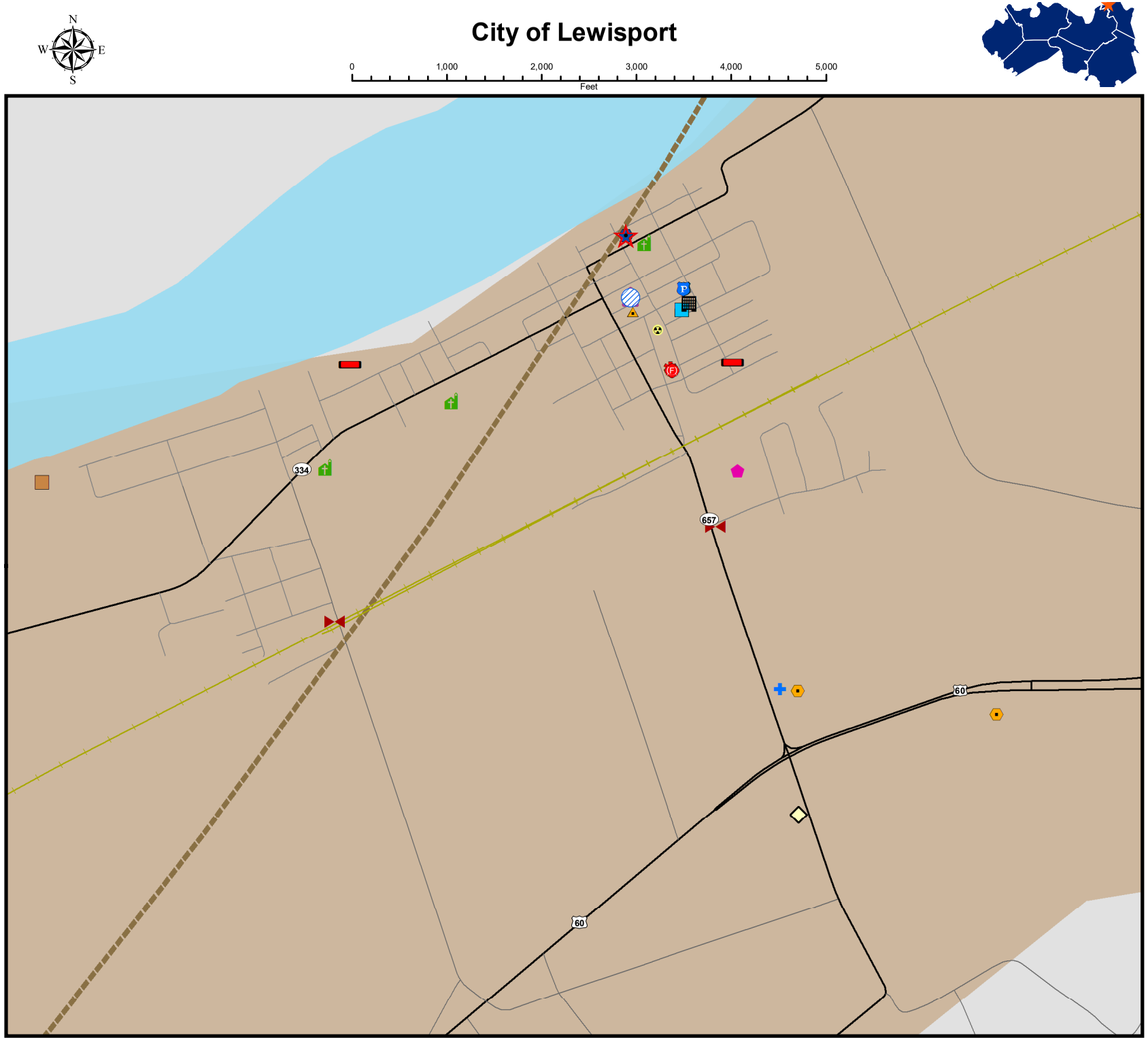
- City Hall
- Courthouse
- Road Department
- Government Building

Transportation

- Railroad



City of Lewisport



Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- Religious

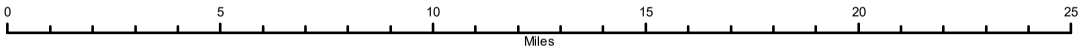
Civic Facilities

- City Hall
- Public Works

Transportation

- Railroad

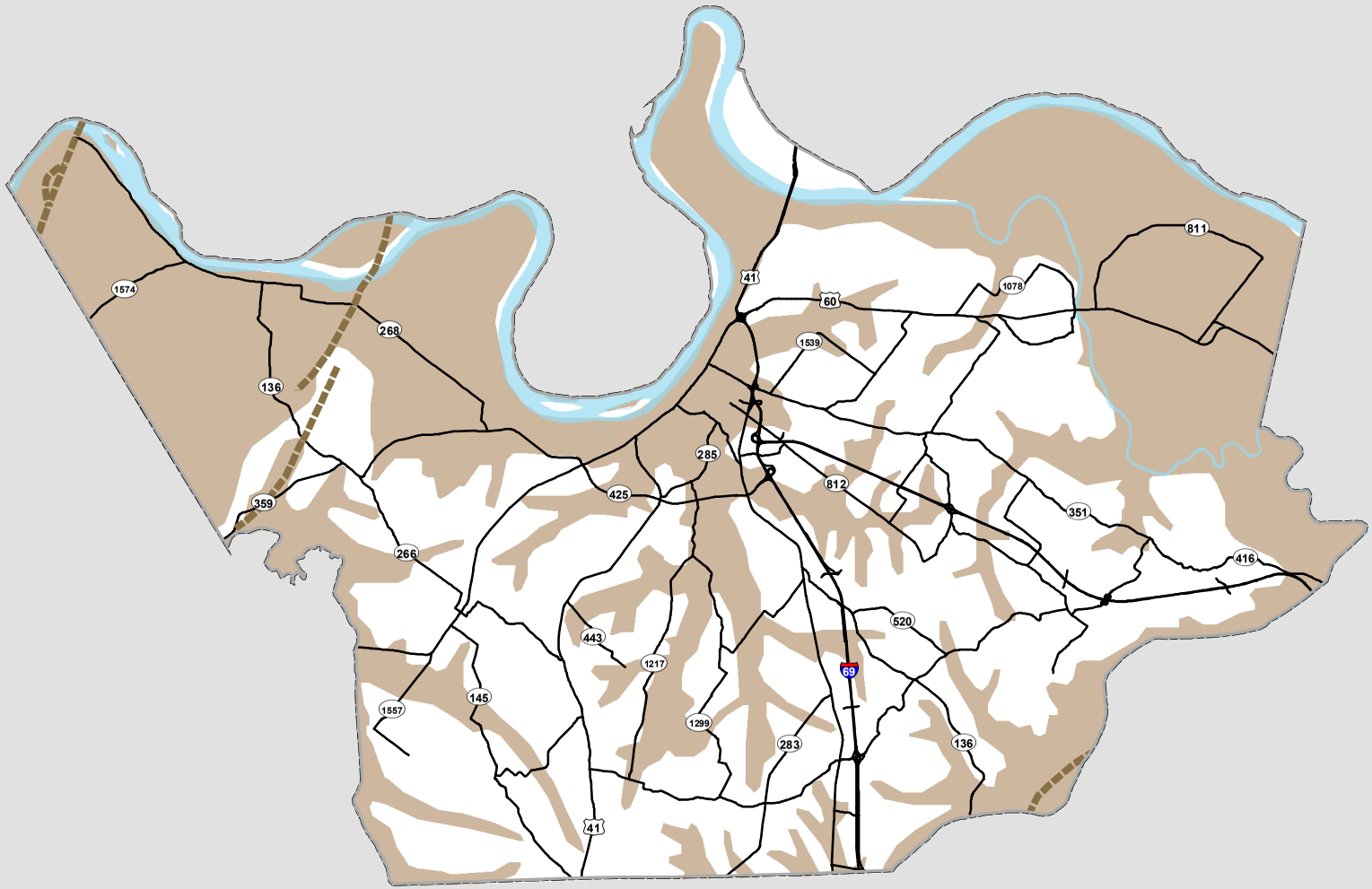
Henderson County

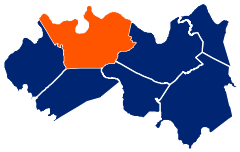




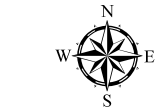
Hazard Type

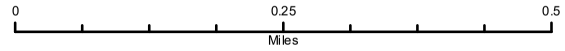
- Fault Line
- Alluvium Sediment





City of Corydon







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

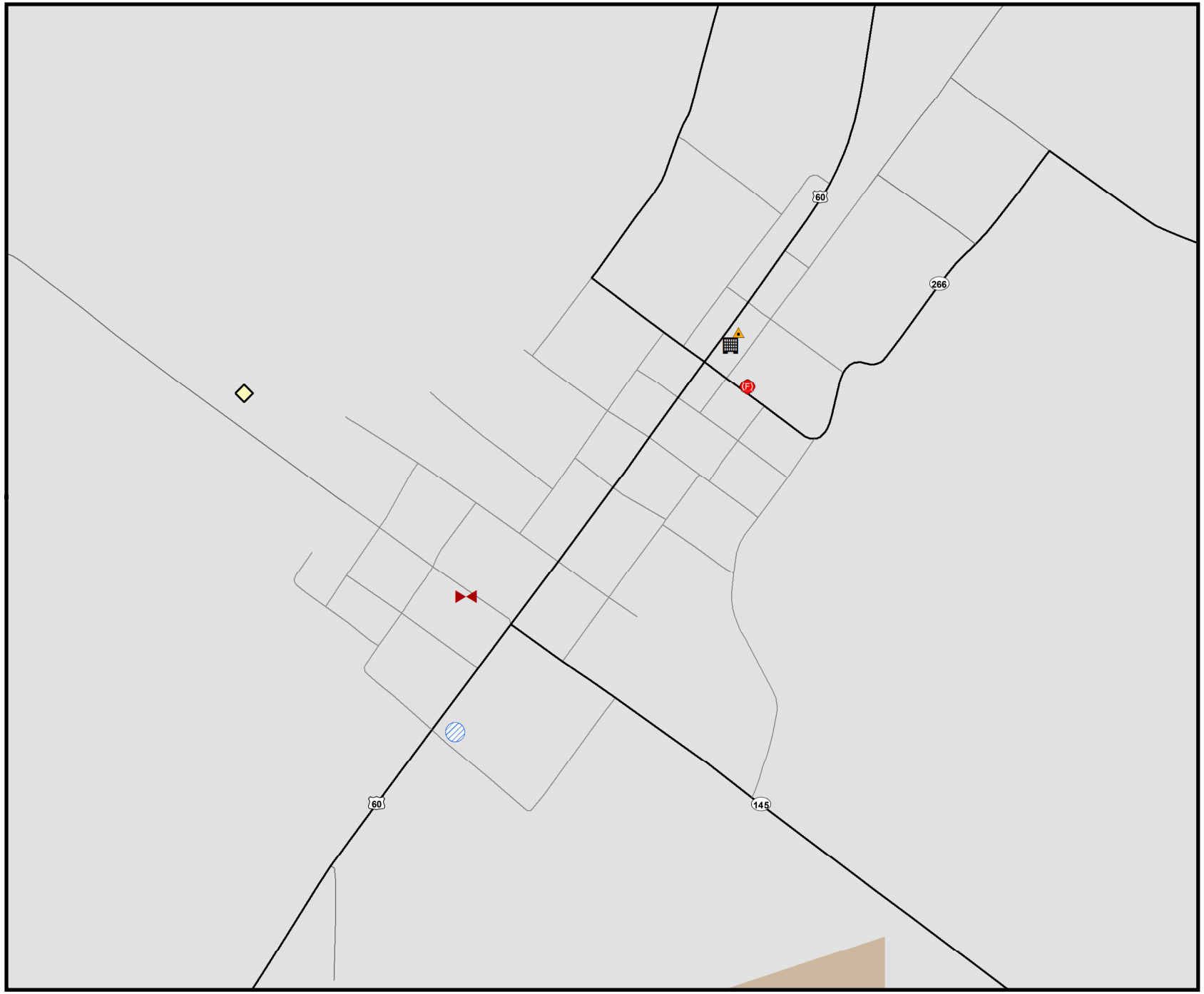
- Fire Department
- Warning Siren

Utilities

- WaterTank
- Substation

Civic Facilities

- City Hall
- Public Works



City of Henderson

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry

Utilities

- Electric Utility
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Religious
- Child Care/Preschool
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Road Department
- Government Building
- Correctional

Transportation

- Riverport
- Railroad

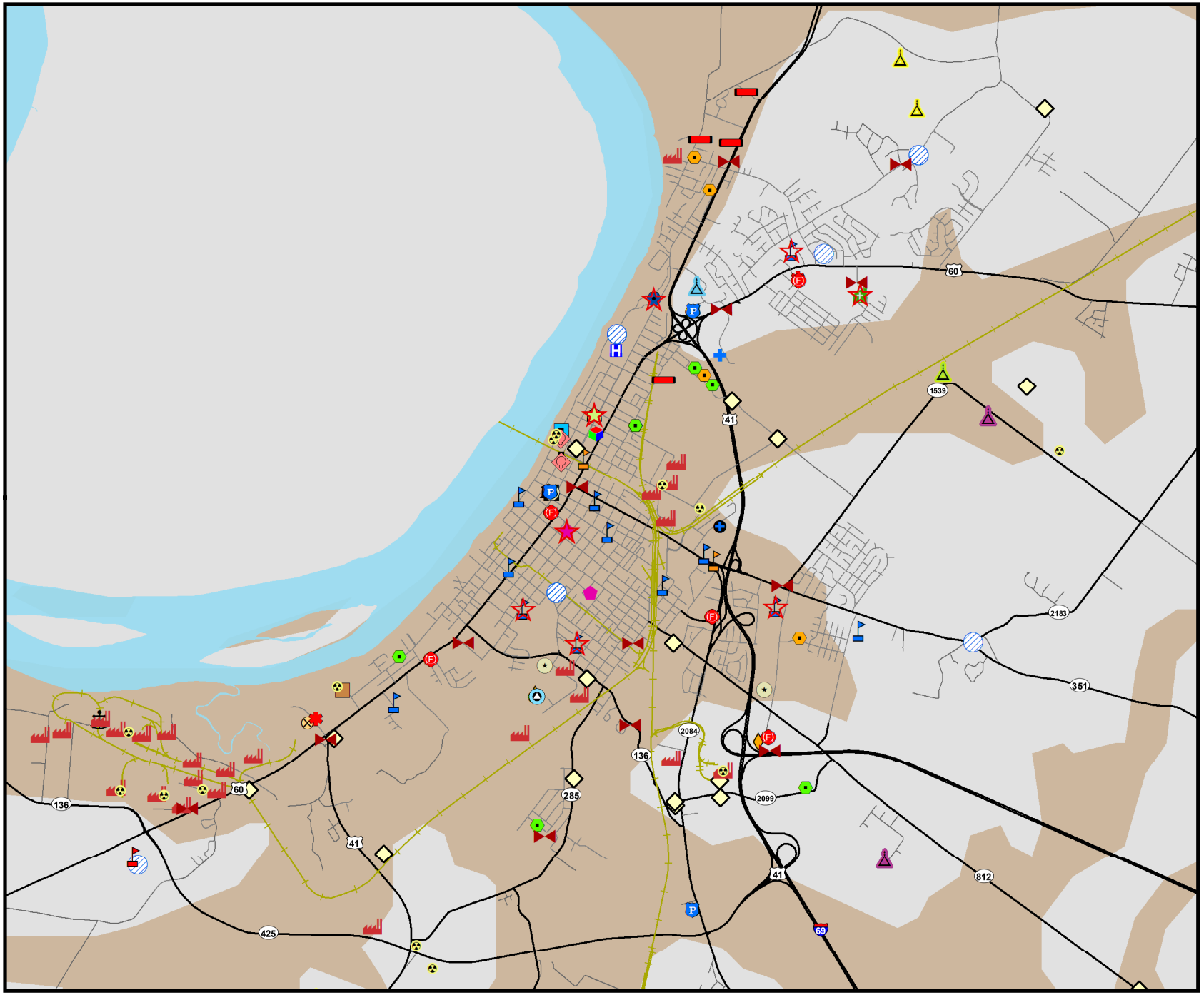
Hazard Type

- Fault Line
- Alluvium Sediment

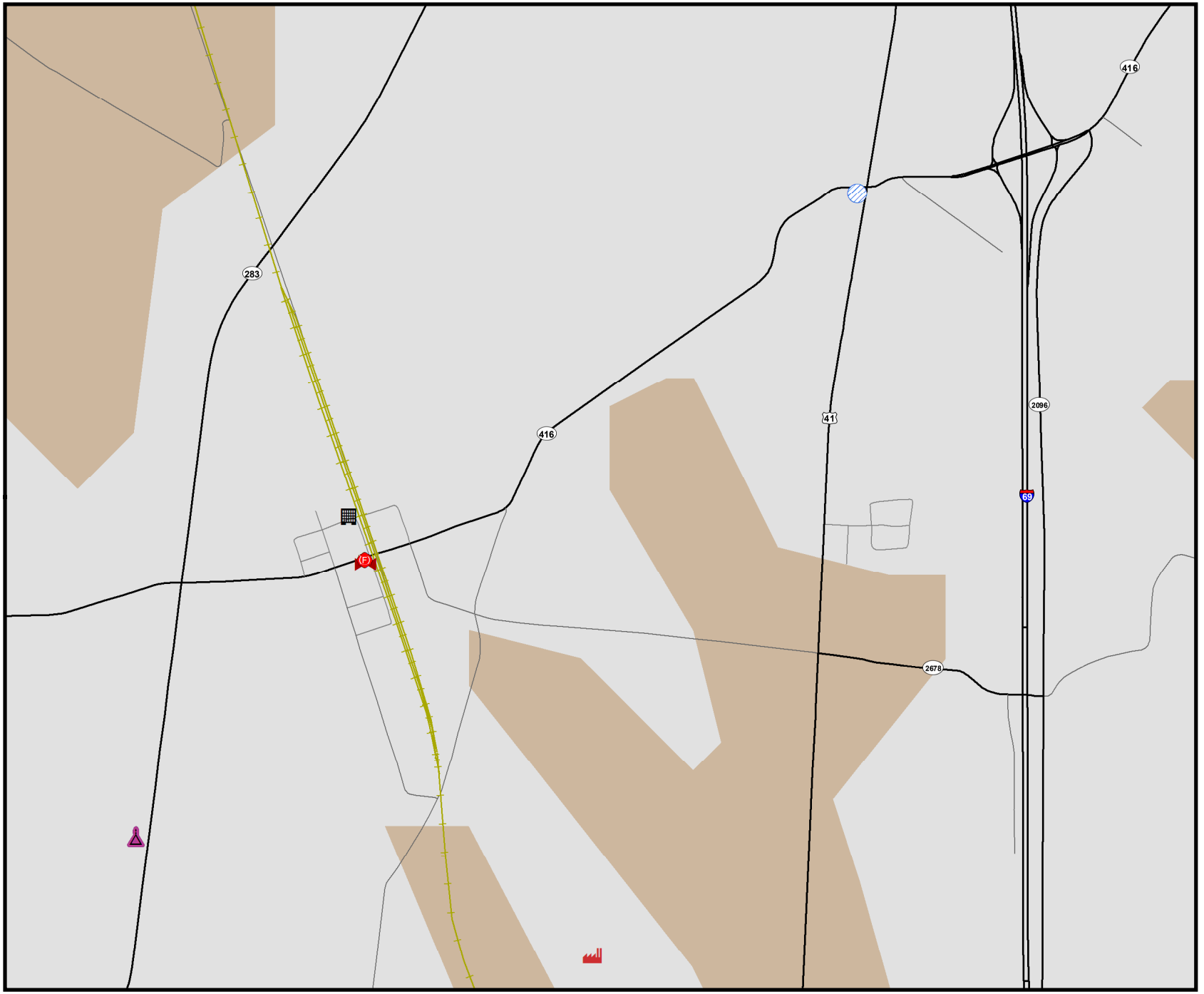
0 2 4
Miles

N
W E
S





City of Robards





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- WaterTank
- Substation

Communications

- ConnectGRADD Tower

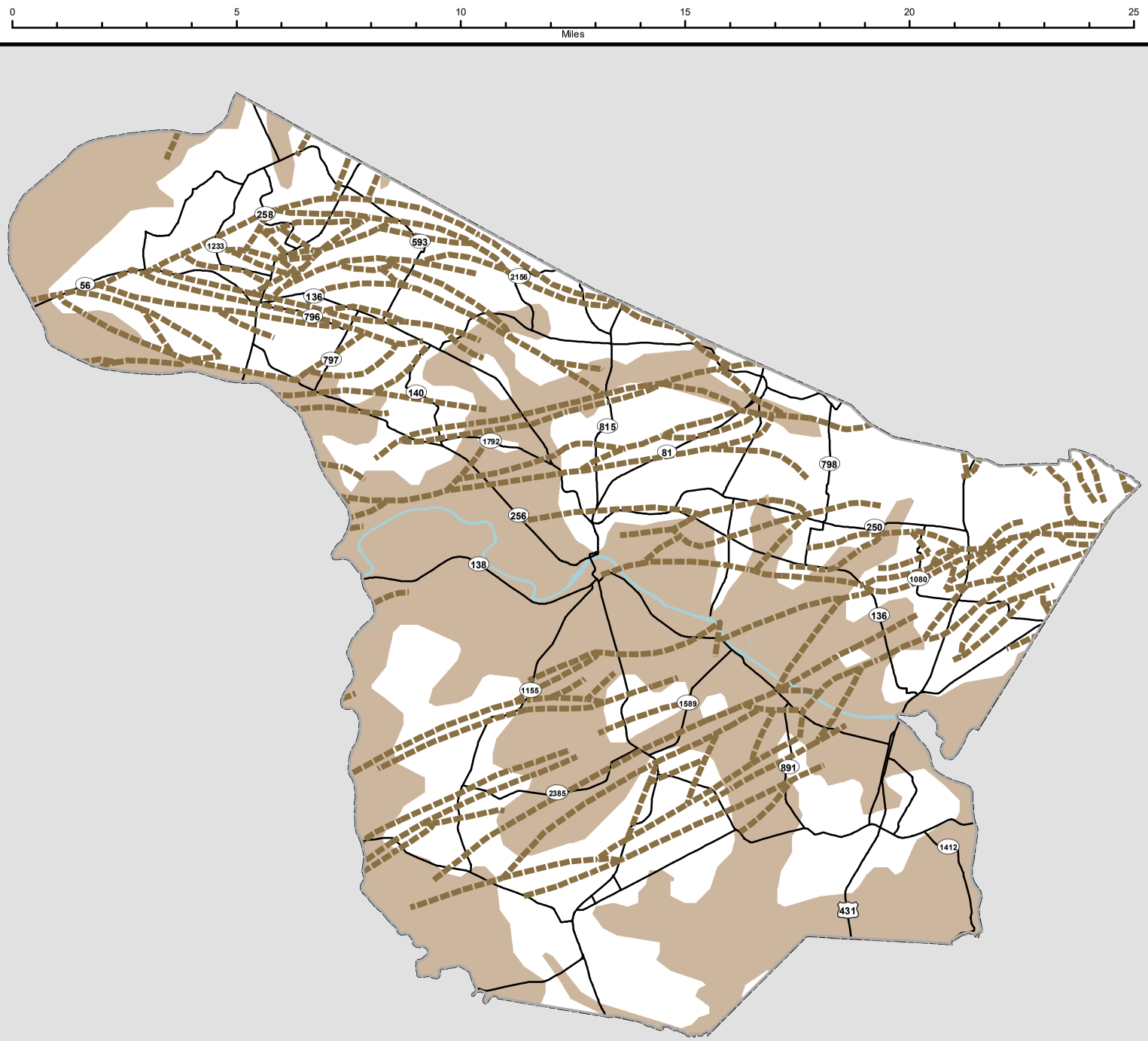
Civic Facilities

- City Hall

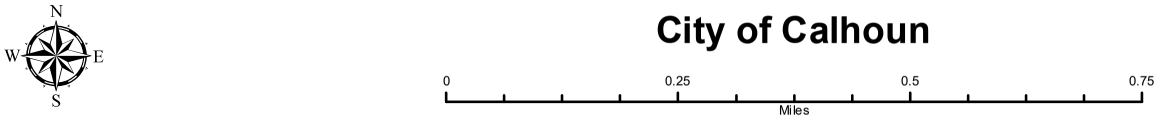
Transportation

- Railroad

McLean County



City of Calhoun





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Emergency Shelters

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation
- Dam

Communications

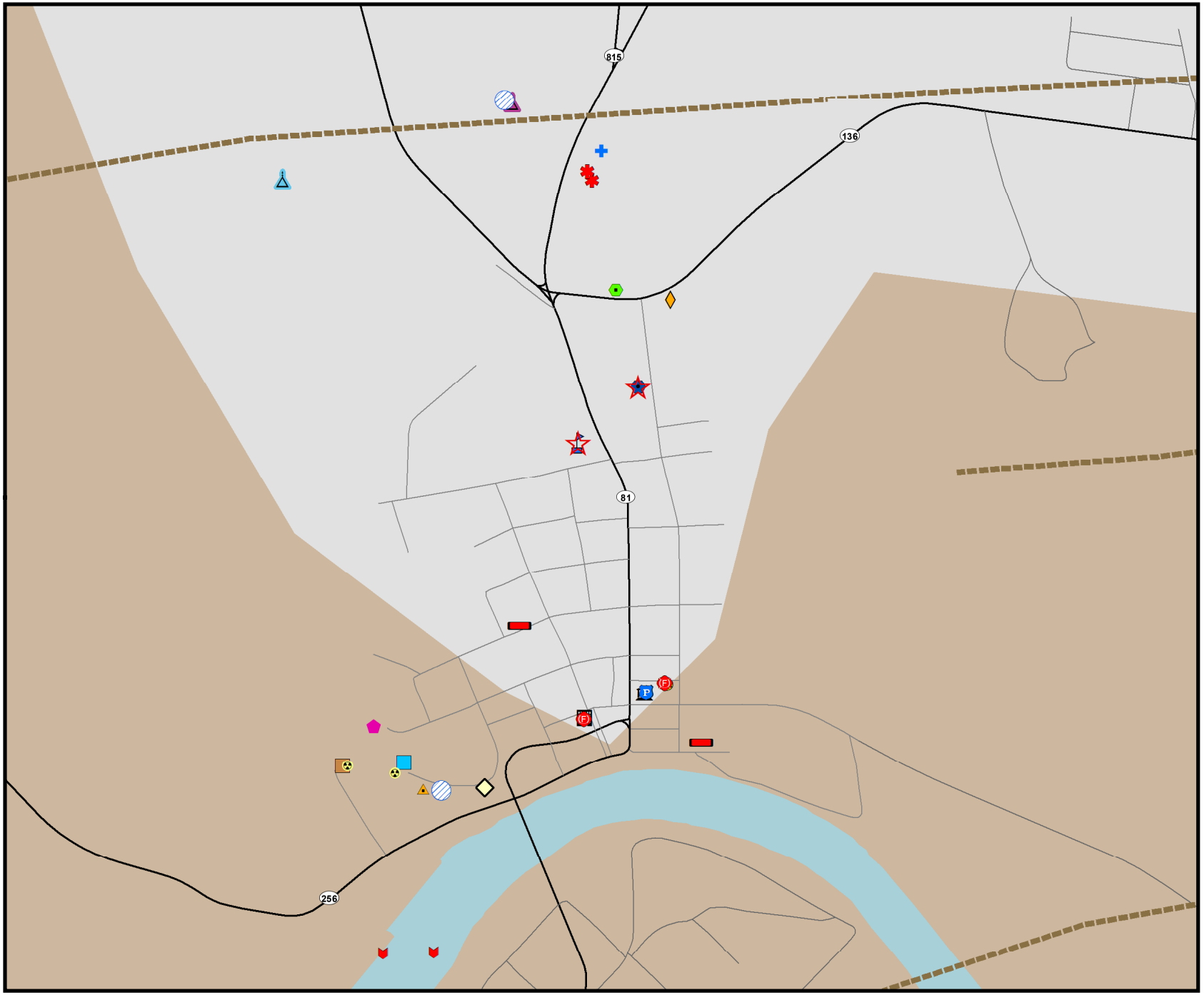
- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- School

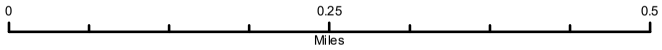
Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Dam



City of Island







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials

Utilities

- SewageTreatmentPlant
- Substation

Communications

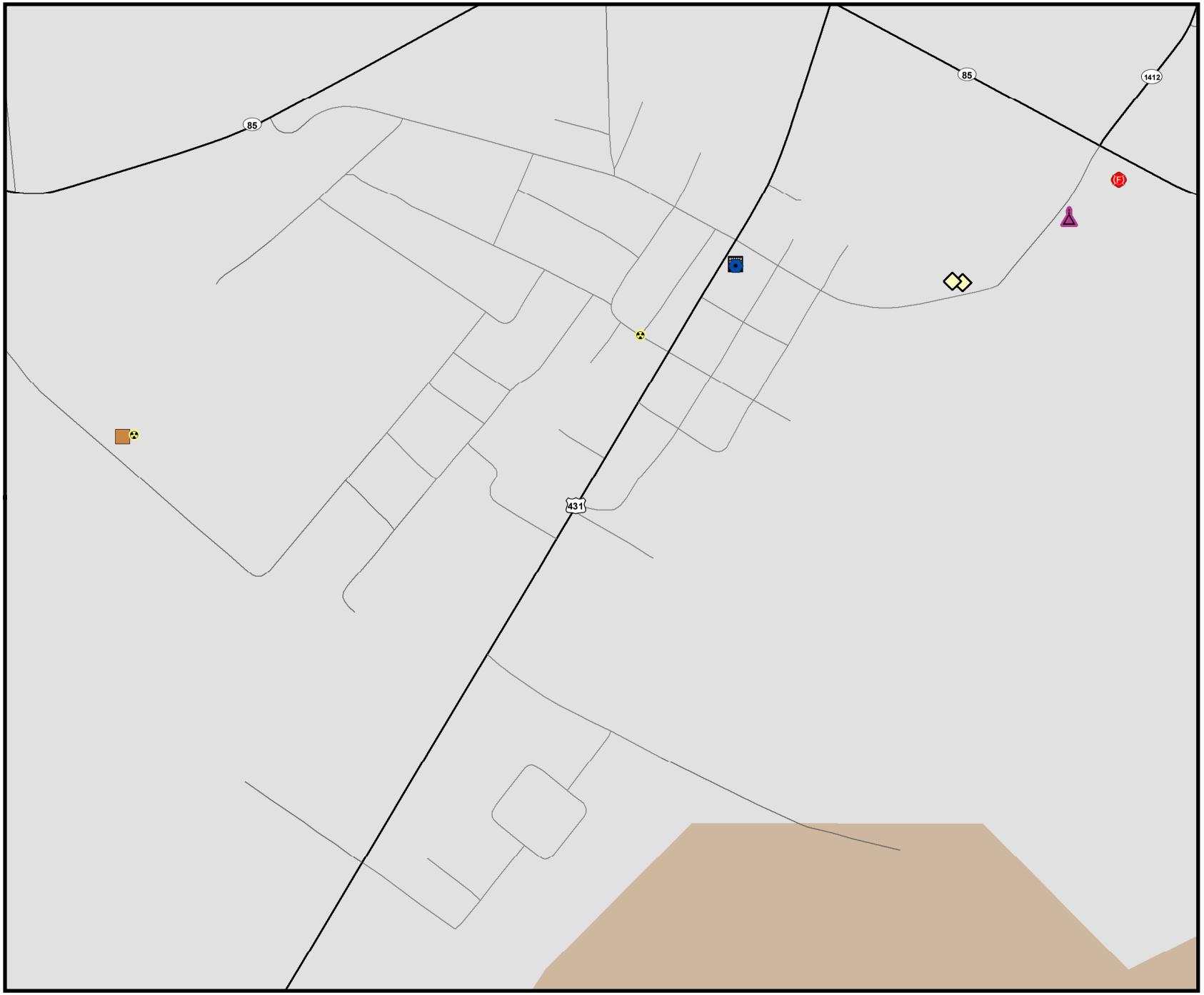
- ConnectGRADD Tower

Vulnerable Population Centers

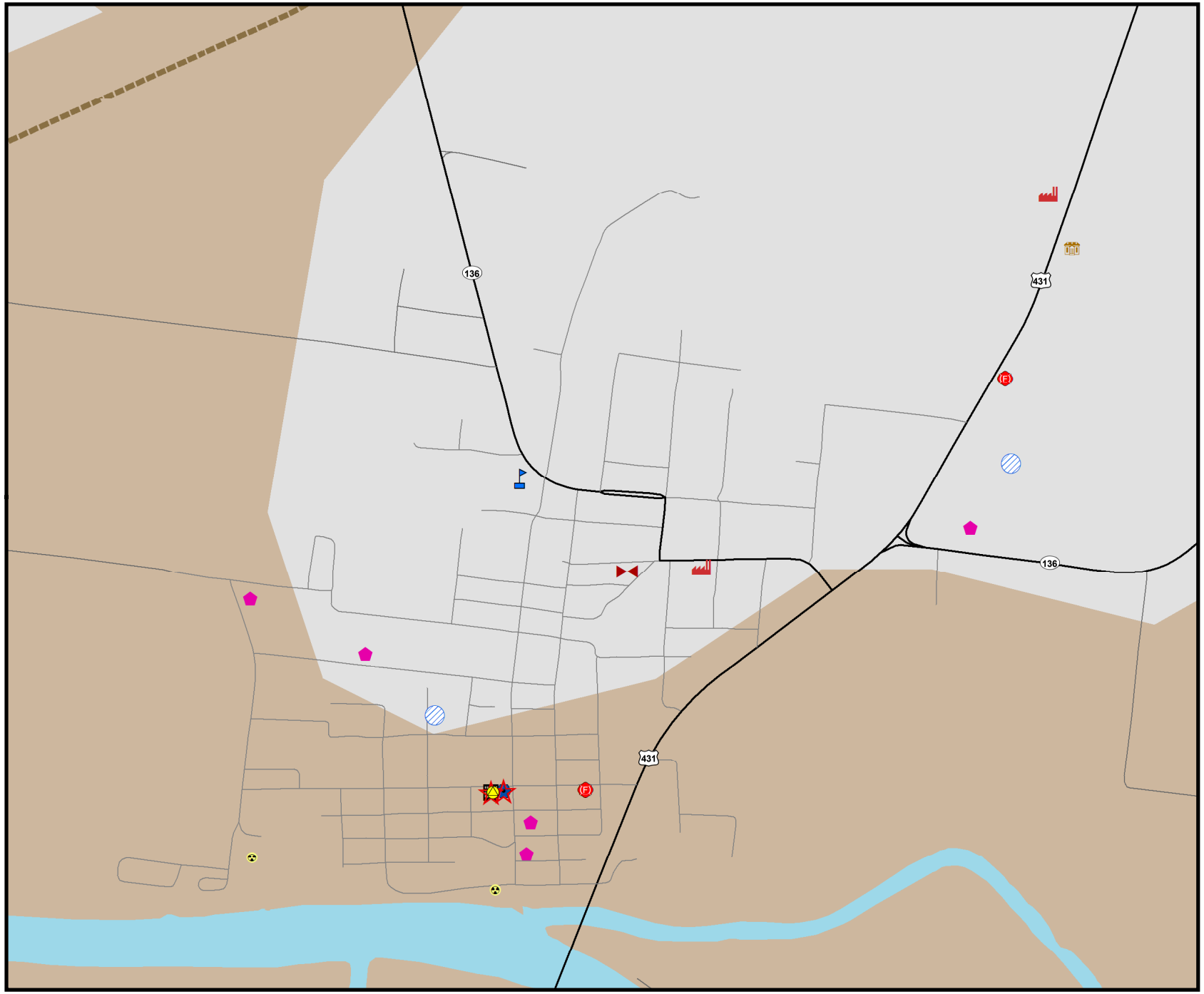
- Senior Center

Civic Facilities

- City Hall



City of Livermore



Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Emergency Operations Center
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTank

Communications

- Cellular Tower

Vulnerable Population Centers

- Apartments
- Senior Center
- School

Civic Facilities

- City Hall

City of Sacramento





0 0.25 0.5
Miles

Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Emergency Shelters

Economic

- Industry

Utilities

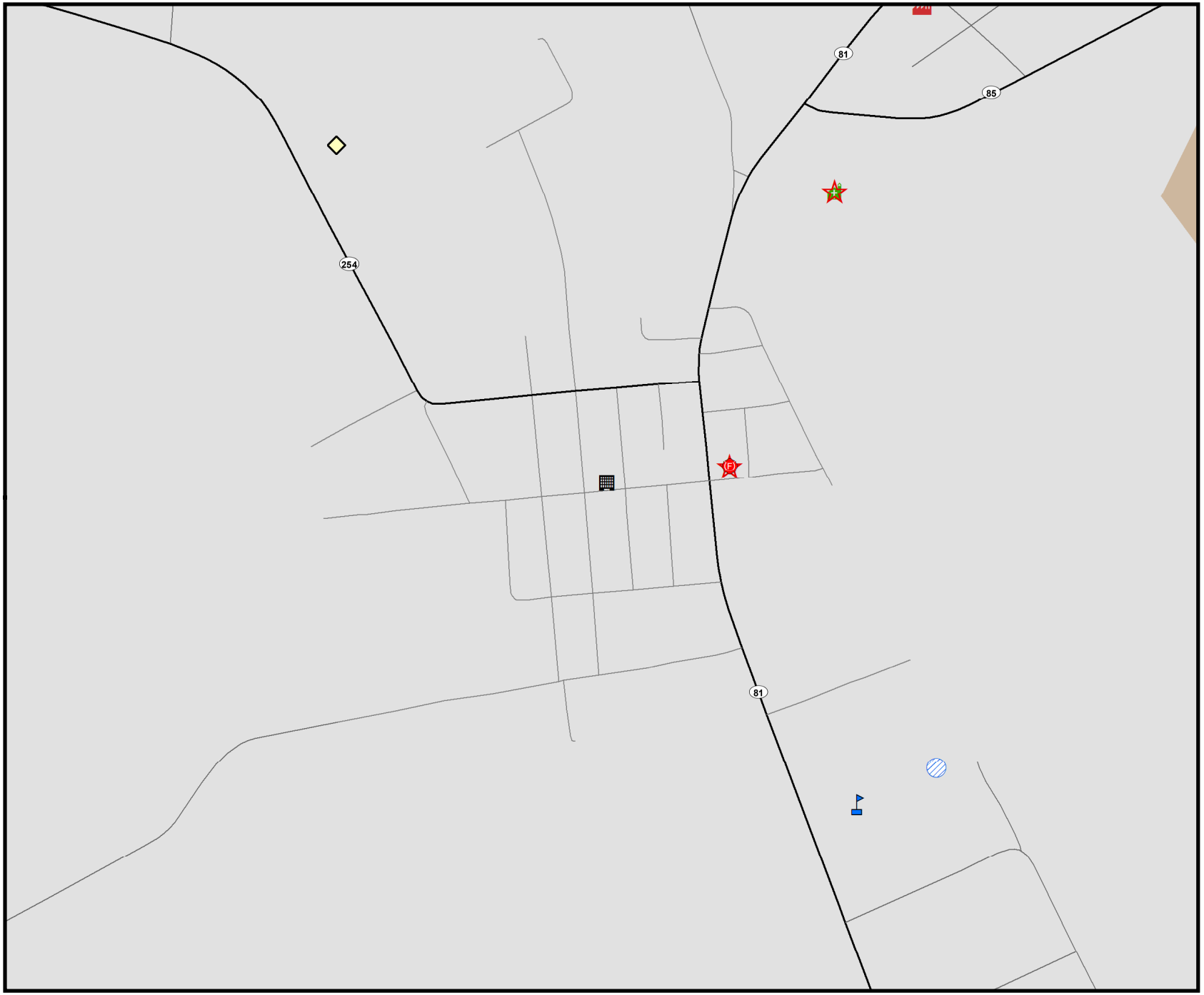
- WaterTank
- Substation

Vulnerable Population Centers

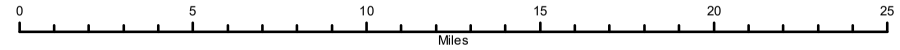
- Senior Center
- School
- Religious
- Entertainment

Civic Facilities

- City Hall



Ohio County

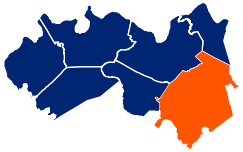




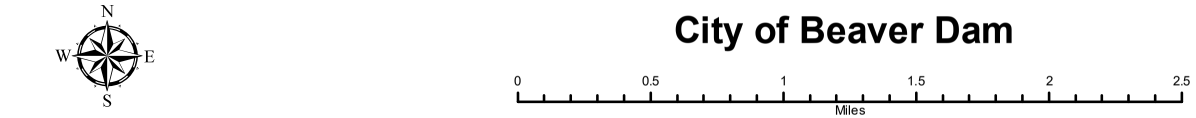
Hazard Type

- Fault Line
- Alluvium Sediment





City of Beaver Dam





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers

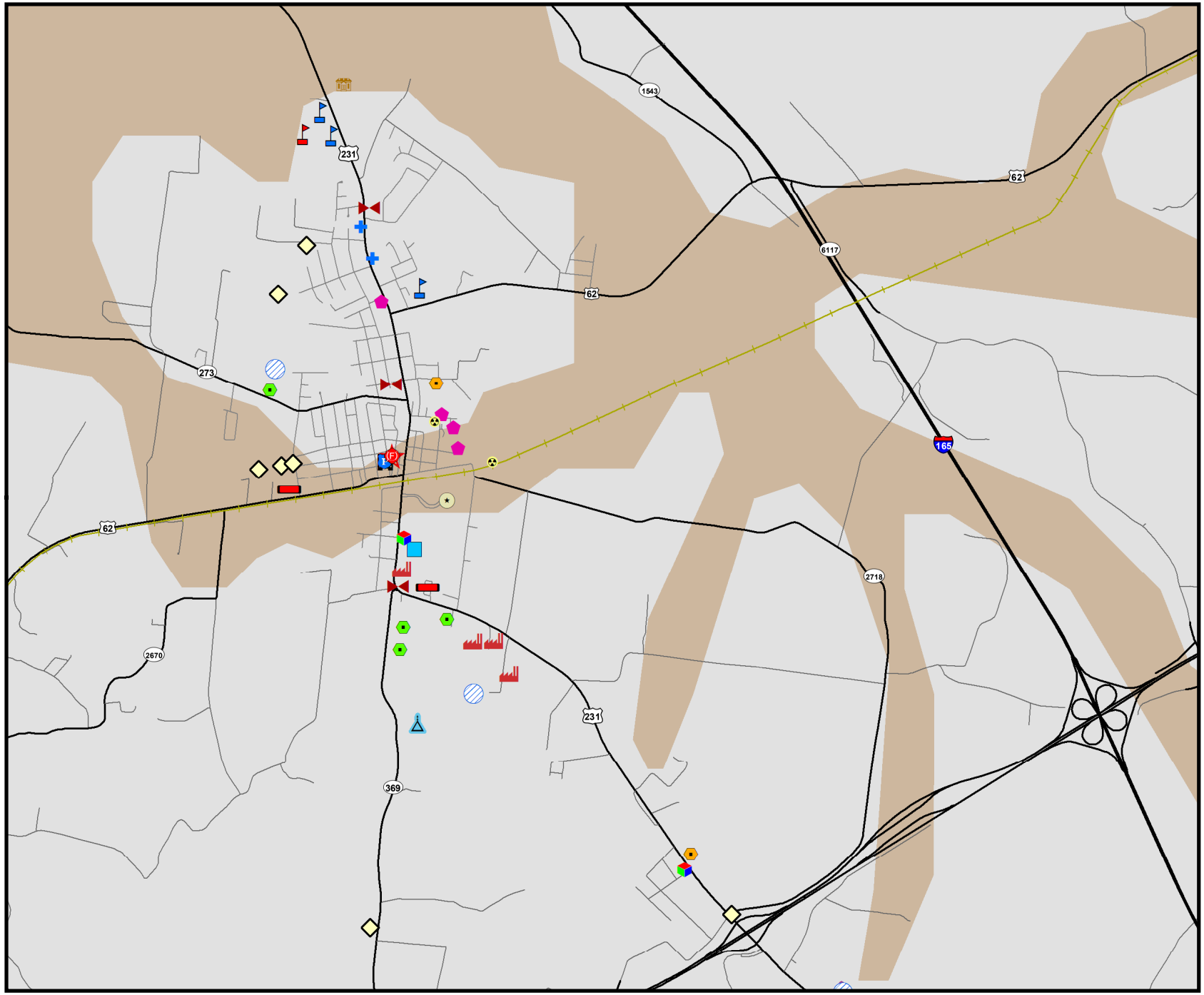
- Apartments
- Trailer Park
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- Child Care/Preschool
- Entertainment

Civic Facilities

- City Hall

Transportation

- Railroad



City of Centertown





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department

Utilities

- Substation

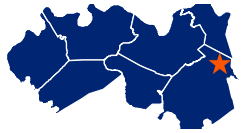
Communications

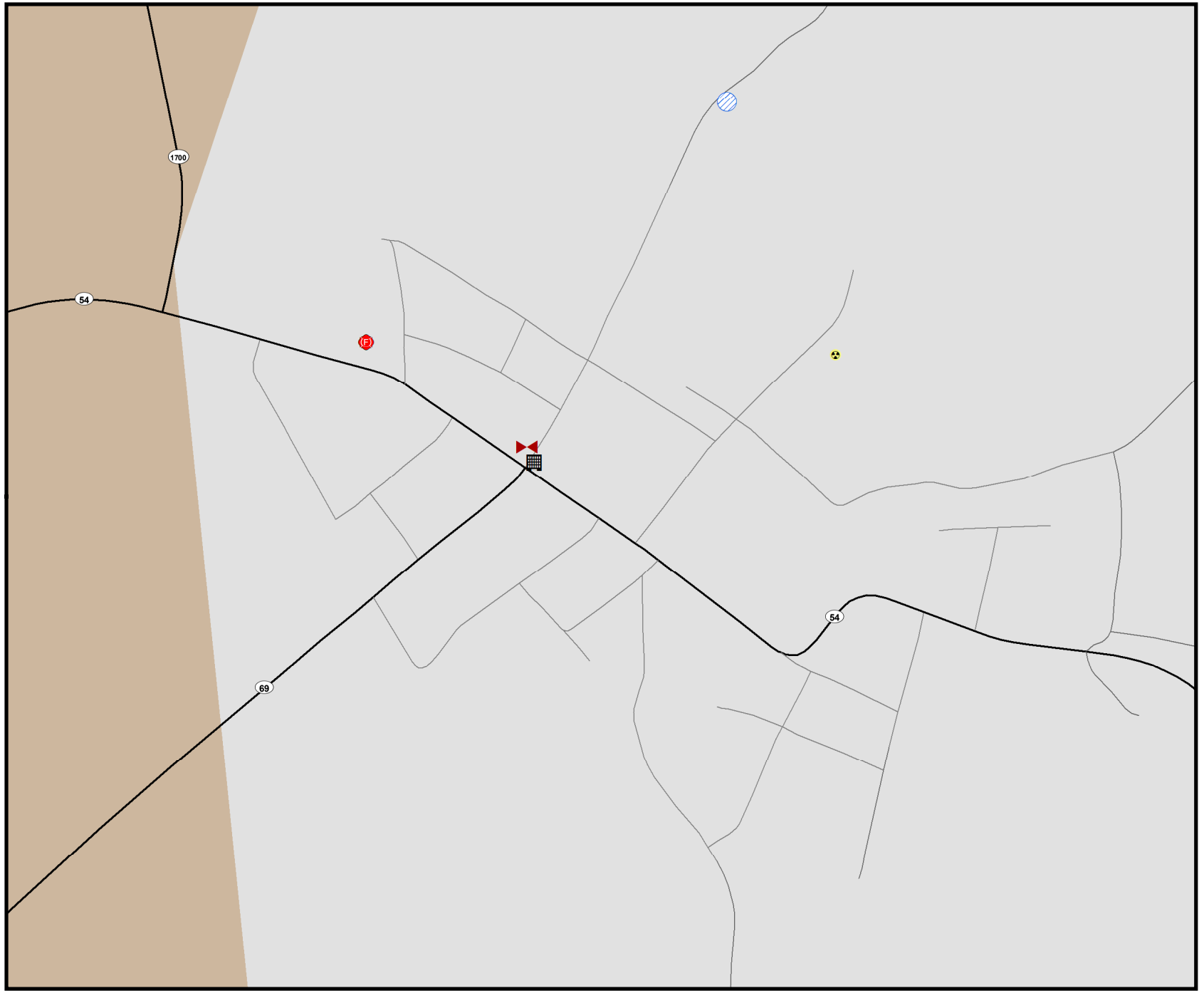
- ConnectGRADD Tower

Civic Facilities

- City Hall

City of Fordsville





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower

Civic Facilities

- City Hall

City of Hartford

Hazard Type

- Fault Line
- Alluvium Sediment

N W E S

0 0.5 1 1.5 Miles

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

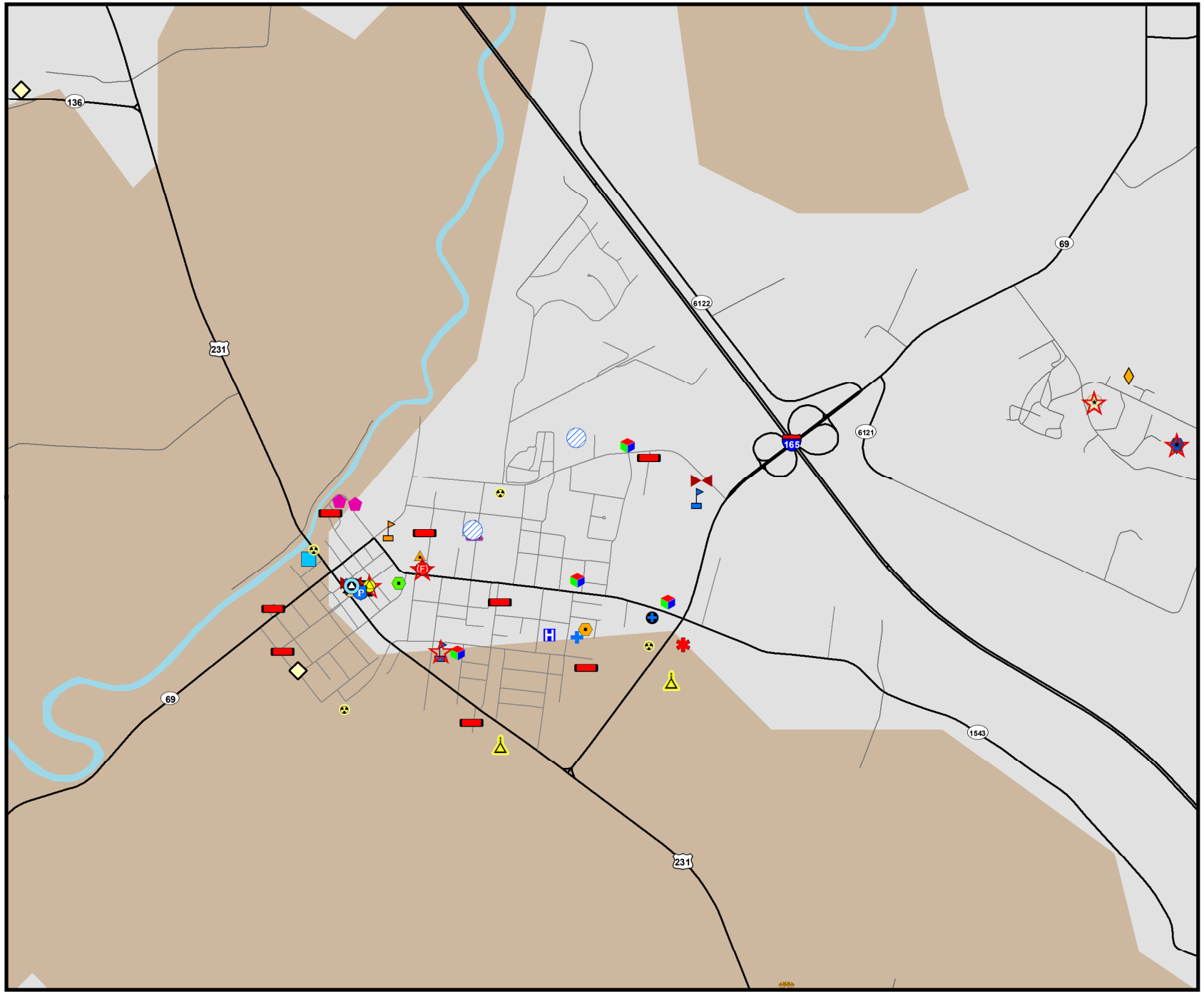
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Child Care/Preschool
- Special Needs
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional

Transportation

- Railroad



City of McHenry





0 1,000 2,000 3,000
Feet

Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

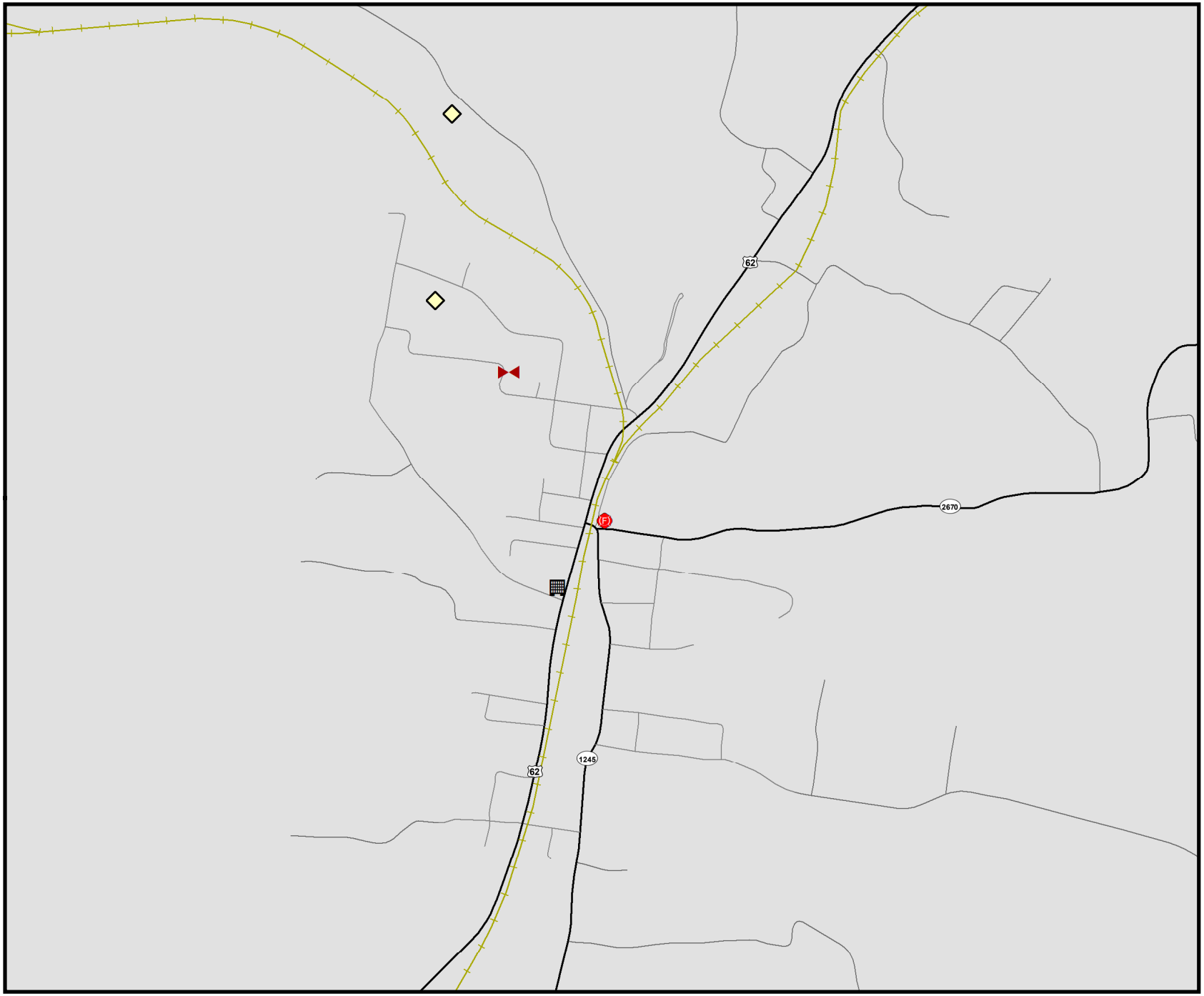
- Substation

Civic Facilities

- City Hall

Transportation

- Railroad



City of Rockport





0 1,000 2,000 3,000
Feet

Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

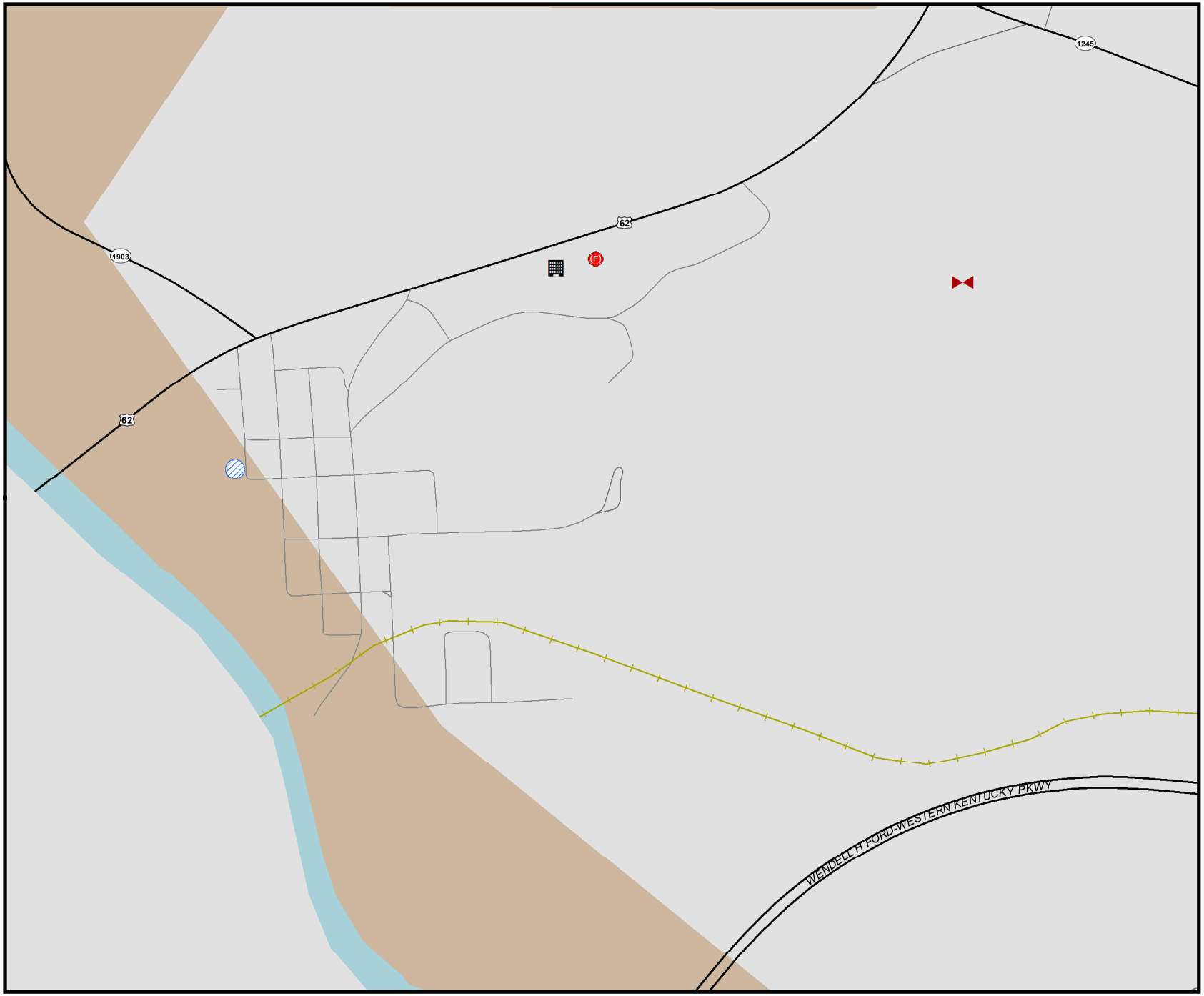
- WaterTank

Civic Facilities

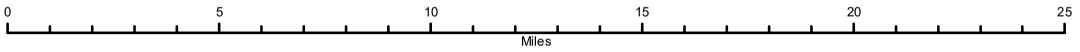
- City Hall

Transportation

- Railroad



Union County

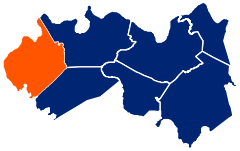




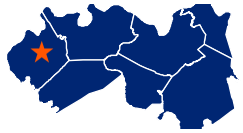
Hazard Type

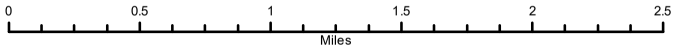
- Fault Line
- Alluvium Sediment





City of Morganfield





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- Hazardous Materials
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

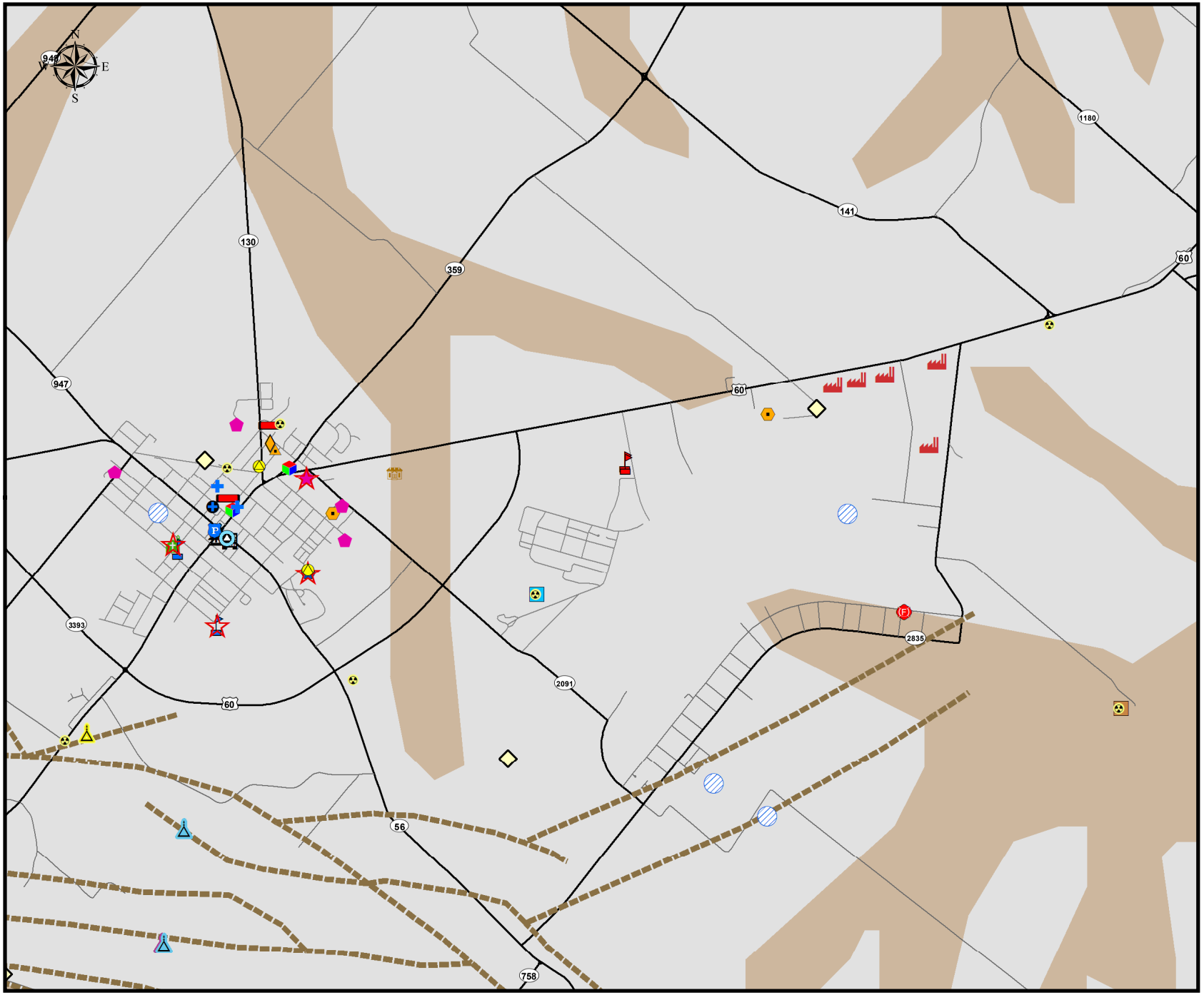
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

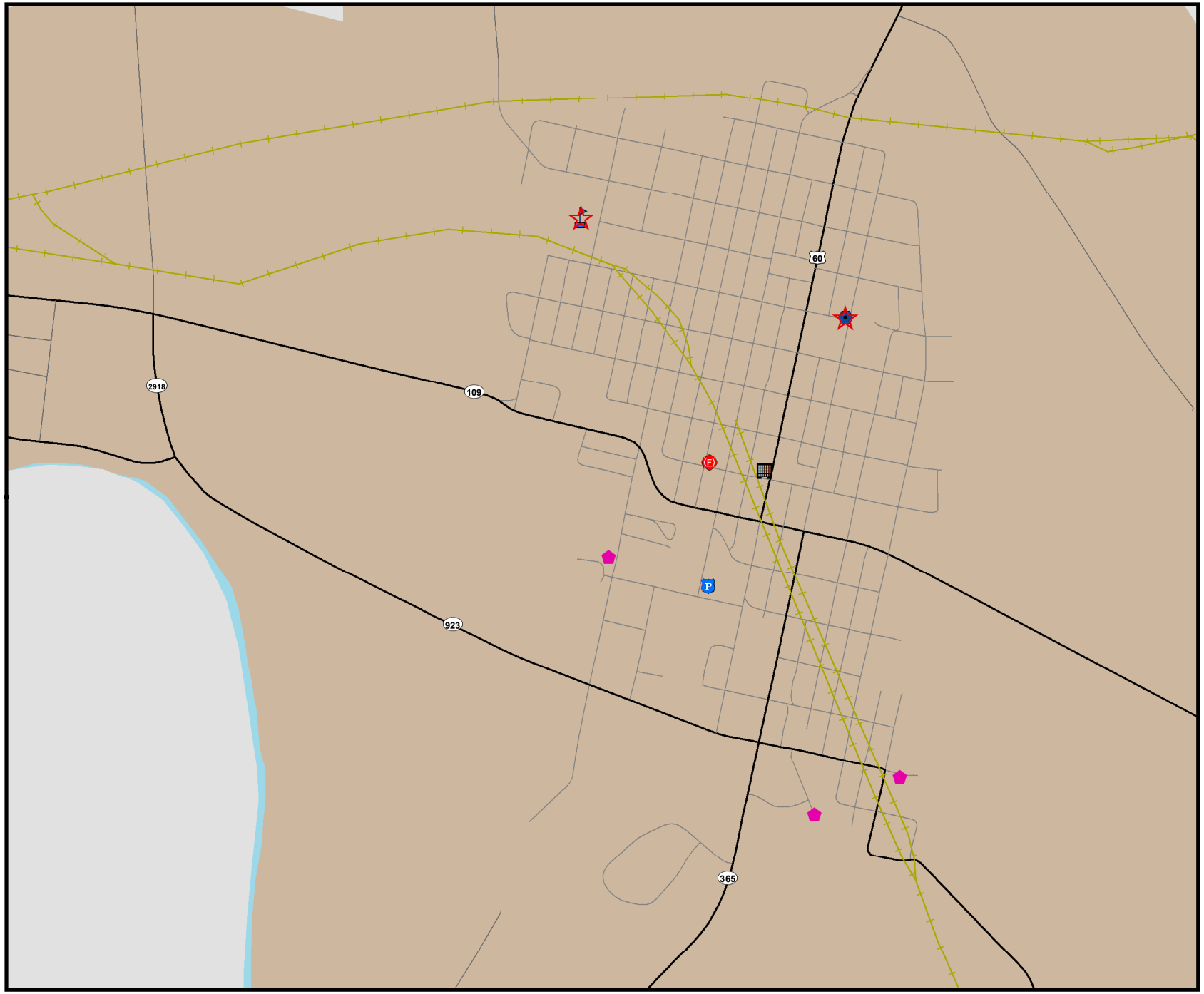
- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- School
- Post Secondary School
- Religious
- Child Care/Preschool

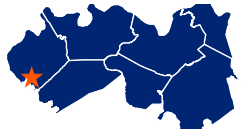
Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional



City of Sturgis





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Hazardous Materials
- Emergency Shelters

Economic

- Industry

Utilities

- WaterTank

Vulnerable Population Centers

- Apartments
- Senior Center
- School
- Entertainment

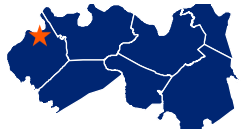
Civic Facilities

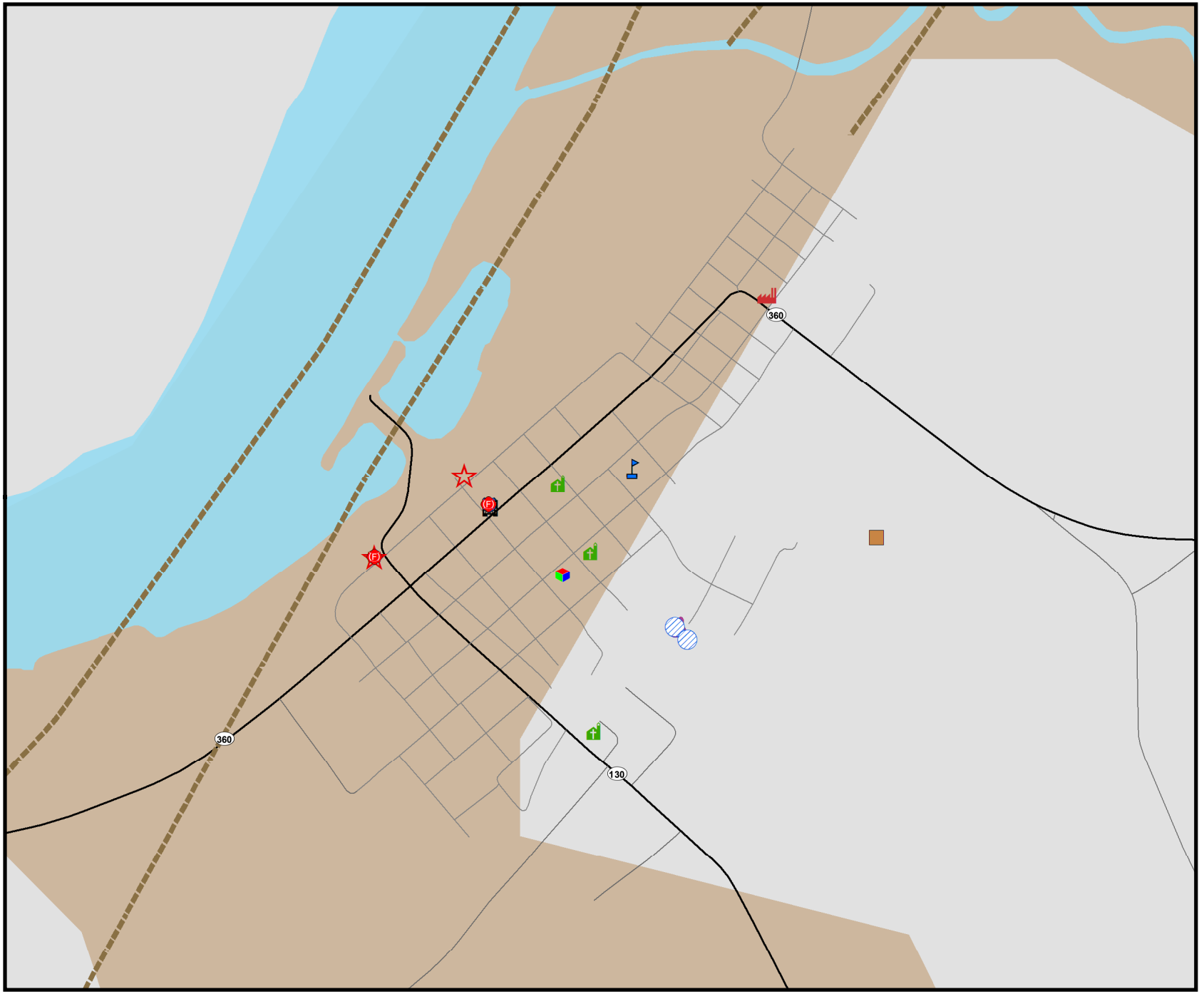
- City Hall
- Public Works

Transportation

- Railroad

City of Uniontown





Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Emergency Shelters

Economic

- Industry

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna

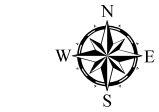
Vulnerable Population Centers

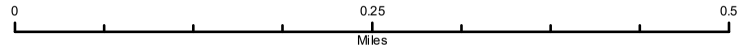
- School
- Religious
- Child Care/Preschool

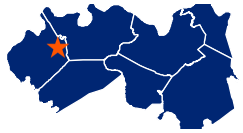
Civic Facilities

- City Hall

City of Waverly







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department

Utilities

- WaterTank

Communications

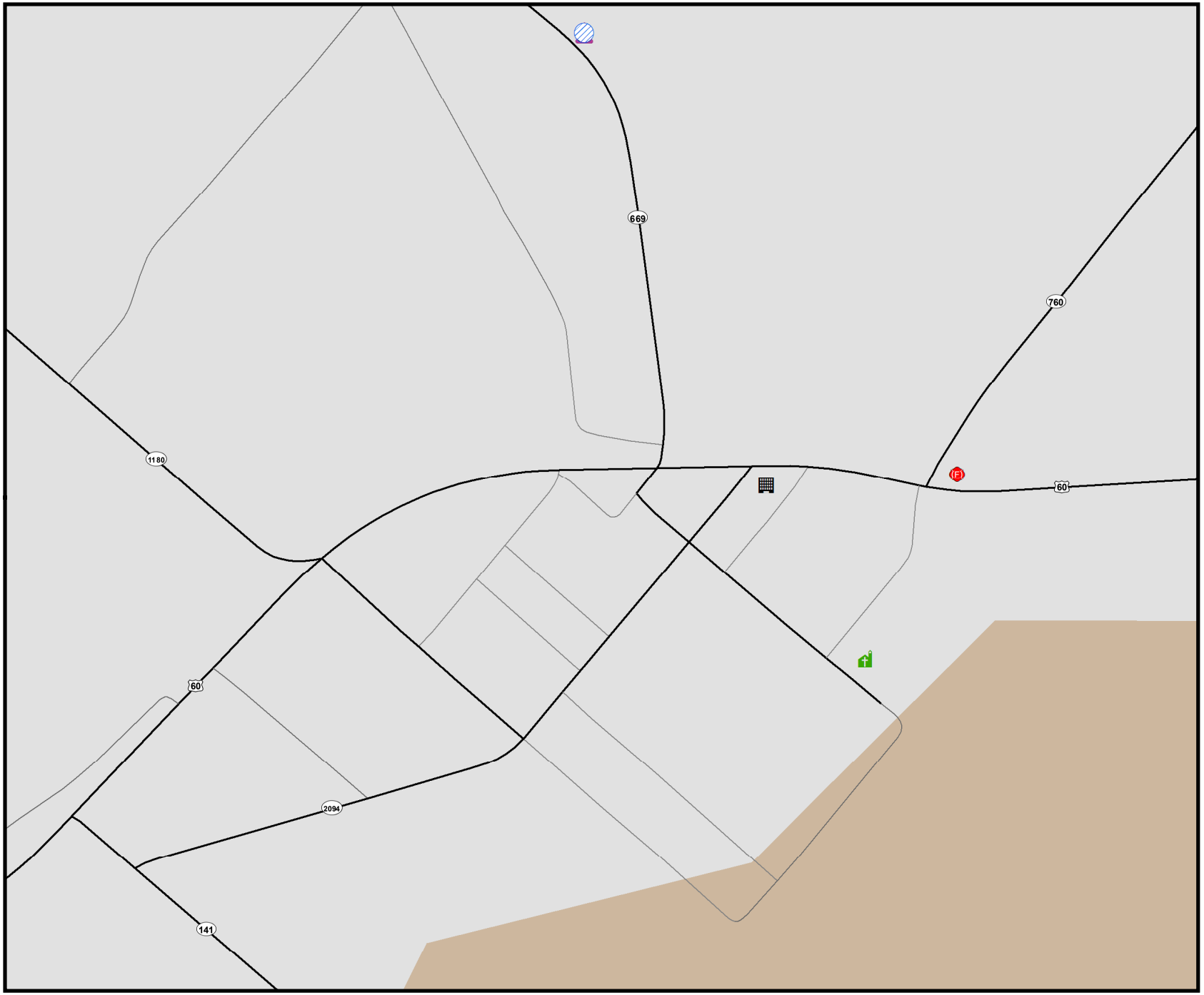
- ConnectGRADD Tower

Vulnerable Population Centers

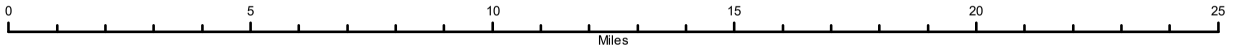
- Religious

Civic Facilities

- City Hall



Map A.7.0: Webster County

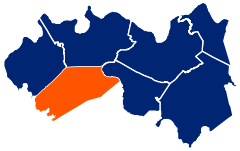




Hazard Type

- Fault Line
- Alluvium Sediment





City of Clay





0 0.25 0.5
Miles

Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Vulnerable Population Centers

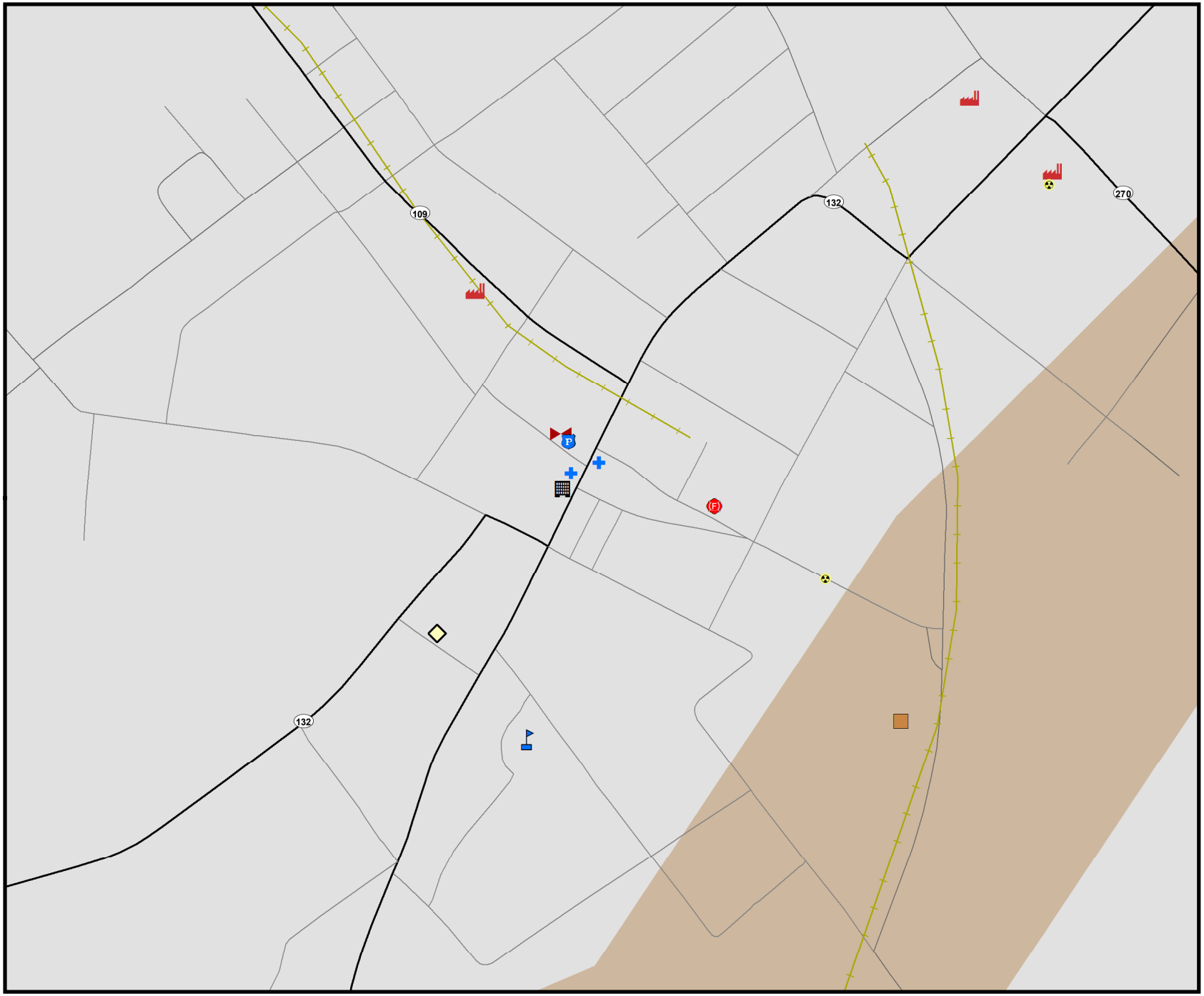
- Apartments
- School

Civic Facilities

- City Hall

Transportation

- Railroad



City of Dixon







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- EMS
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTank

Communications

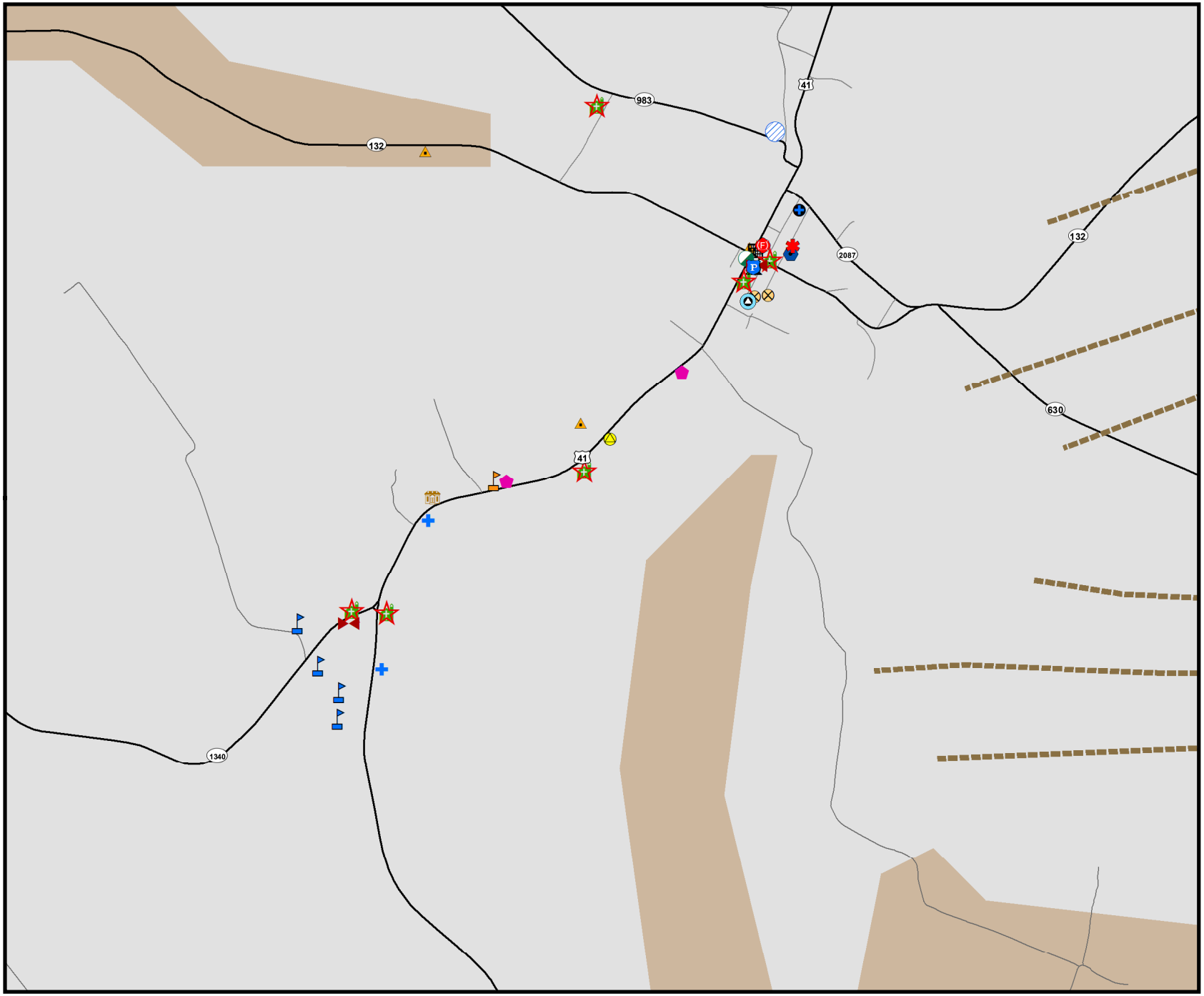
- ConnectGRADD Tower

Vulnerable Population Centers

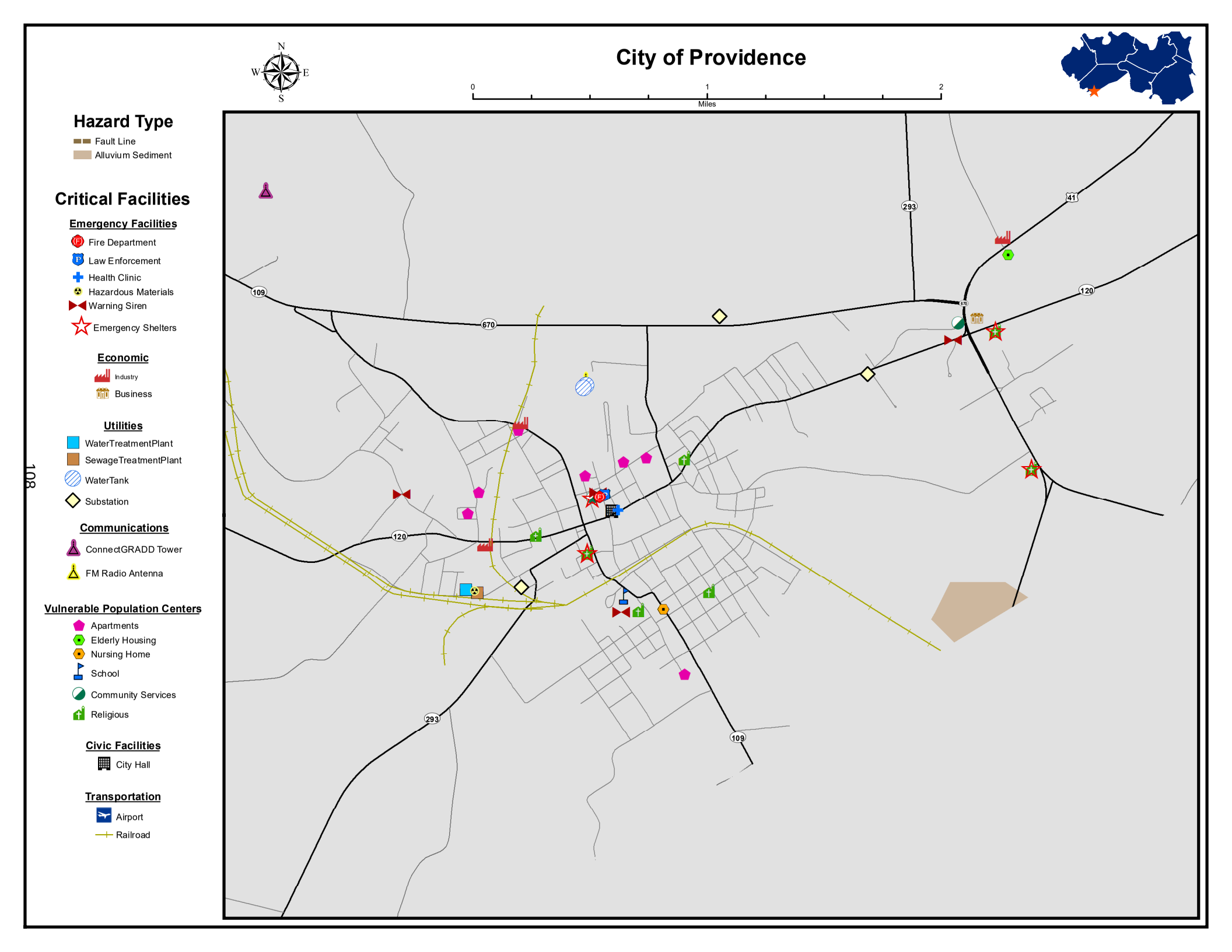
- Apartments
- Senior Center
- School
- School Administration
- Community Services
- Religious

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Correctional



City of Providence



Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers

- Apartments
- Elderly Housing
- Nursing Home
- School
- Community Services
- Religious

Civic Facilities

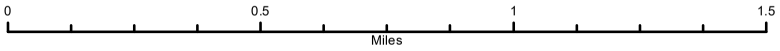
- City Hall

Transportation

- Airport
- Railroad

City of Sebree







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- WaterTank

Communications

- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

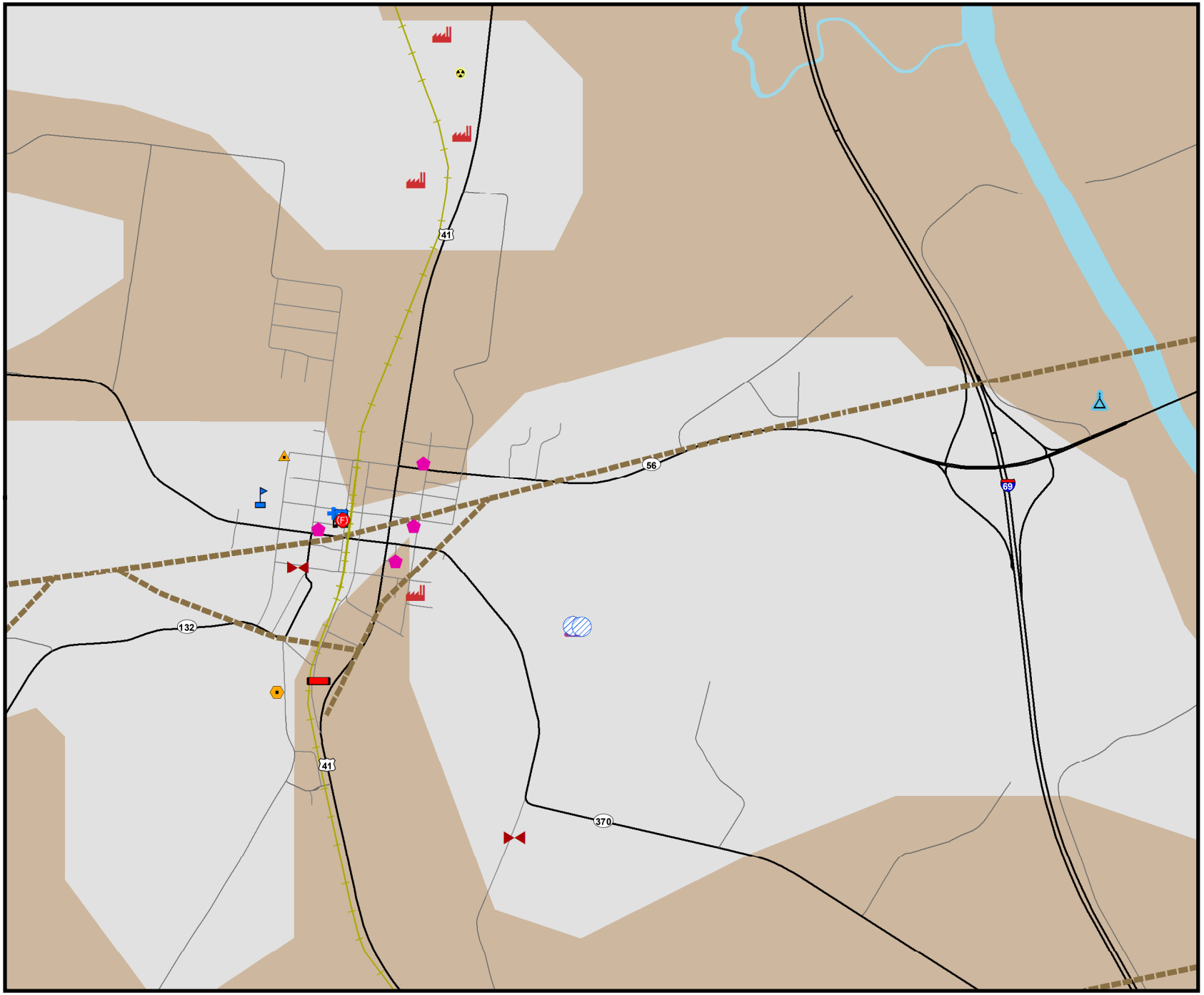
- Apartments
- Trailer Park
- Nursing Home
- School

Civic Facilities

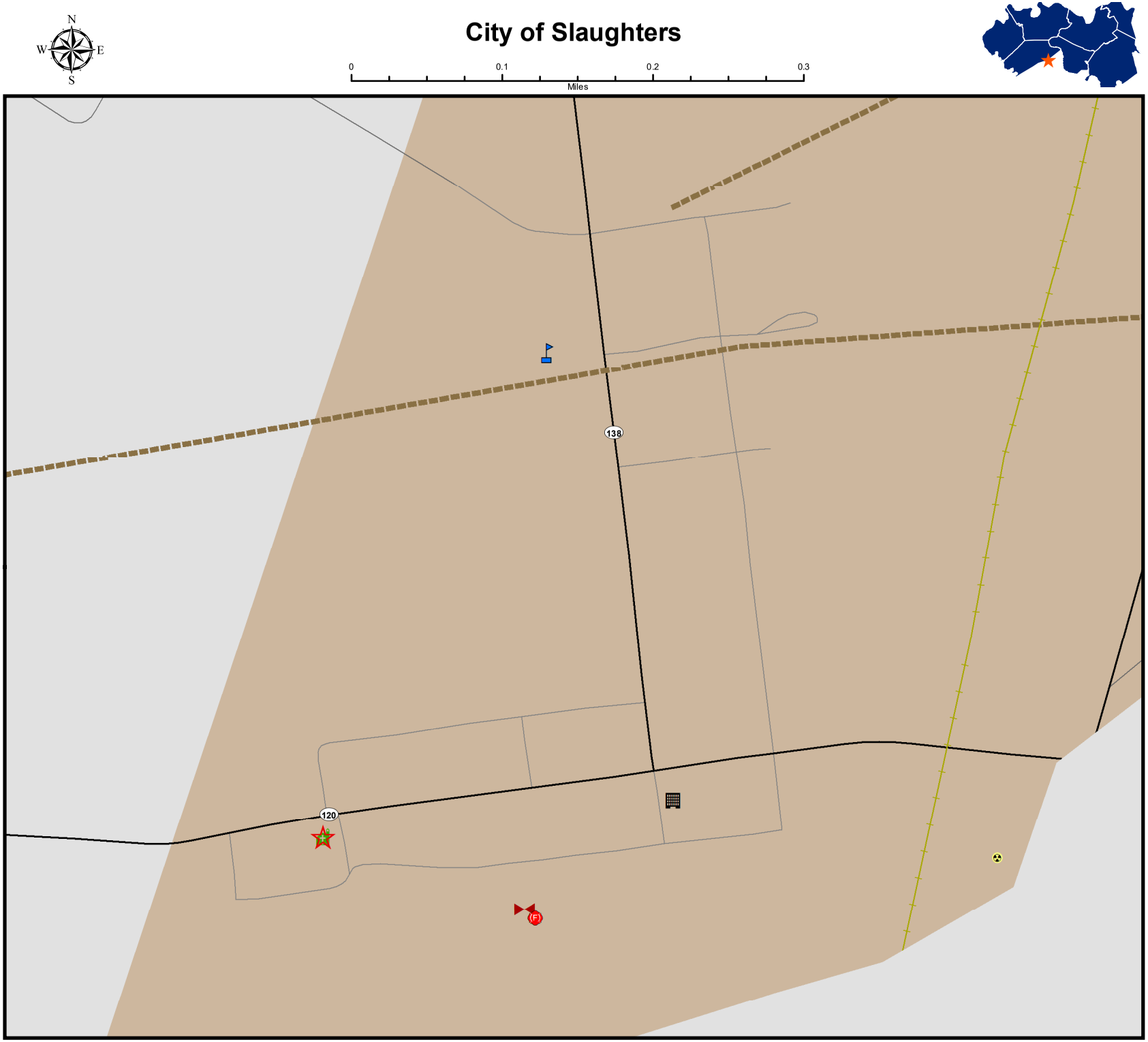
- City Hall
- Public Works

Transportation

- Railroad



City of Slaughters



Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Communications

- Cellular Tower

Vulnerable Population Centers

- School
- Religious

Civic Facilities

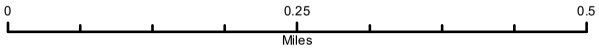
- City Hall

Transportation

- Railroad

City of Wheatcroft







Hazard Type

- Fault Line
- Alluvium Sediment

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

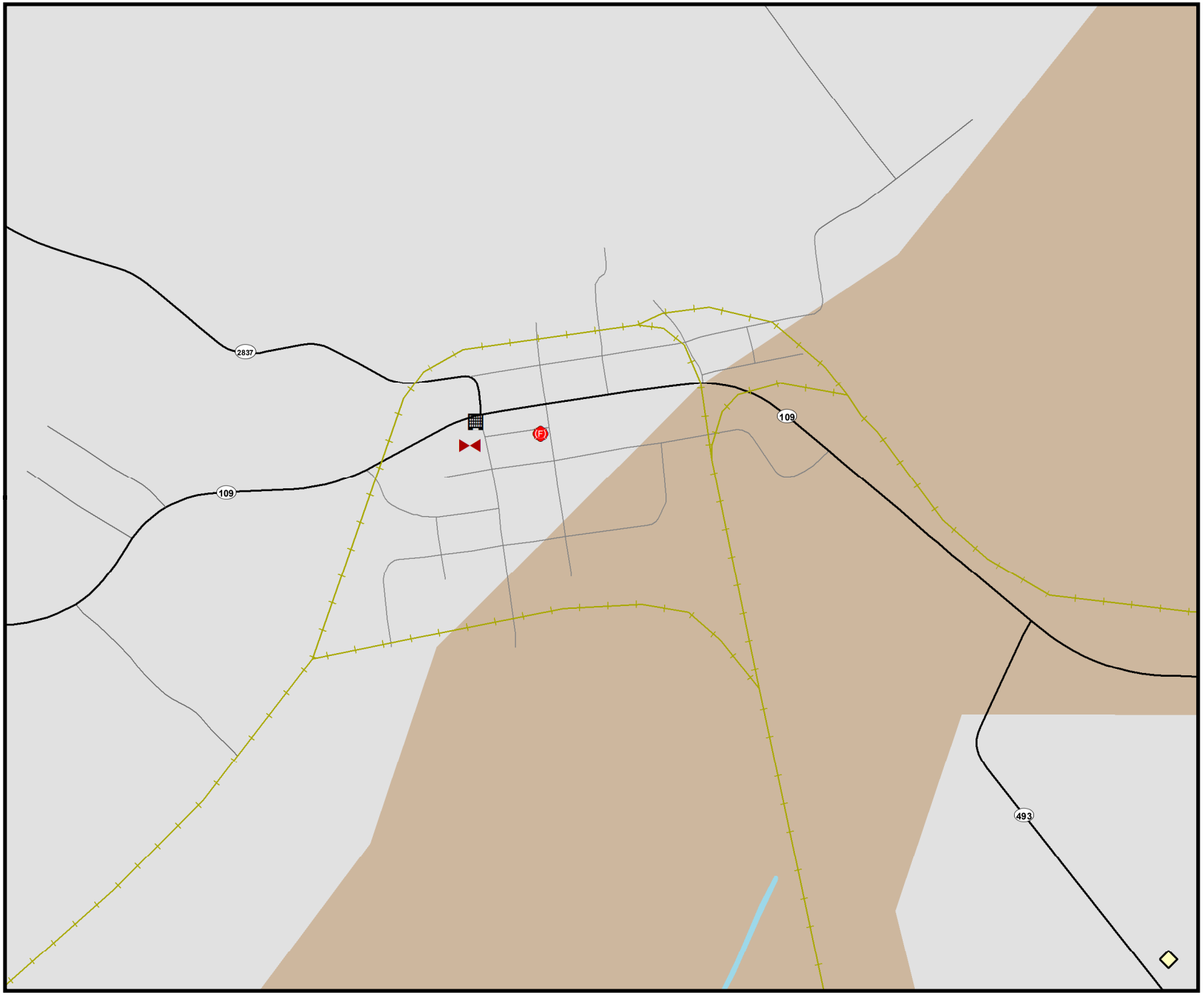
- Substation

Civic Facilities

- City Hall

Transportation

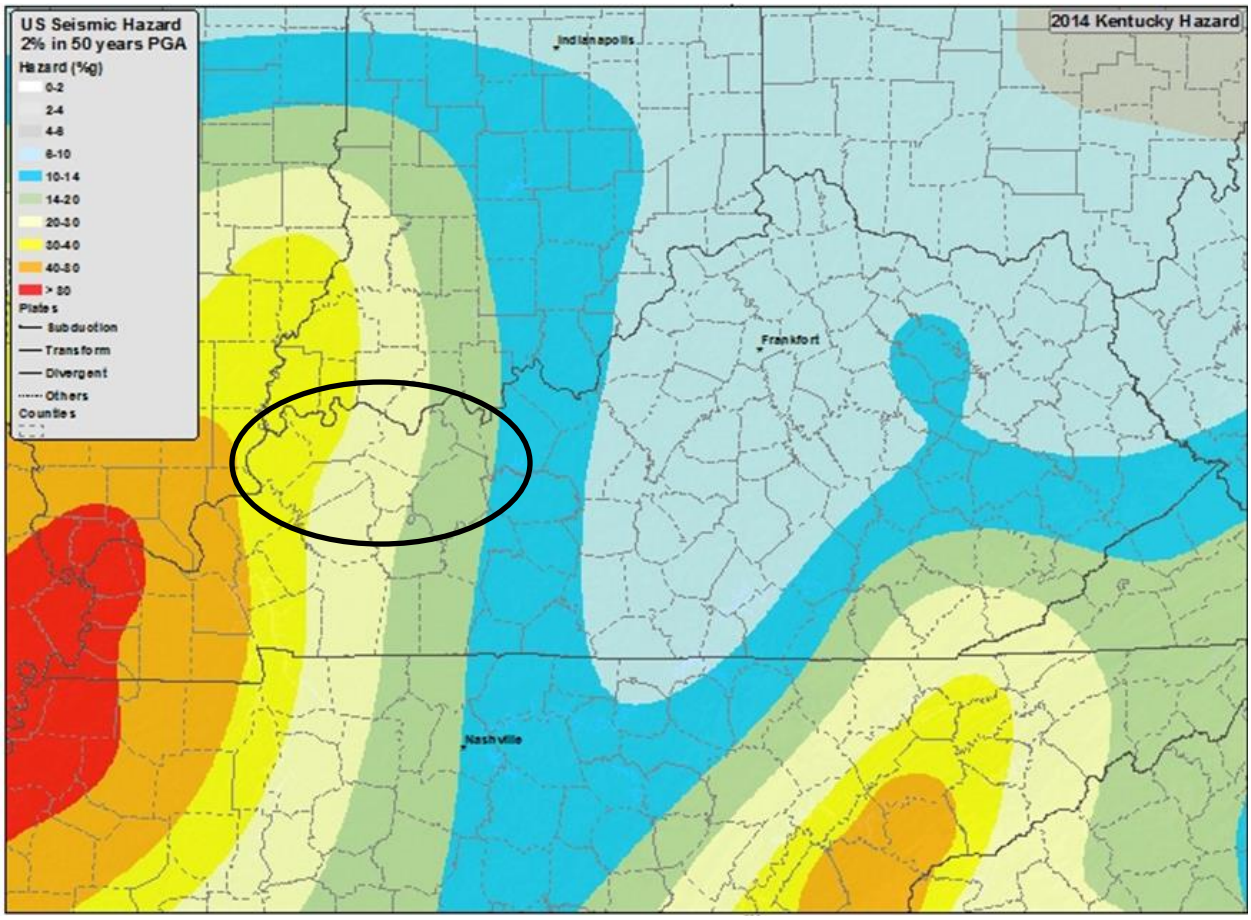
- Railroad



Probability

There exists the probability of between 1-10% of a magnitude 5.0 or greater earthquake occurring in the GRADD region, specifically from the active New Madrid Fault. Areas immediately west of the GRADD region increase substantially to a probability of 10-25% of a magnitude 5.0 or higher. The figure below and the table immediately following display that probability.

Figure 4.15 Probability of a Magnitude 5.0 Earthquake



Source: U.S. Geological Survey, 2020

Table 4.15 - Probability of a Magnitude 5.0 Earthquake

County	Probability	Vulnerability
Daviess	2-4% in a 50-year period	Moderate
Hancock	1-3% in a 50-year period	Low
Henderson	4-8% in a 50-year period	Moderate
McLean	2-4% in a 50-year period	Low
Ohio	1-3% in a 50-year period	Low
Union	6-10% in a 50-year period	Moderate
Webster	4-8% in a 50-year period	Moderate

Source: Kentucky Geological Survey Data

Seismic Study

Currently, through FEMA's Hazard Mitigation Grants Program, a seismic study is being conducted by the University of Kentucky and Kentucky Geological Survey. This study will include mapping of the liquefaction impact of earthquakes for the GRADD region and will allow data from the study to be incorporated into HAZUS maps. Once concluded, those maps will be included as an appendix to this plan.

Summary

The GRADD region's proximity to active seismic zones and the unpredictability of an earthquake event make this hazard essential in all areas of planning for local officials. Cities with downtowns that lie on the banks of significant waterways in the GRADD region are popular and an earthquake event will result in devastating damage with liquefaction. Mitigation planning must incorporate earthquake risk into all solutions and strategies.

Hazard Profile: Extreme Temperatures

Beginning with the 2013 edition of the GRADD Hazard Mitigation Plan, extreme temperatures were included as its own hazard profile instead of being included with drought and winter storms. Extreme temperatures as experienced by those in the Green River region have accounted for 29 injuries since the reporting distinction began in 1996. This number warrants inclusion of these hazards as its own profile to encourage mitigation efforts and solutions.

Ready.gov defines extreme heat as a period of high heat and humidity with temperatures above 90 degrees for at least two to three days. Extreme heat is responsible for the highest number of annual deaths among all weather-related hazards. What constitutes extreme cold varies in different parts of the country. Extreme cold creates a higher risk of car accidents, hypothermia, frostbite, carbon monoxide poisoning and heart attacks from overexertion.

Kentucky's central location in the eastern half of the United States, yet some distance from ocean bodies of water, results in a climate that is characterized by moderately large variations in temperature and abundant precipitation. Summers vary from warm to hot and humid, while winters are cool with occasional episodes of very cold Arctic air. Average daily high temperatures for July range from 86°F in the east to 90°F in the west, while average daily high temperatures for January range from 38°F in the north to 44°F in the south. Temperatures fall below 0°F for about three days per year in the north and one day in the south.

Much of this hazard profile is analysis of extreme temperatures and the history of those temperatures for the GRADD region. Some data is included for reference, but full data tables on extreme temperatures in the GRADD region from the National Climatic Data Center are included in the appendix of the Hazard Mitigation Plan.

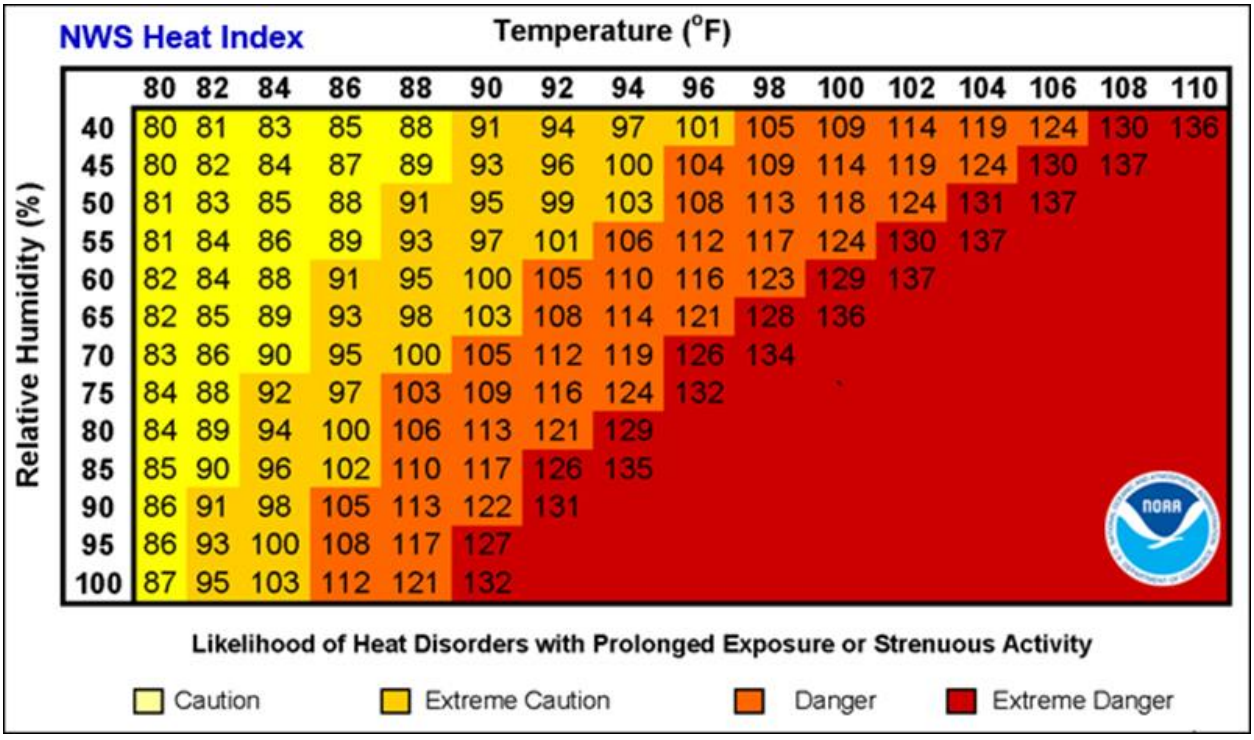
Extent

The National Weather Service suggests that extreme temperatures can be described as ten degrees above or below the average high or low temperature for a region. Both the state plan and the National Weather Service prescribe the use of the heat index to explore extreme heat and the wind chill factor to examine extreme cold. NWS has also produced guidelines for heat events. These guidelines and indexes are found on the following pages.

Table 4.16 - National Weather Service Heat Guidelines

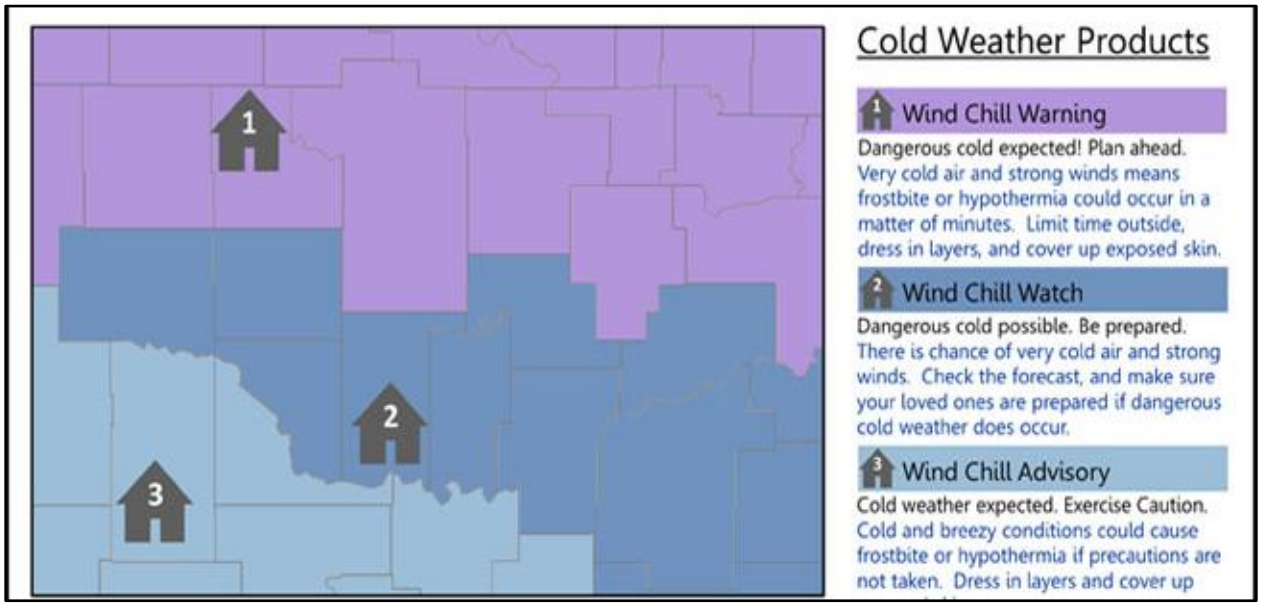
Watch, Warning and Advisory Guidelines	
Heat Advisory	Heat Index of ≥ 105 degrees and for ≥ 3 hours and a minimum of 24-hour heat index in the middle 70s.
Heat Warning	Heat Index of ≥ 110 degrees and minimum heat index of 75 degrees or higher or a heat index ≥ 105 degrees for 4 or more consecutive days.
Excessive Heat Outlook	Issued when the potential exists for an excessive heat event in the next 3-7 days. An Outlook provides information to those who need of considerable lead time to prepare for the event, such as public utilities, emergency management, and public health officials.
Excessive Heat Watch	Issued when conditions are favorable for an excessive heat event in the next 12 to 48 hours. A Watch is used when the risk of a heat wave has increased, but its occurrence and timing are still uncertain. A Watch provides enough lead time so those who need to prepare can do so.

Figure 4.16 - National Weather Service Heat Index



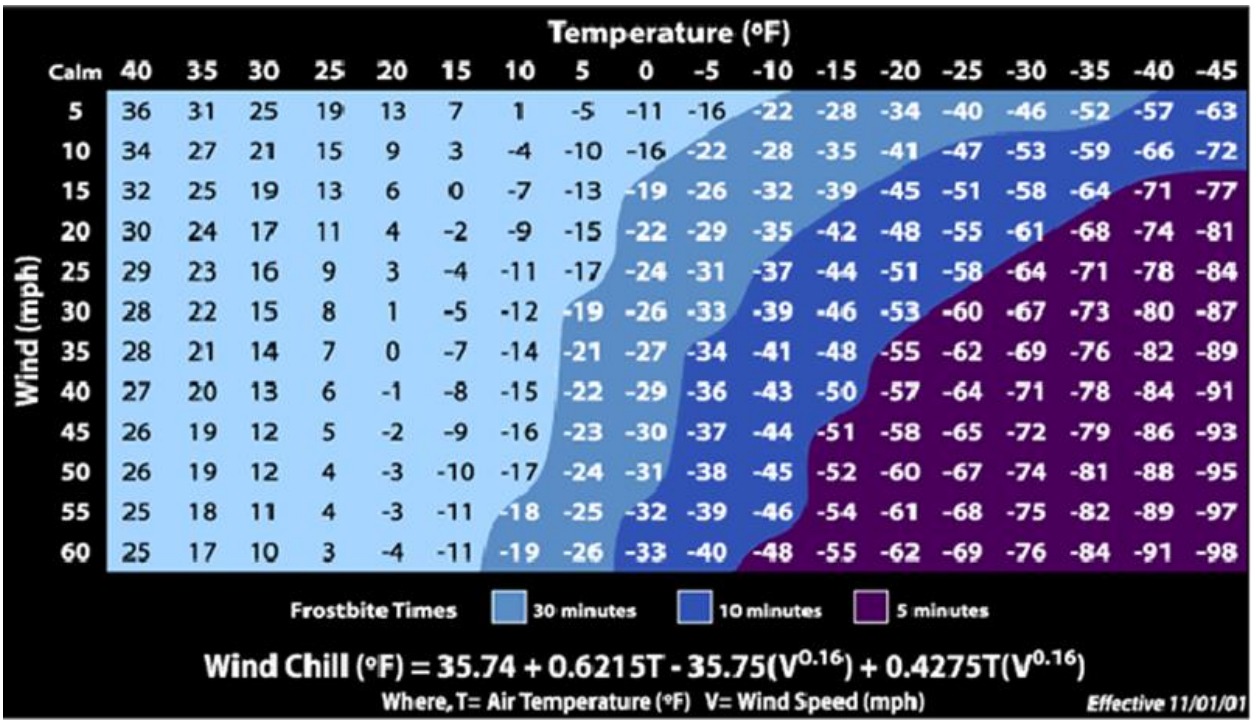
Source: National Weather Service, 2020

Figure 4.17 - NOAA Cold Weather Guidelines



Source: NOAA, 2020

Figure 4.18 - National Weather Service Windchill Chart

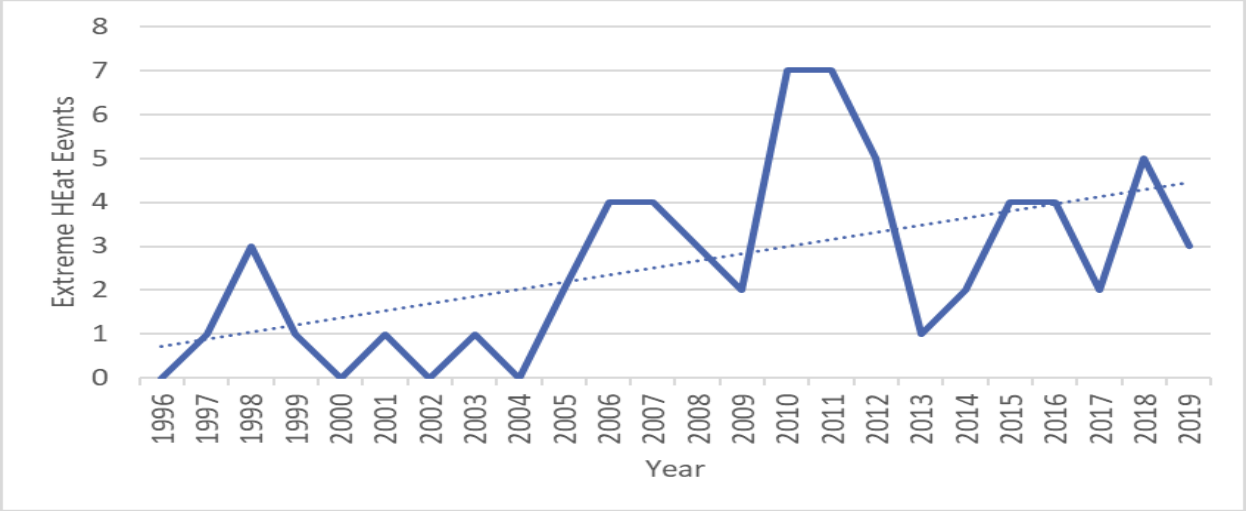


Source: National Weather Service, 2001

Frequency

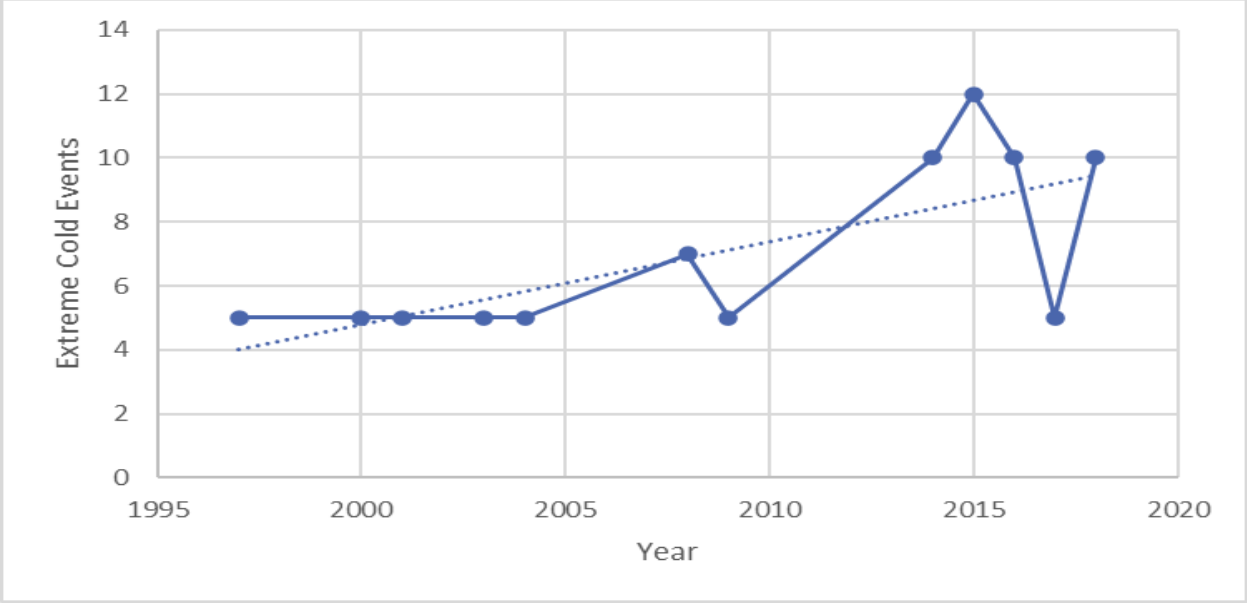
Tracking exactly what constitutes an extreme temperature is difficult because explicit guidance does not exist. However, the National Climatic Data Center tracks events of extreme heat and extreme cold, and those events are displayed in the following graphs.

Figure 4.19 - Extreme Heat Events by Year - GRADD



Source: National Climatic Data Center, 2019

Figure 4.20 - Extreme Cold Events by Year - GRADD



Source: National Climatic Data Center, 2019

Historical Events

Heat

An extended heatwave in 1991 led to that year becoming the 3rd hottest year on record at the time. A heat wave in 2005 across the Commonwealth caused nearly 70 heat related injuries in western Kentucky. The summers of 2010, 2011 and 2012 are notable in that extreme heat became a norm; seven weeks were recorded as above average in 2010, five in 2011 and four in 2012 for GRADD counties. According to the National Weather Service, 2012 was the hottest year on record for the United States.

In 2012, The National Academy of Sciences reported since 1950, the frequency and severity of heat waves has increased globally. In the United States, record high temperatures have outnumbered record low temperatures 2:1. Researchers have linked this trend to climate change. Human development is one cause of the increase in global temperatures. Transportation, industry and utilities produce greenhouse gases that are emitted into the atmosphere. Some greenhouse gases have heat-trapping abilities that capture sunlight that enters the atmosphere and prevents it from reflecting out.

C**old**

An invasion of arctic air occurred on December 12, 2000 and became entrenched over the region for the remainder of the month, resulting in the coldest December on record according to the NCEI database. The average monthly temperature of 25.9 degrees was 11.4 degrees below normal. On the coldest day of the month, December 17th, the high was 17 and the low was 6. Unusually high energy prices, combined with the record cold, caused homeless shelters to fill to capacity. The usual problems associated with frigid temperatures, such as frozen pipes and water main breaks, were common during the latter half of the month.

During the Ice Storm of 2009, gusty northwest winds from 15 to 25 mph combined with a surge of arctic air to produce wind chills from minus 5 to minus 10 degrees. The wind chills caused the ice and snow produced during the storm to linger, prolonging cleanup and rescue efforts.

The region experienced a bout of extreme cold during the end of February and beginning of March in 2015. Warming centers had to be opened across the region for the period of subzero temperatures and dangerous wind chill levels.

Probability

Comprehensive historical data and records are substantially nonexistent, but the existing data suggests that the GRADD region will experience over one heat event per year and one extreme cold event every two years, both of which have the potential to harm vulnerable populations and increase demand on emergency responders. Though two counties had no documented events generally due to the nature of reporting mechanism changes, these heat and cold events are generally regional in nature and the vulnerability remains the same for each county in the region.

Events here are reported under requirements from the NOAA Storm Data directive:

1. An Excessive Heat event occurs and is reported in Storm Data whenever heat index values meet or exceed locally/regionally established excessive heat warning thresholds. For the GRADD Region, these values are based off the National Weather Service.

2. A period of extremely low temperatures or wind chill temperatures reaching or exceeding locally/regionally defined warning criteria. For the GRADD Region, these values are based off the National Weather Service.

Table 4.17 - Extreme Heat Event Probability as Frequency of Event Occurrence

County	Documented Events (2000-2020)	Probability of Future Frequency	Vulnerability	Associated Injuries over 20 Years
Daviess	11	1 event every 2 years	High	29 injuries reported in the GRADD region
Hancock	*No documented events*		High	
Henderson	11	1 event every 2 years	High	
McLean	10	1 event every 2 years	High	
Ohio	*No documented events*		High	
Union	10	1 event every 2 years	High	
Webster	10	1 event every 2 years	High	

Source: National Climatic Data Center, 2020

Table 4.18 - Extreme Cold Event Event Probability as Frequency of Event Occurrence

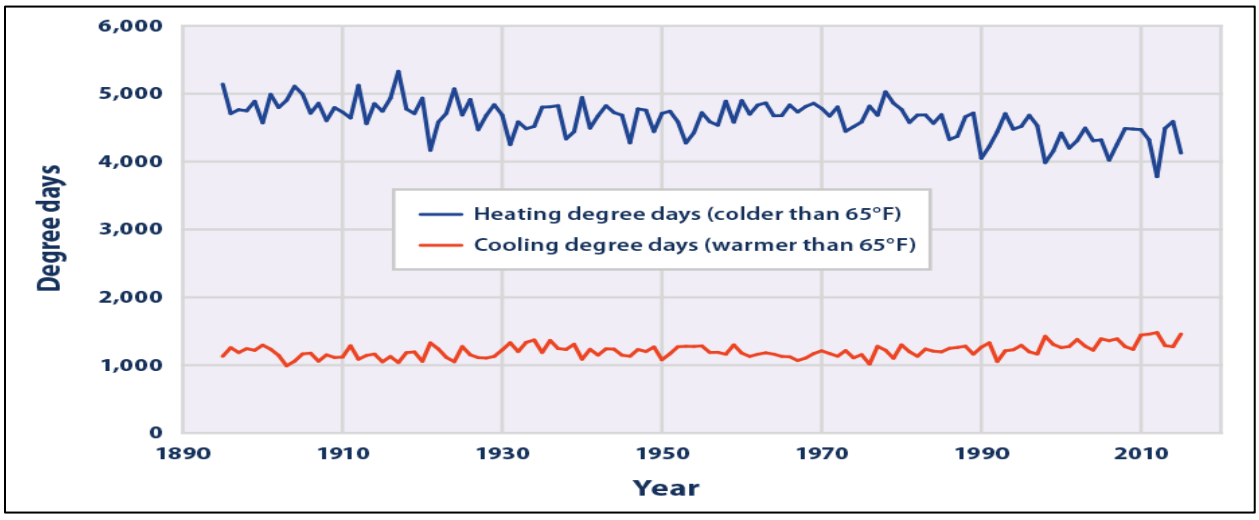
County	Documented Events (2000-2020)	Probability of Future Events	Vulnerability	Associated Injuries over 20 Years
Daviess	3	1 event every 6 years	Medium	5 injuries reported across western Kentucky
Hancock	*No documented events*			
Henderson	3	1 event every 6 years	Medium	
McLean	3	1 event every 6 years	Medium	
Ohio	*No documented events*			
Union	3	1 event every 6 years	Medium	
Webster	3	1 event every 6 years	Medium	

Source: National Climatic Data Center, 2020

Trend

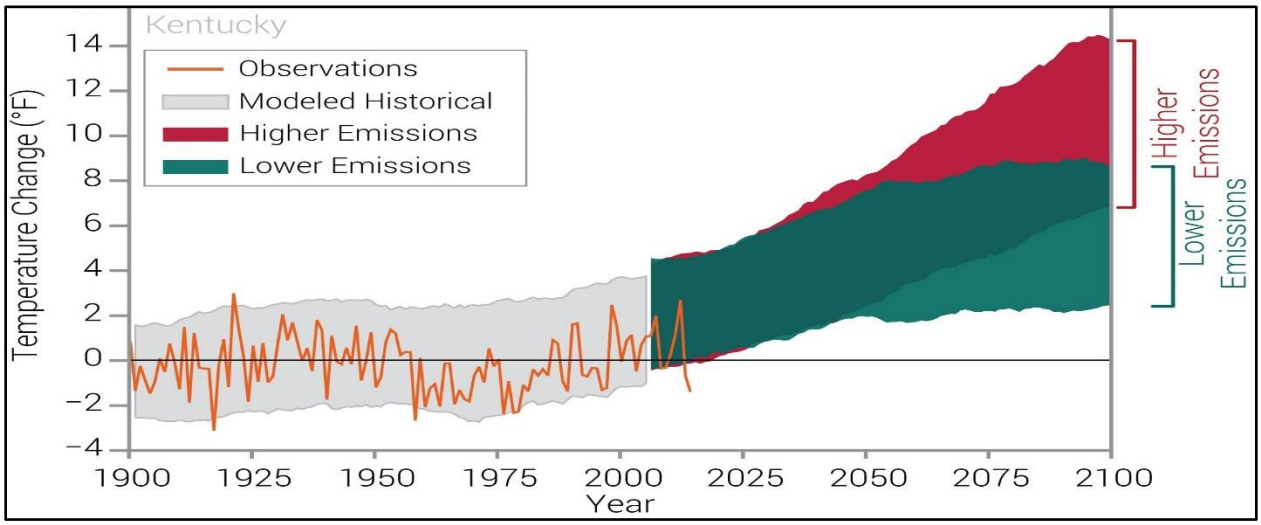
Degree days are defined as the number of degrees by which the average daily temperature is higher than 65°F (cooling degree days) or lower than 65°F (heating degree days). Degree days reflect changes in climate and are used as a proxy for the energy demand for heating or cooling buildings. The chart below reveals the trend for heating and cooling days in the United State from 1895. The days warmer than 65 degrees has been trending up since the late 1960s.

Figure 4.21 - Heating and Cooling Degree Days in the Contiguous 48 States, 1895-2015



Source: NOAA National Center for Environmental Information, 2015

Figure 4.22 - Observed and Projected Temperature Change



Source: CICS-NC and NOAA NCEI, 2015

Summary

Extreme temperatures cause significant consequences and threats to human life and extrapolate impacts related to disaster recovery. Heat related events are responsible for the most annual deaths of weather-related disasters and extreme cold weather events prolong the cleanup and recovery from any associated winter weather. While genuine historical data for these profiles is not readily accessible in the same way as other weather-related data, enough context exists to keep extreme temperatures at the forefront when planning. Projected warming and increased temperatures will cause categorical change in climate if not addressed.

Hazard Profile: Flooding

Flooding is a coast-to-coast threat to the United States and its territories in all months. Flooding typically occurs when prolonged rain falls over several days, when intense rain falls over a short period of time, or when an ice or debris jam causes a river or stream to overflow onto the surrounding area (National Weather Service). Flooding can also result from the failure of a water control structure, such as a levee or dam. The most common cause of flooding is water due to rain or snowmelt that accumulates faster than soils can absorb it, or rivers can carry it away. According to the National Weather Service, approximately 75 % of all Presidential disaster declarations are associated with flooding.

Kentucky's elevation ranges from 400 feet above sea level along the Mississippi River in the west to more than 4,100 feet at the peak of Black Mountain in the southeast. Most of the state is below 1,000 feet above sea level. Average annual precipitation ranges from about 42 inches in the north to around 52 inches in the southern portion of the state. The wettest year on record is 2011 with 64 inches of precipitation while the driest year was 1930 with 29 inches. According to the National Weather Service, flooding is the costliest and most common natural disaster in the United States and in the GRADD region. In the U.S., floods kill more people each year than tornadoes, hurricanes, or lightning. Though flooding encompassed only 17 % of natural hazard events since 2010, about 80 % of all property damage caused by natural hazards stemmed from flooding.

Types of Flood Hazards

The following types of flood hazards that affect the GRADD region are profiled with information from NOAA and the National Weather Service.

Flash Flooding

Flash flooding, a rapid and extreme flow of high water into a normally dry area or a rapid water level rise in a stream or creek above a predetermined flood level, begins within six hours of the causative event, such as intense rainfall or dam failure. In the GRADD region, flash flooding generally results from very heavy rainfall that hits saturated earth flooding county roads. City storm sewers become overwhelmed by the volume of runoff, flooding the streets and buildings

nearby. This type of flooding is highly dangerous due to the short period of time in which it happens, limiting the ability to warn and protect the public.

River Flooding

River flooding occurs when river levels rise and overflow banks or the edges of main channels and inundate areas that are normally dry. The Ohio River, Rough River, Tradewater River and Green River all run through or border the GRADD region. Periods when the Ohio River is high contribute heavily to flooding of the other rivers along with their riverine communities. Significant damages have occurred in the GRADD region and are examined in closer detail in the following section.

Snowmelt

Flooding due to snowmelt most often occurs in the spring when rapidly warming temperatures quickly melt the snow. The water runs off the already saturated ground into nearby streams and rivers causing them to rapidly rise and, in some cases, overflow their banks. Snowmelt has affected areas in the GRADD region historically, generally following a late season snowstorm when the temperature fluctuates. Areas of pressure bring heavy rains to the area when snow is still present.

Dam Break / Levee Failure

A dam or levee break or failure can occur with little or no warning. Most often, they are caused by water overtopping the structure, excessive seepage through the surrounding ground or a structural failure. As studied in a previous section, dams and levees protect the entire area of the GRADD region. Certification requirements and mitigation efforts, in conjunction with federal partners, ensure dams and levees remain at full strength.

National Flood Insurance Program

Flooding is the most common natural disaster in the United States. The Federal Emergency Management Agency's National Flood Insurance Program (NFIP), created in 1968 with passage of the National Flood Insurance Act, provides federally backed insurance coverage for homeowners and small businesses across the United States. The NFIP was designed to address the policy objectives of identifying flood hazards, offering affordable insurance premiums to encourage program participation and promoting community-based floodplain management. The

goal of the NFIP is to designate which property owners would be required to carry flood insurance and who would not, based on their location and related risk of flooding. To meet these policy objectives, NFIP has four key elements: identifying and mapping flood hazards, floodplain management, flood insurance and incentivizing flood-risk reduction through grants and premium discounts. NFIP enables property owners in participating communities to purchase flood insurance. In exchange, the community agrees to adopt and enforce NFIP minimum floodplain management regulations and applicable building construction standards to help reduce future flood losses. A participating community's floodplain management regulations must meet or exceed NFIP's minimum regulatory requirements. FEMA obligates any federally backed lender to require flood insurance when an insurable structure is within a Special Flood Hazard Area (SFHA).

Requirement §201.6 (c)(3)(ii)
The mitigation strategy must also Address the jurisdiction's participation In the National Flood Insurance Program (NFIP) and continued compliance with NFIP requirements, as appropriate.

The Special Flood Hazard Area (SFHA) historically has been referred to as the 100-year flood plain. There is a common misinterpretation of the100-year flood terminology—a flooding event in the area only happens once in every 100 years. The 100-year flood zone is instead a designated area that has a 1-in-100 chance (or 1% chance) of flooding in any given year. This distinction also means it can flood more than once within a 100-year period and can even flood more than once in the same year. This SFHA is more commonly referred to now as the 1% Annual Chance Flood.

NFIP Community Participation

Community participation in the NFIP is voluntary. Communities that join and actively participate in the NFIP agree to adopt the NFIP regulatory standards to manage the flood hazard areas in their community. If a community chooses not to participate, property owners and residents of that jurisdiction cannot purchase federal flood insurance. Federal grants, loans, disaster assistance and federal mortgage insurance are not available to the community to mitigate flood prone structures in the floodplain. However, residents of a community not participating are not subject to the federal flood insurance purchase requirements. A lender may still require the purchase of flood insurance. Nationwide, there are nearly five million active NFIP policies

according to FEMA, with 1,900 policies in the GRADD Region. The following chart details the communities in the GRADD region which are active participants in the National Flood Insurance Program. Also included in the chart is the total community population that lives in a Special Flood Hazard Area. The chart also captures the ratio of the population of the SFHA in relation to the total population of the community.

Table 4.19 - GRADD - NFIP Community Participation

Community	NFIP Entry Date	Total NFIP Policies	Population in SFHA	% Population in SFHA	Average NFIP Policy Cost	CRS Class June 2020	FIRM Effective Date
Beaver Dam	9/26/1985	8	0	0%	$ 240.00	0	6/1/2011
Calhoun	8/18/1986	16	0	0%	$ 381.33	0	4/17/2011
Clay	8/18/1986	12	0	0%	$ 525.50	0	12/16/2013
Daviess County	9/2/1980	344	4,465	12%	$ 555.75	8	4/15/2009
Hancock County	6/24/2008	21	1,357	16%	$ 1,237.67	0	9/26/2013
Hartford	9/3/1985	5	301	12%	$ 497.00	0	6/1/2011
Hawesville	11/4/1986	3	0	0%	$ 1,669.00	0	9/26/2013
Henderson County	4/9/1991	144	1,567	9%	$ 988.25	8	9/28/2017
Henderson	6/14/1978	186	1,436	5%	$ 283.75	8	9/28/2017
Lewisport	11/18/1986	56	0	0%	$ 464.33	0	9/26/2013
Livermore	8/4/1986	10	0	0%	$ 577.67	0	4/17/2011
Mclean County	2/14/1991	43	1,420	14%	$ 265.67	0	4/17/2011
Morganfield	8/31/1986	1	0	0%	$ 199.50	0	9/1/2009
Ohio County	9/28/1989	9	2,362	10%	$ 314.00	0	6/1/2011
Owensboro	7/31/1980	1,010	2,381	4%	$ 359.80	8	4/15/2009
Providence	8/31/1986	3	128	4%	$ 514.00	0	12/16/2013
Sebree	8/18/1986	8	0	0%	$ 277.00	0	12/16/2013
Slaughters	7/2/1986	0	0	0%	$ -	0	12/16/2013
Sturgis	8/31/1986	1	0	0%	$ 153.50	0	9/1/2009
Union County	9/1/2009	20	1,755	20%	$ 806.00	0	9/1/2009
Uniontown	3/31/1998	1	0	0%	$ 2,629.00	0	9/1/2009
Webster County	4/27/2015	26	1,638	12%	$ 3,538.00	0	12/16/2013
Wheatcroft	6/23/2014	3	0	0%	$ 387.00	0	12/16/2013
GRADD	**N/A**	**1,900**	**18,810**	**5%**	**$ 766.53**		

Source: Community Engagement Priority Analysis, 2020

Repetitive Loss / Severe Repetitive Loss

Requirement §201.6 (c)(2)
The risk assessment must also address National Flood Insurance Program (NFIP) insured structures that have been repetitively damaged.

FEMA defines a Repetitive Loss (RL) property as any insurable building for which two or more claims of more than $1,000 were paid by the NFIP on a rolling ten-year basis since 1978. A Repetitive Loss property may or may not be currently insured by the NFIP. Nationwide, more than 150,000 properties have repeatedly flooded, at tremendous cost and strain to the National Flood Insurance Program according to FEMA. Historically, repeatedly flooded properties account for only one percent of properties with NFIP policies. Of the $69.7 billion in claims NFIP paid out from 1978 to 2019, $22.2 billion were for flood damage sustained by Repetitive Loss properties or 32 % of total payments.

The Flood Insurance Reform Act of 2004 defined a Severe Repetitive Loss Property (SRLP) as an NFIP-insured or previously insured property that has met at least one of the following paid flood loss criteria since 1978:

a) four or more NFIP claims payments (including building and contents) exceeding $5,000 each in which the cumulative amount of such claims payments exceeds $20,000; or

b) at least two separate claims payments (building payments only) in which the cumulative amount of the building portions of such claims exceeds the market value of the building.

Since the NFIP program began, nearly 37,000 properties have met the criteria to become Severe Repetitive Loss Properties (SLRP). These properties have flooded about five times each on average. Currently, there are approximately 26,000 SRLP that have not been mitigated across the United States. The following chart highlights the RL/SRL data for the GRADD region (National Resources Defense Council).

Table 4.20 - GRADD Region Repetitive Loss & Severe Repetitive Loss

Community	# of NFIP Claims	NFIP Total Paid	Repetitive Loss Properties (R/L)	Severe Repetitive Loss Properties (SRL)	R/L Total Paid	R/L Average Paid per Loss
Beaver dam	6	$ 8,482.49	0	0	$ -	$ -
Calhoun	30	$ 230,691.94	0	0	$ -	$ -
Clay	1	$ -	0	0	$ -	$ -
Daviess Co.	122	$ 1,588,620.17	10	0	$ 476,739.95	$ 47,674.00
Hancock Co.	0	$ -	0	0	$ -	$ -
Hartford	0	$ -	0	0	$ -	$ -
Hawesville	0	$ -	0	0	$ -	$ -
Henderson Co.	134	$ 1,653,389.40	19	2	$ 772,758.62	$ 40,671.51
Henderson	209	$ 3,113,793.09	36	9	$ 2,079,724.86	$ 57,770.14
Lewisport	7	$ 30,452.04	0	0	$ -	$ -
Livermore	4	$ 32,369.34	0	0	$ -	$ -
Mclean Co.	76	$ 590,795.92	6	0	$ 111,697.05	$ 18,616.18
Morganfield	4	$ 54,057.92	1	0	$ 51,230.07	$ 51,230.07
Ohio Co.	7	$ 27,947.37	1	0	$ 16,838.31	$ 16,838.31
Owensboro	161	$ 845,887.46	11	1	$ 224,913.45	$ 20,446.68
Providence	1	$ 612.50	0	0	$ -	$ -
Sebree	1	$ 5,617.82	0	0	$ -	$ -
Slaughters	0	$ -	0	0	$ -	$ -
Sturgis	2	$ 1,708.07	0	0	$ -	$ -
Union Co.	9	$ 299,885.76	0	0	$ -	$ -
Uniontown	1	$ 3,000.00	0	0	$ -	$ -
Webster Co.	1	$ 87,541.48	0	0	$ -	$ -
Wheatcroft	0	$ -	0	0	$ -	$ -

Source: Community Engagement Priority Analysis, 2020

Notable Flood Events

In the 255-year recorded history of the Ohio River, the U.S. Army Corps of Engineers states there have been more than a dozen "great floods" along its 981-mile length. The earliest in 1763 and 1773 are believed to have been almost as damaging as the 1937 flood, which ranks as the worst on record. Other early floods occurred 1789-90, 1808, 1832, 1847, 1853 and 1867. An 1883 history of Daviess County explains those floods caused extensive erosion along the riverbanks.

The Great Flood of 1937



Figure 4:23 - *Third Street in Owensboro, KY during the 1937 Flood. Photo courtesy of the Daviess County Public Library*

The flood of 1937 is one of the most devastating floods in Kentucky's recorded history. Heavy rain fell over western and central Kentucky during December 1936. In the month of January 1937, the state experienced four times the normal amount of precipitation, 15 inches of rain in 12 days and over 19 inches for the month. With the river cresting at over 57 feet in Louisville, 75 % of the city was underwater and over 175,000 residents evacuated. Across the river in Jeffersonville, Indiana, 90 % of the town was flooded. Further downstream in Paducah, the river crested at over 60 feet, and residents were also evacuated.

The damages incurred by the entire Commonwealth were estimated at $250 million in 1937 dollars. In current dollars, that amount totals $3.3 billion. In Owensboro (Daviess County), the Ohio River hit 54.8 feet on January 29, 1937, more than 13 feet above flood stage. The river did not dip below flood stage again until February 10th. The flood drove 5,500 people from their homes in McLean County and 2,172 in Daviess County. To illustrate the depth of water, the Spottsville Railroad Swing Bridge on the Green River is shown in Figure 4.26 in 2018 and shown during the Great Flood of 1937 in Figure 4.27.

Figure 4.24 - Spottsville Bridge in 2018



Photo courtesy of CSX

Figure 4.25 - Spottsville Bridge in 1937



Photo courtesy of Daviess County Public Library

1997 Flood



Figure 4.26 *Flood waters from the Ohio & Green River in Henderson County. Photo courtesy of The Gleaner, 3/10/97*

According to the National Weather Service, in early March 1997, a powerful storm system over the Great Plains drew warm, moist air northward out of the Gulf of Mexico. The air had 200% the normal amount of moisture for that time of year. The moist air interacted with a stationary front over Kentucky, causing heavy showers and thunderstorms.

Since the front was nearly stationary, the showers regenerated until a larger cold front pushed the wet weather to the east. On March 1, torrential downpours fell on saturated ground, two inches on top of 24-hour totals from six to ten inches throughout the region. The City of Whitesville measured 13.8 inches on March 1st. Climatologists with the National Weather Service estimated that 75 billion gallons of rain fell on Daviess County from Friday night, February 28th to Monday morning, March 3rd.

Some cities along the Ohio River in west Kentucky were spared from major damage by floodwalls and levees. Smaller communities, not protected by flood control structures, were endangered. Tributaries that flow into the Ohio River backed up, causing serious flooding many miles away from the Ohio. Schools throughout the region were out for one to two weeks. President Bill Clinton declared most western Kentucky counties along the river disaster areas. The National Guard was called in to patrol for looters, control access to restricted areas and pump out water according to the NCEI database.

Daviess, McLean and Ohio Counties declared states of emergency as Highways U.S. 431, Kentucky 81, Kentucky 54 and Kentucky 69 were all submerged along with dozens of county roads.

1997 Flood Continued

Daviess County was especially hard hit due to the combined effects of major flooding along the Green River, Ohio River and Panther Creek. Backwater from the Green River slowed drainage of Panther Creek, causing parts of Owensboro to flood. Flash flooding destroyed a bridge, evacuated eight mobile homes and stalled approximately a dozen vehicles. Eighty-five residents of a nursing home in Owensboro were evacuated as water crept inside. The flash flooding contributed to rapid rises on Panther Creek, which flows through the south side of Owensboro. A dozen homes along U.S. 431 flooded quickly. The Ohio River stretched four miles wide as it passed the city. The city of Whitesville became an island, with the two intersecting roads that allow access to the city, KY HWY 54 and HWY 764 underwater in all four directions.

In McLean County, the entire town of Rumsey was evacuated before it was inundated by the Green River. About 20 % of Calhoun was submerged, and small parts of Livermore were affected.

Two hundred homes were evacuated in Henderson County, and high water swept a car from Highway Kentucky 351 near Zion. Divers located the female occupant of the vehicle, and she was taken to a local hospital. Most of Ellis Park, a thoroughbred racetrack, was inundated with water.

The Union County Shopping Center parking lot rapidly filled with five to six feet of water. Several vehicles were partially or totally covered with water. Many employees were trapped in the stores and had to be rescued by large trucks. Most cities in the county were cut off from outside traffic for at least two to three hours. Up to four inches of rain fell within four hours. The Ohio River crested at 53.8 feet at Uniontown—flood stage 37 feet.

The Tradewater River flooded back into Webster County, causing evacuations at Blackford. At least 60 families were forced from their homes in Webster County, partly due to flash flooding. Highway 41A was closed between Providence and Madisonville. One woman was evacuated from the northwestern part of the county as backwater from the Tradewater River rose. A cooperative observer in Sebree measured 7.57 inches of rain in three days.

Hancock and Ohio counties experienced widespread flash flooding with many roads water-covered and closed. The Rough River at Dundee crested at 30.2 feet, the highest stage since the 1937 flood.

Agriculture was impacted, along with public and private structures. The hardest affected crop was the winter wheat. An estimated total of 130,000 acres of cropland were submerged. According to a March 5, 1997 Courier Journal article, the Army Corps of Engineers halted all commercial traffic between Cincinnati and Louisville because of high water.

Damage in Daviess, Hancock, McLean and Ohio Counties was estimated at more than $50 million. At least $32 million occurred in Daviess County. One hundred and one counties in Kentucky were declared disaster areas with approximately $400 million in damages, tens of thousands of people evacuated from their homes, and seven deaths occurred according to the NCEI Database.

September 2004 Flooding

Despite very dry weather in September, the Ohio River rose above flood stage at gauge points along the GRADD region, mostly above the confluence with the Wabash River. The flooding was due to copious rainfall in the upper Ohio Valley from the remnants of Hurricanes Frances and Ivan. Nearly all the acreage flooded by the river was uninhabited bottomland or cropland. The timing of the flooding proved to be the detrimental aspect of this event—most of the corn crop was mature enough to be harvested before the flooding; however, 20,000 acres of soybeans were estimated to be under water in Henderson and Daviess Counties. This loss translated into an estimated crop loss of several million dollars according to the NCEI database.

2005 Flooding

Flooding caused damage in the GRADD region during two separate events in 2005. During January, moderate to major flooding of the Ohio River occurred, causing states of emergency to be declared in Union and Henderson Counties. The major flooding partially resulted from a record-setting snowstorm on December 22nd that dumped up to 22 inches of snow across the region. The snowpack melted rapidly by New Year's Day, followed by a series of heavy rainfall events in early January. Rainfall totals from three to four inches averaged daily from January 1-5th, with another one to two inches falling on average January 10-13th.

2005 Flood Continued

Flood control activities included the construction of temporary sandbag levees and isolated evacuations of some lowland residents. Very cold conditions from January 15-18 hampered flood-fighting activities, with low temperatures around ten degrees each day.

In Henderson County, five families from the Spottsville area were evacuated, and the county rescue squad evacuated two residences. Isolated homes were surrounded by water and only accessible by boat. A mobile home was flooded in Henderson County.

In Union County, 13 families were evacuated including three on the Tradewater River in Sturgis. Several homes outside the Uniontown floodwall were only accessible by boat.

All along the Ohio River, dozens of roadways were closed, the largest of which was U.S. Highway 60 eastbound through Smithland, where a sandbag levee was built over one lane. According to the NCEI Database, in Henderson County, nearly 100 miles of roads were flooded affecting about 1,200 households. In Daviess County, at least 22 county roads were flooded along the Ohio River and Panther Creek, a tributary of the Ohio. The river crested at a height of 51.21 feet at Uniontown, compared to a crest of 53.84 feet in 1997. The monetary property damage of $730,000 directly attributed to this event is estimated, based on damage estimates and reported figures. It is uncertain because of the associated storms and attributable damages.



Figure 4.27 *Photo courtesy of The Gleaner, Mike Lawrence*

In November 2005, a band of thunderstorms became stationary from west to east across Union and Henderson Counties. The storms were anchored there by a warm front that stalled during the night with rainfall amounts of five to ten inches. An observer in Henderson measured a record 8.51 inches of rainfall over a 24-hour period with this storm. The previous 24-hour record was 6.33 inches on March 11, 1935.

Widespread flash flooding inundated homes and businesses in Henderson County. County officials estimated $3.5 million in damage to residences and $14 million in damage to commercial and government property. Many roads were closed or under several feet of water. Flooding shut down U.S. Highway 41 South within the Henderson City limits. About 100 county-maintained roads were flooded, two bridges were washed out and more than 15 miles of state-maintained roads were closed. Numerous people were evacuated and removed from subdivisions in the city of Henderson, including the Cooper Park and Lakeland neighborhoods. Water was up to the windowsills on some homes in this area according to submitted damage reports.

An industrial park was flooded by Canoe Creek with three to four feet of water in at least two manufacturing plants. A portion of the Eastgate Shopping Center was submerged, closing businesses located there. Throughout the county, water rescues were conducted for people stranded in flooded vehicles.

2011 Flood

Spring river flooding arrived early across the region during February 2011, enhanced by snowmelt following the snowy weather of January into early February. Two systems during the last week of the month produced heavy rainfall totals of three to six inches. From February 23rd through March 14th, a total of 8.31 inches was recorded in the area. Heavy rainfall in March set the stage for major flooding when record-setting rains fell in April and May. Between nine and twenty-two inches of rain fell across the region between April 22nd and May 3rd. The result was rapid and dramatic rises on rivers. Record flood crests occurred on the Ohio and Green Rivers, inundating homes and businesses. There were major impacts to transportation, both on land and water—numerous closed roads across the region, often leading to lengthy detours along with significant day and nighttime restrictions to barge traffic. Hundreds of thousands of acres of farmland were flooded, and crops were late getting planted.

Flooding of the Tradewater River in Webster County led to isolation of several cities—all main roads to Providence in Webster County were closed and the communities of Clay and Blackford in Webster County were isolated by flooding, only accessible by boat.

At the Uniontown (Union County) river gauge, the flood crest of 56.94 feet on the morning of May 6th was about three feet higher than the 1997 flood. This crest was still over seven feet

lower than the record crest set in 1937. The Ohio River floodgates were installed on Kentucky Highway 923 at Sturgis. This event was the first time since the March 1997 flood that such actions were required. At the Calhoun (McLean County) river gage, the flood crest of 34.01 feet on the morning of May 7th was just a few inches lower than the 1997 flood. Green River floodwaters inundated the entire community of Rumsey (McLean County) and about 20% of Calhoun.

The Rough River near Dundee (Ohio County) crested at 29.1 feet on May 3rd. Flood stage at Dundee is 25 feet. Mobile home parks in Hartford (Ohio County) were flooded along with Kentucky Highway 69 near the intersection of US Highway 231 in Hartford. Ohio County roads near Dundee, Sunnydale and Narrows also flooded. Roads were flooded and a some were impassable west of Beaver Dam.

In Henderson, at least 80 county roads and a number of state roads were closed by flooding. Ellis Park was surrounded by floodwater. Near the confluence of the Green and Ohio Rivers, an estimated 200 homes were enveloped by water near Spottsville, according to the NCEI database.

At the peak of the flooding in Daviess County, Panther Creek flooded extensively due to backwater from the Ohio River, forcing evacuations of residents in the Pettit area of Daviess County. Firefighters assisted three people out of their homes. Panther Creek covered parts of U.S. Highway 431 and surrounded a few major businesses. Ohio River backwater worsened flooding of the Green River, flooding a house in Curdsville with a foot of water. Countywide, 63 county roads and 18 state roads were closed. About a dozen county roads were damaged. The damage consisted mostly of washed-out shoulders and bridge approaches.

In Union County, there were at least 14 state highways and 18 county roads posted as closed. U.S. Highway 60 in the city of Sturgis was under two feet of water.

After the floodwaters receded, property and infrastructure damages totaling more than $19 million were estimated in the Green River Region. This figure did not include the loss and damages experienced by the agriculture community.

2019 Flooding

According to the National Weather Service, the weather pattern from February 6 - February 23, 2019, produced major flooding along the Ohio River and points along the river crested at their

highest flood stage since the historic 2011 flooding. At the Cairo, IL flood gauge near the confluence of the Ohio and Mississippi Rivers, the water level remained above flood stage for 156 days, not receding under flood stage until July 13, 2019. The winter of 2018-19 was the 4th wettest winter on record for the region, and February was the second wettest February since 1937, with a recorded rainfall amount of 10.42 inches for the month.

Backwater from the Ohio River caused flooding near the mouth of the Green River, flooding roads in eastern Henderson County. Flooded roads extended inland to near Hebbardsville. Water rescues were conducted on Highway 1539, a few miles east of Henderson. The flooding was aggravated by backwater from the near flood stage Ohio River. In Daviess County, about three dozen roads were closed by high water. Several roads were closed in the flood plain in McLean County and thousands of acres were flooded in the Island, Rumsey and Jewel City areas.



Figure 4.28 *Flooding February 12, 2019, in Downtown Owensboro on the Ohio River. Owensboro Times Photo Courtesy of National Climatic Data Center*

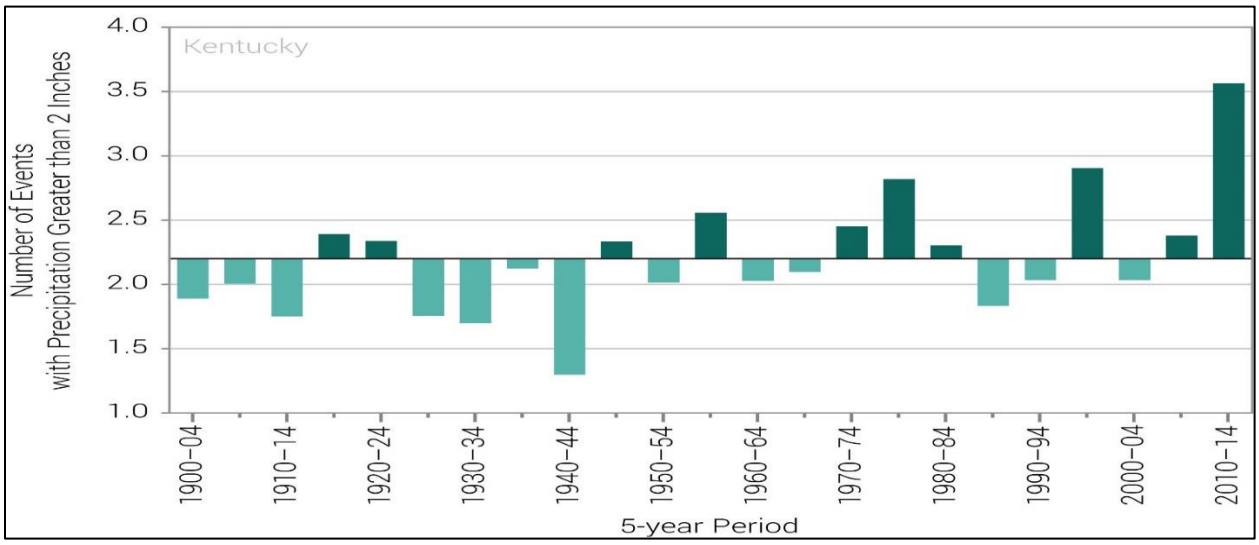
Fortunately, planting season was not underway yet, and flooding did not impact agriculture losses. In Union County, eight state roads were closed, including Highways 667, 668, 1452, 1637, 871 and 1508. Large areas of agricultural land were flooded, but impact was minimal. During March, rounds of damaging winds, large hail and tornadoes impacted the region. Heavy rainfall, wind damage and hail led to the area being named under Presidential Disaster Declaration 4428.

Frequency

Flooding has encompassed only 17 % of natural hazard events since 2010, however; approximately 80 % of all property damage caused by natural hazards stemmed from flooding. Much of the flooding from the GRADD region occurs from riverine flooding and flooding from

backwater associated with that riverine flooding. However, extreme precipitation events in the past have caused flooding and flash flooding in the GRADD region.

Figure 4.29 - Number of Extreme Precipitation Events – Kentucky



Source: CICS-NC/NOAA NCEI, 2014

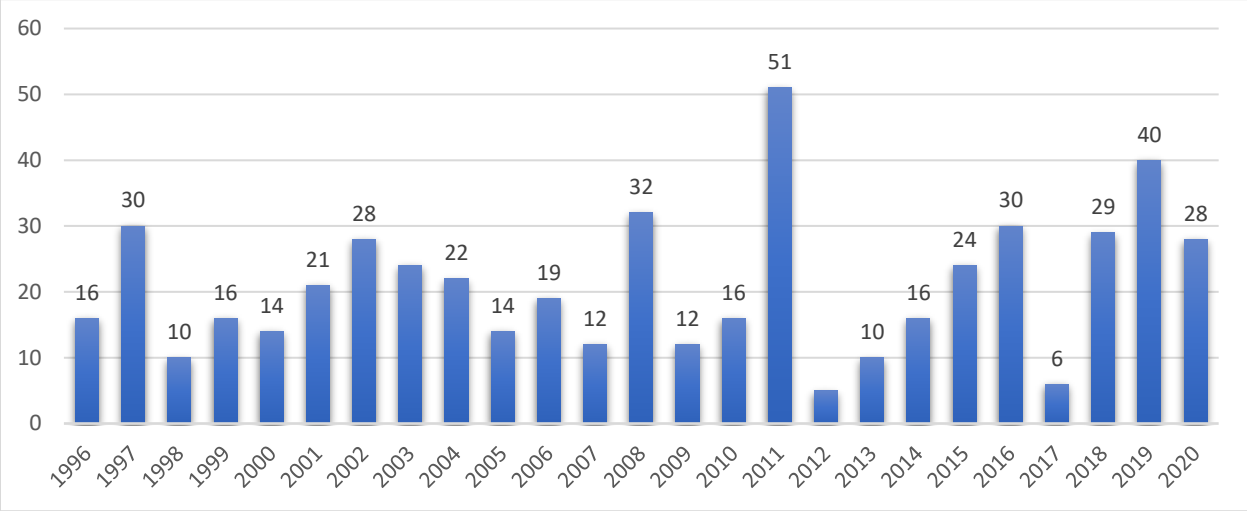
The following charts document the total flooding events from the year 1996. It documents the associated damages, displays the probability for frequency of future events based on historical events and illustrates the number of flooding events by year. Storm Data are geographically categorized by County. Smaller zones such as flash flood are collected by county.

Table 4.21 - Flood Event Probability as Frequency of Event Occurrence

County	Documented Events (1996-2020)	Probability of Future Events	Vulnerability	Associated Damage 1996 - 2020
Daviess	109	4.36 events per year	High	$16,157,000
Hancock	30	1.2 events per year	Low	$200,000
Henderson	86	3.44 events per year	High	$32,814,000
McLean	61	2.44 events per year	Moderate	$8,870,000
Ohio	93	3.72 events per year	High	$595,000
Union	110	4.4 events per year	High	$2,211,000
Webster	36	1.44 events per year	Low	$1,710,000

Source: National Climatic Data Center

Figure 4.30 - Flood Events in the GRADD Region 1996-2020

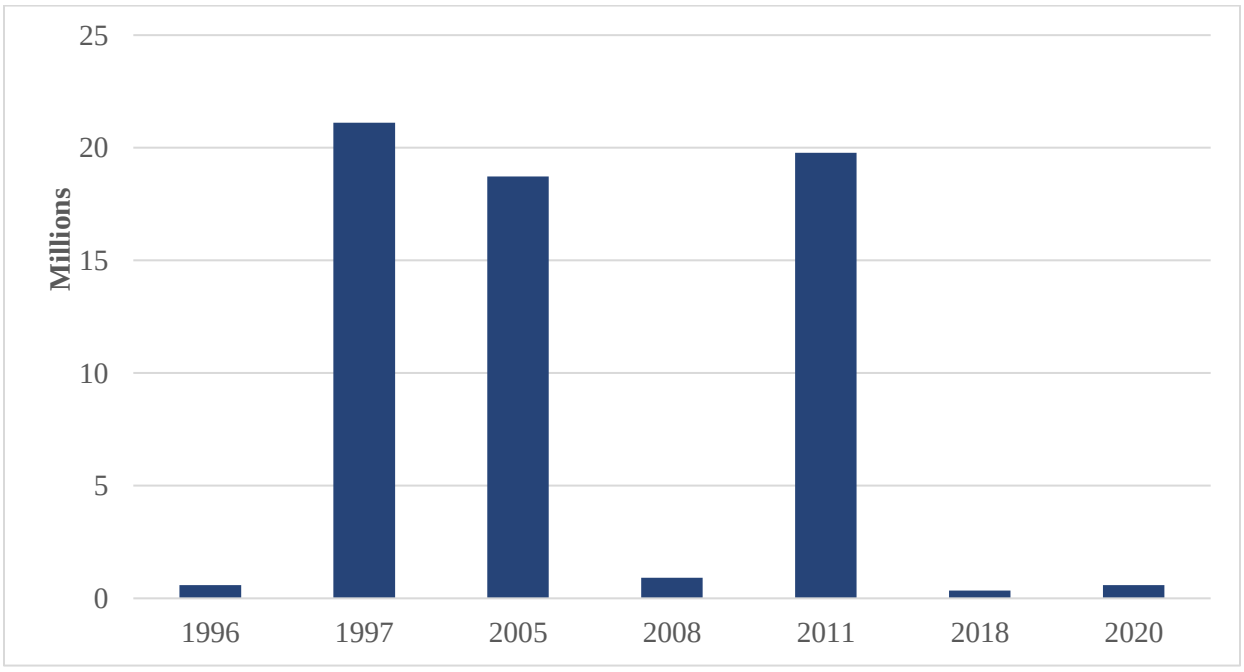


Source: National Climatic Data Center, 2020

Vulnerability

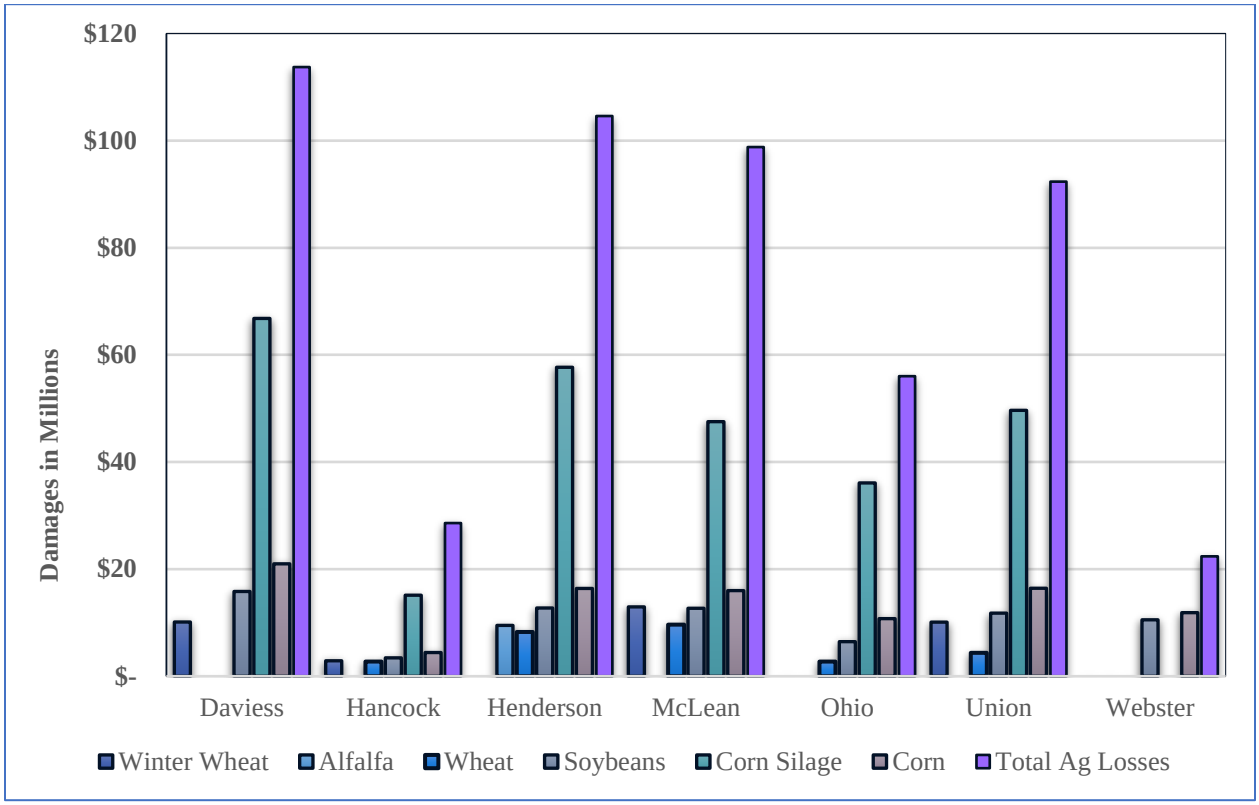
The following charts display the property damages and agriculture damages due to flooding.

Figure 4.31 - Flood Event Damages over $200,000, GRADD Region 1996 - 2020



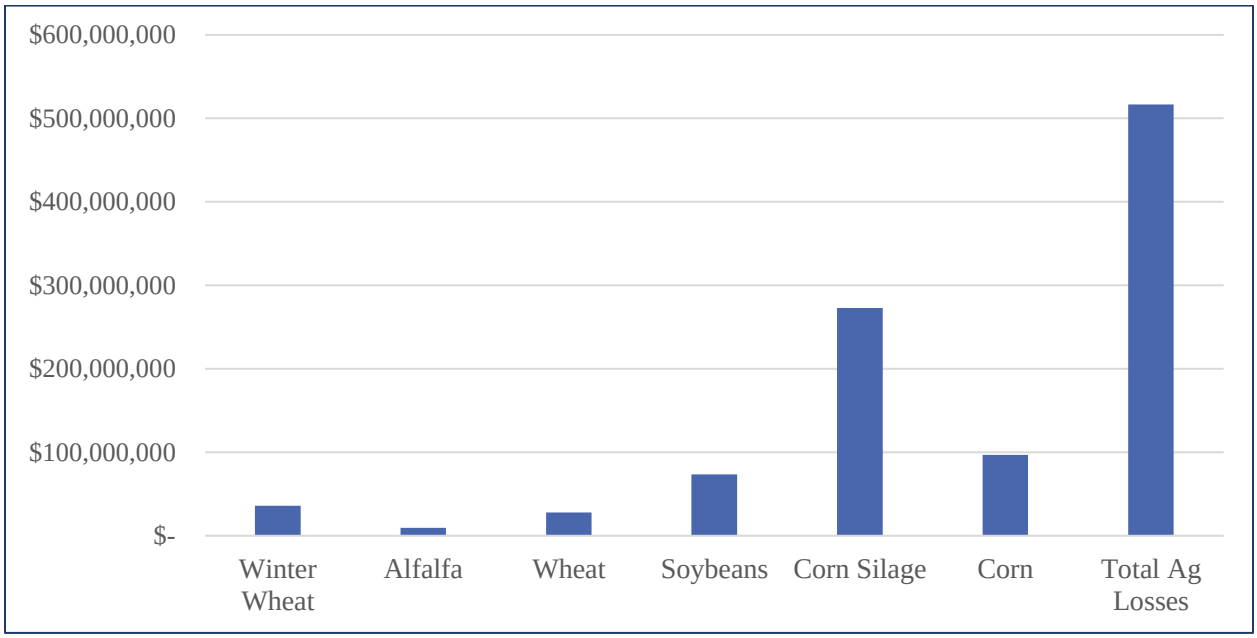
Source: National Climatic Data Center, 2020

Figure 4.32 Flooding Agriculture Loss by County



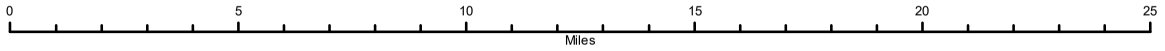
Source: Kentucky Division of Water, 2020

Figure 4.33 - Flooding Agriculture Loss Totals for the GRADD Region



Source: Kentucky Division of Water, 2020

Daviess County

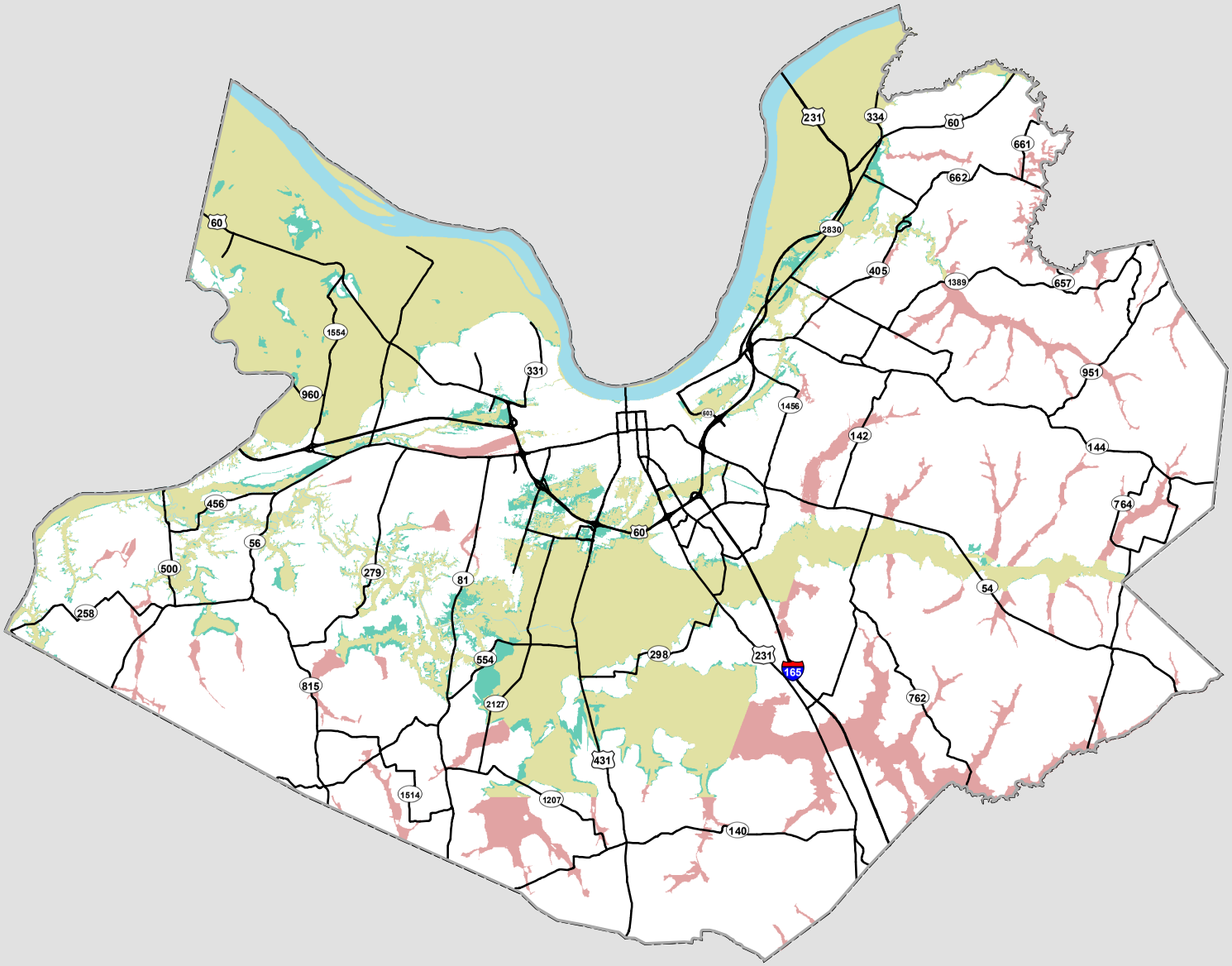




Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





City of Owensboro

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Government Bldg
- Correctional

Transportation

- Riverport
- Airport
- Public Transit
- Railroad

Hazard Type

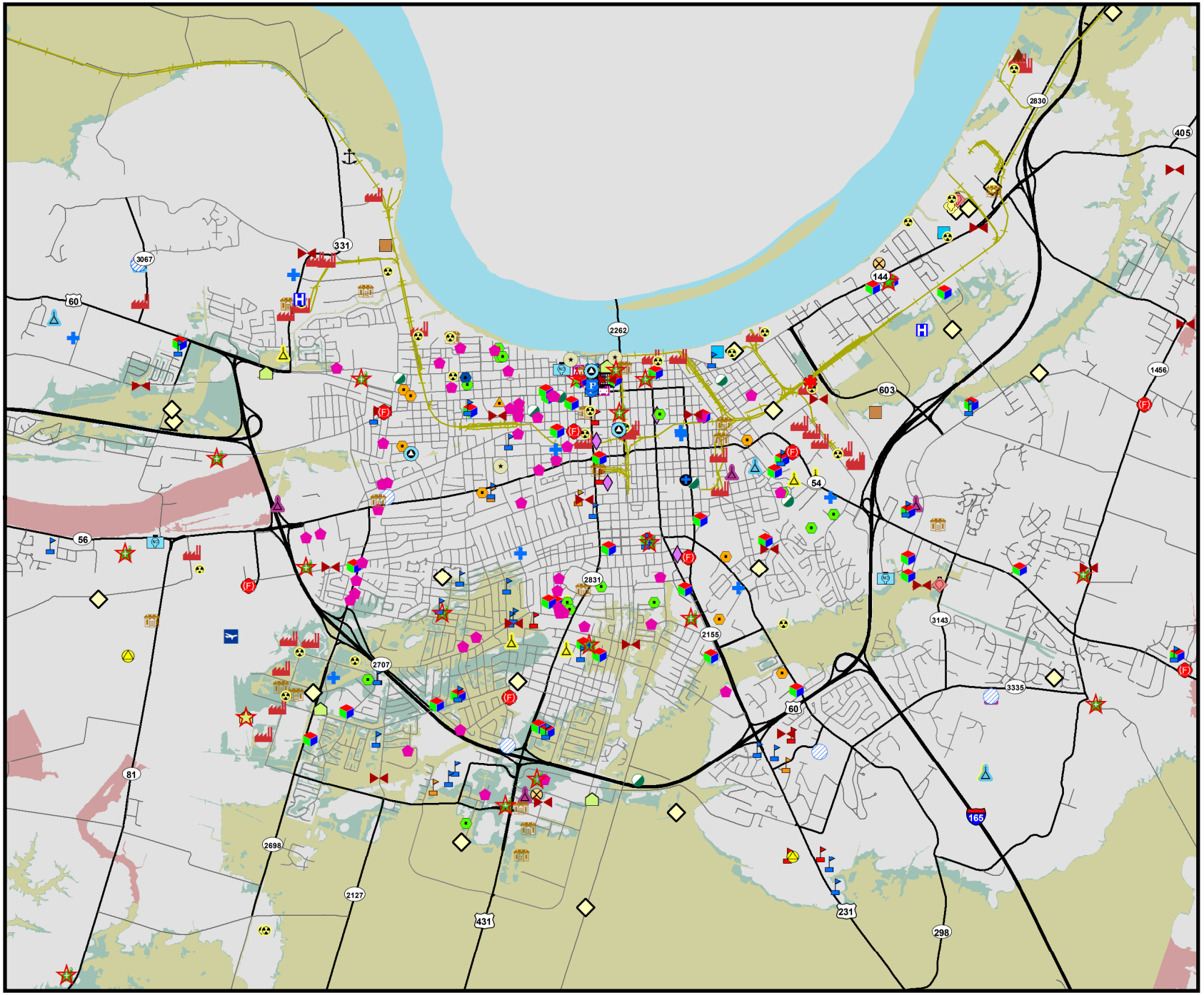
FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

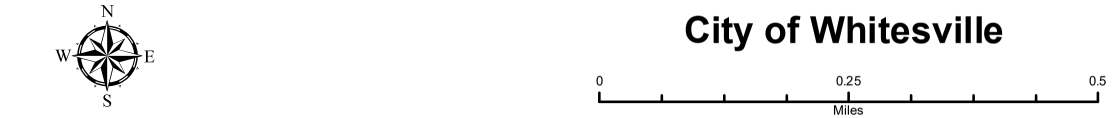
0 2 4
Miles

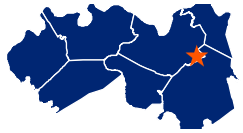
N
W E
S





City of Whitesville





Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Health Clinic
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTank

Communications

- ConnectGRADD Tower

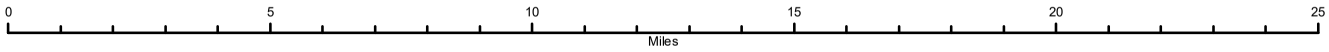
Vulnerable Population Centers

- Apartments
- Senior Center
- School
- Religious

Civic Facilities

- City Hall
- Public Works

Hancock County

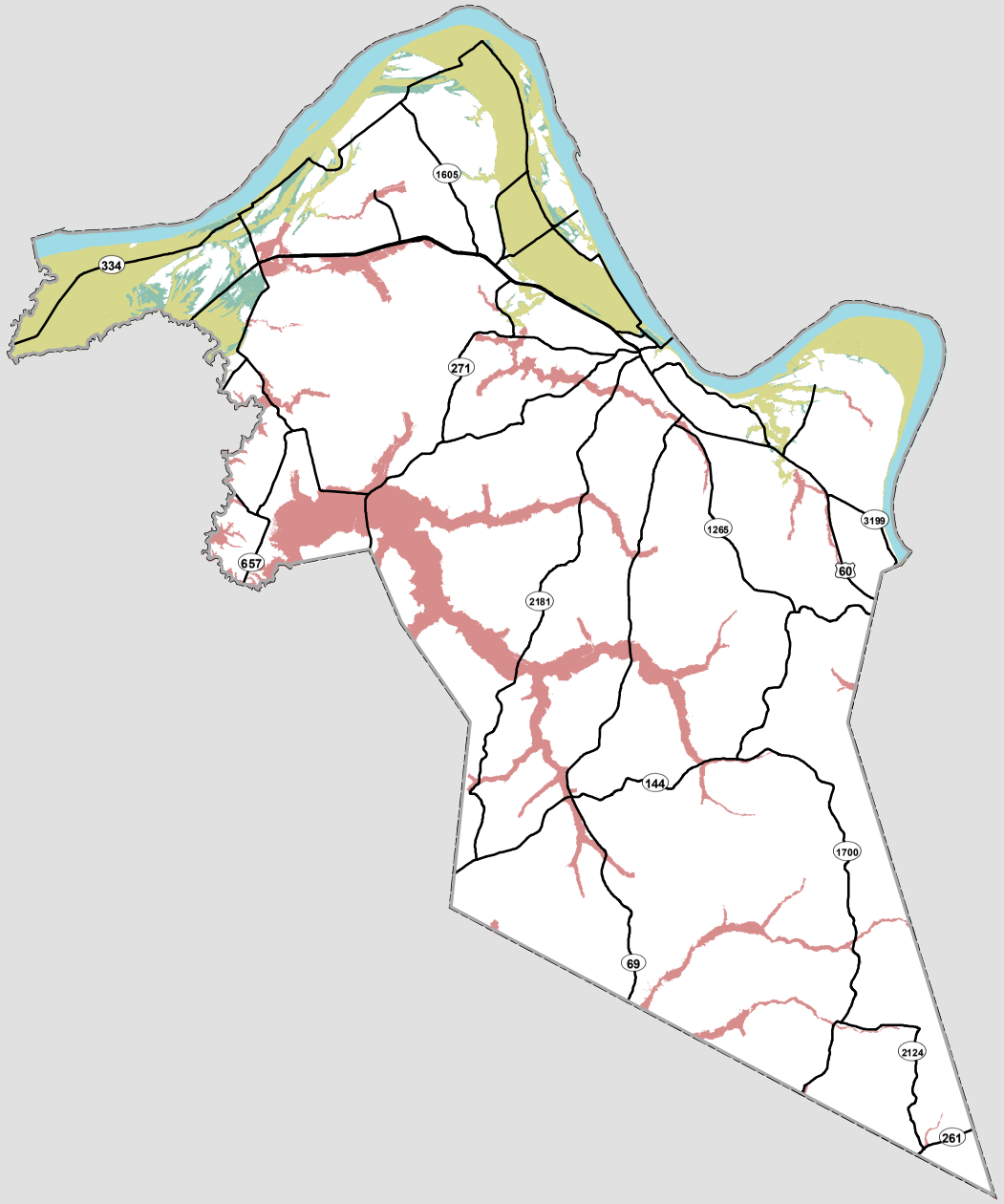


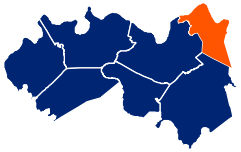


Hazard Type

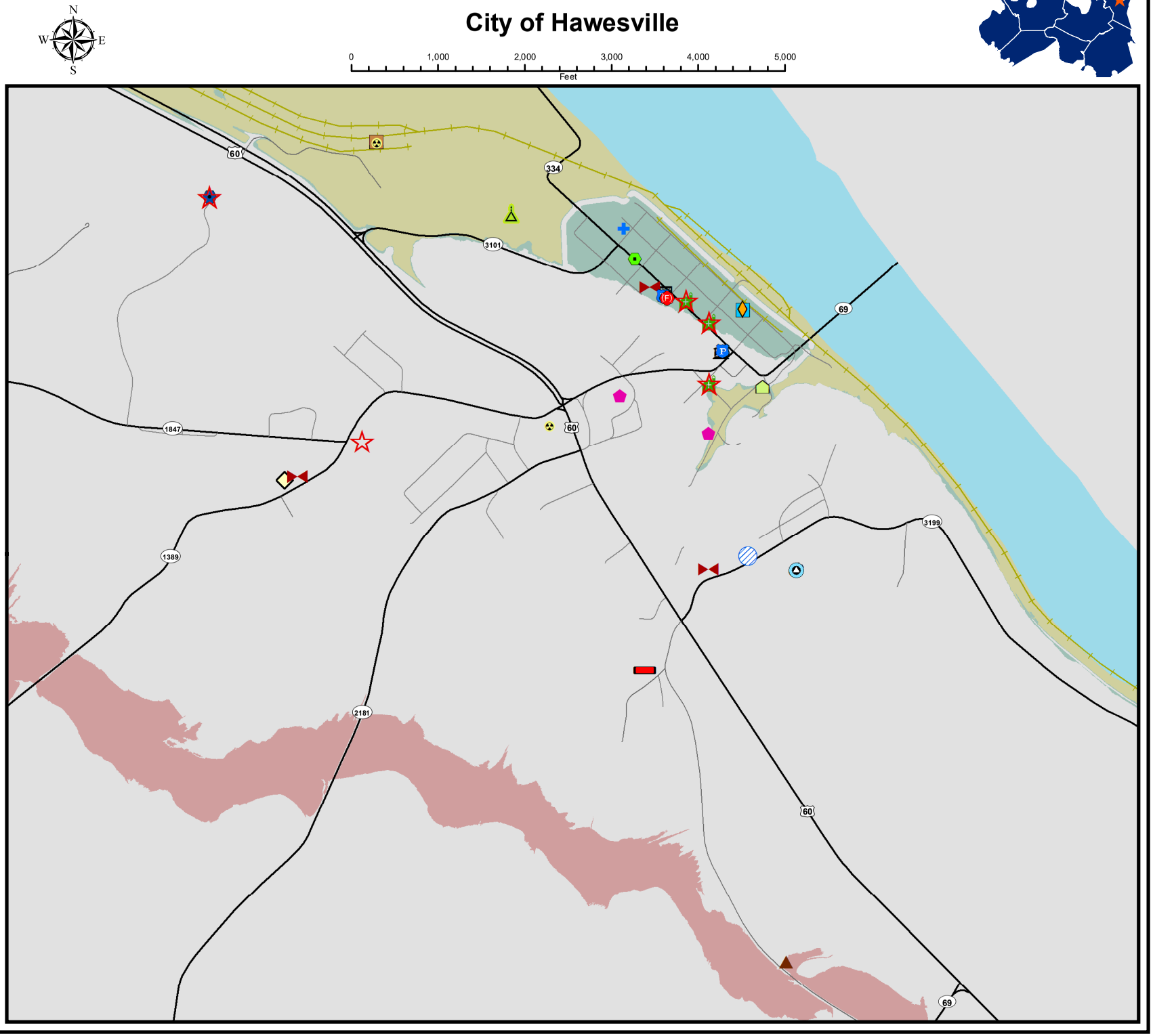
FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





City of Hawesville



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Religious

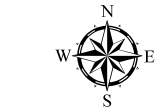
Civic Facilities

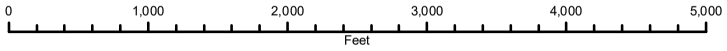
- City Hall
- Courthouse
- Road Department
- Government Building

Transportation

- Railroad

City of Lewisport







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

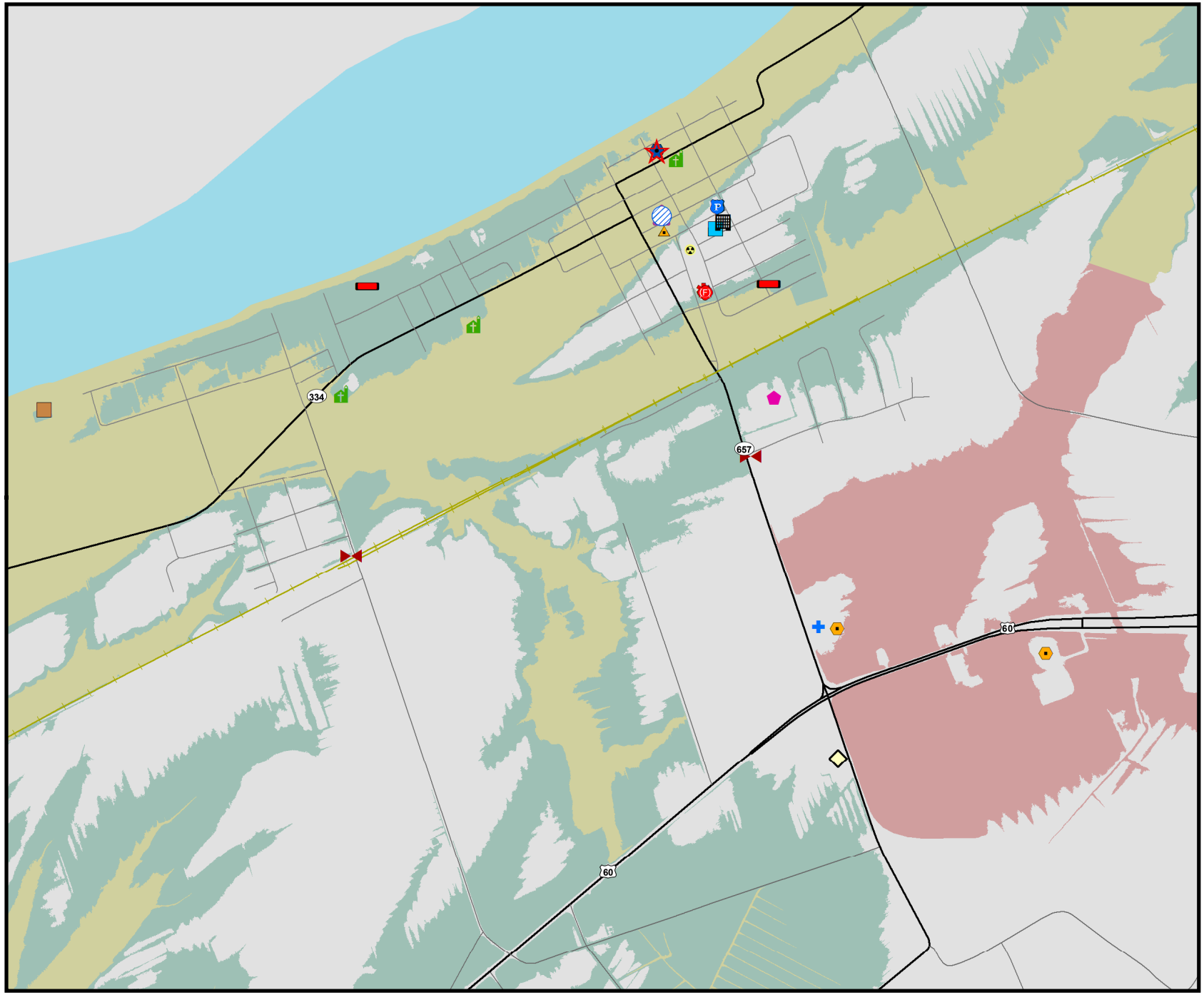
- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- Religious

Civic Facilities

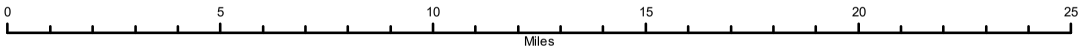
- City Hall
- Public Works

Transportation

- Railroad



Henderson County

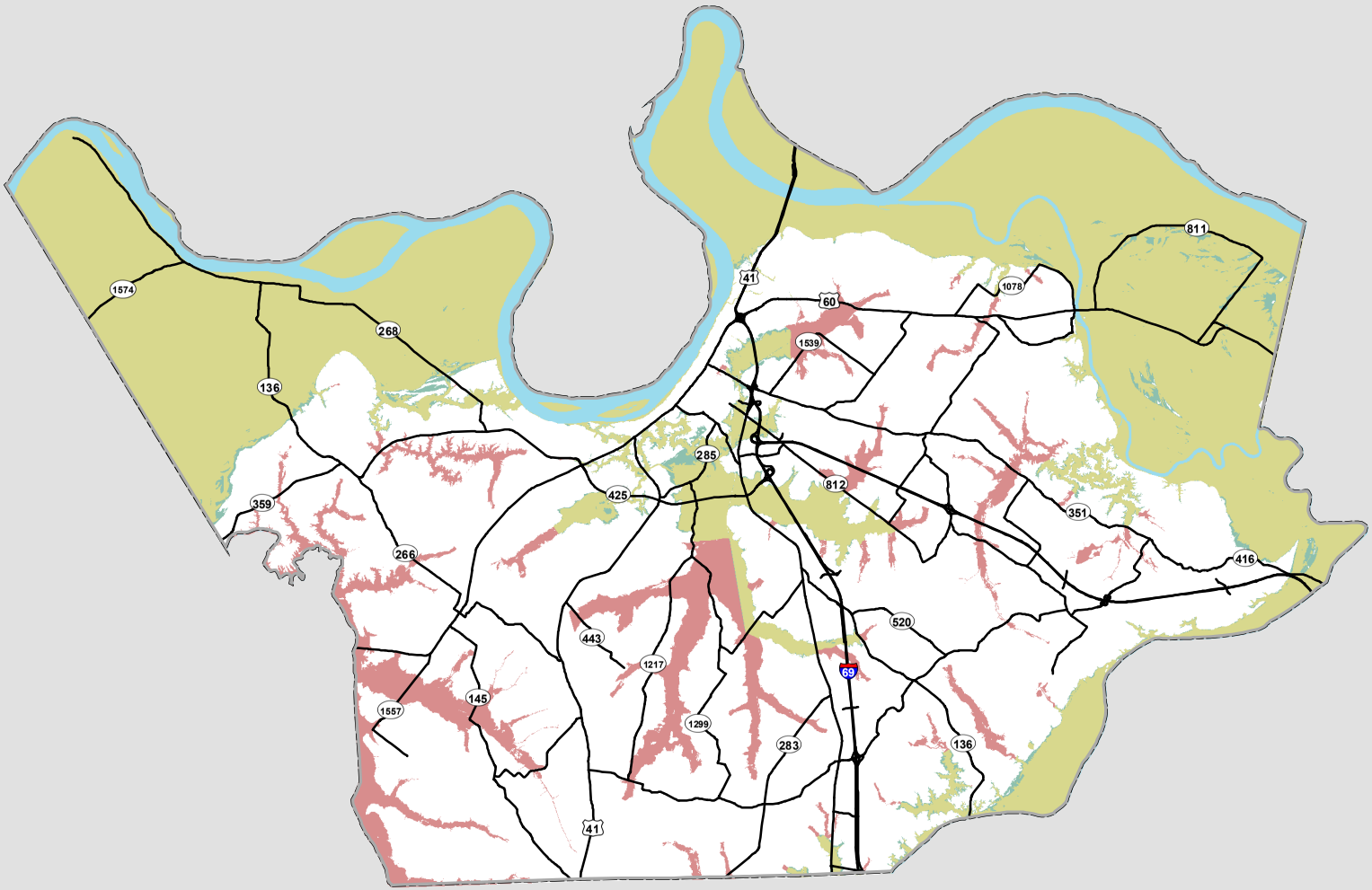


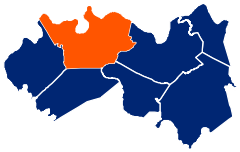


Hazard Type

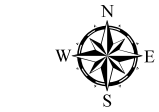
FEMA Flood Zones

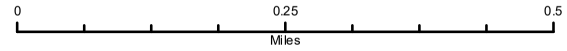
- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





City of Corydon







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

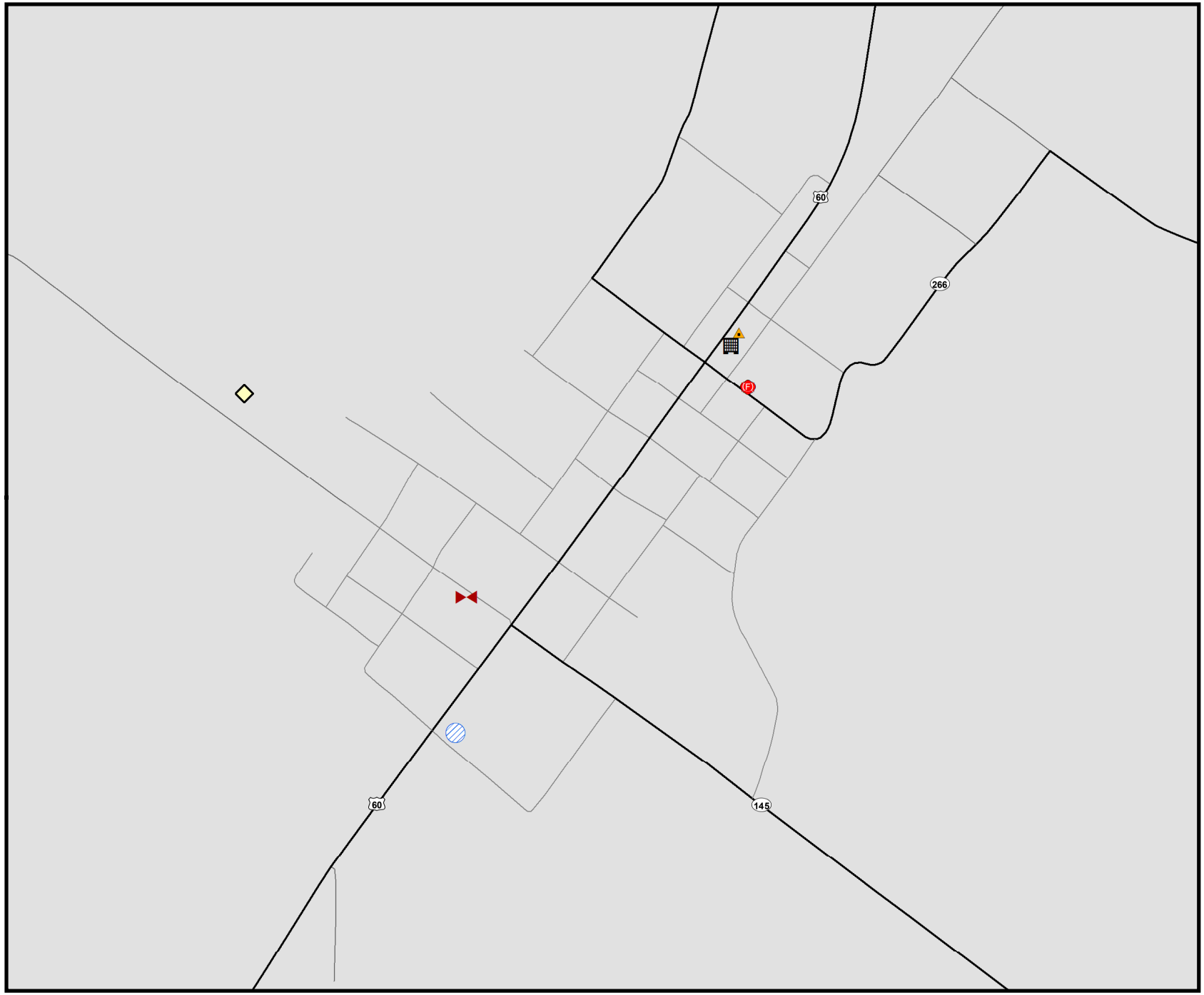
- Fire Department
- Warning Siren

Utilities

- WaterTank
- Substation

Civic Facilities

- City Hall
- Public Works



City of Henderson

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry

Utilities

- Electric Utility
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Religious
- Child Care/Preschool
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Road Department
- Government Building
- Correctional

Transportation

- Riverport
- Railroad

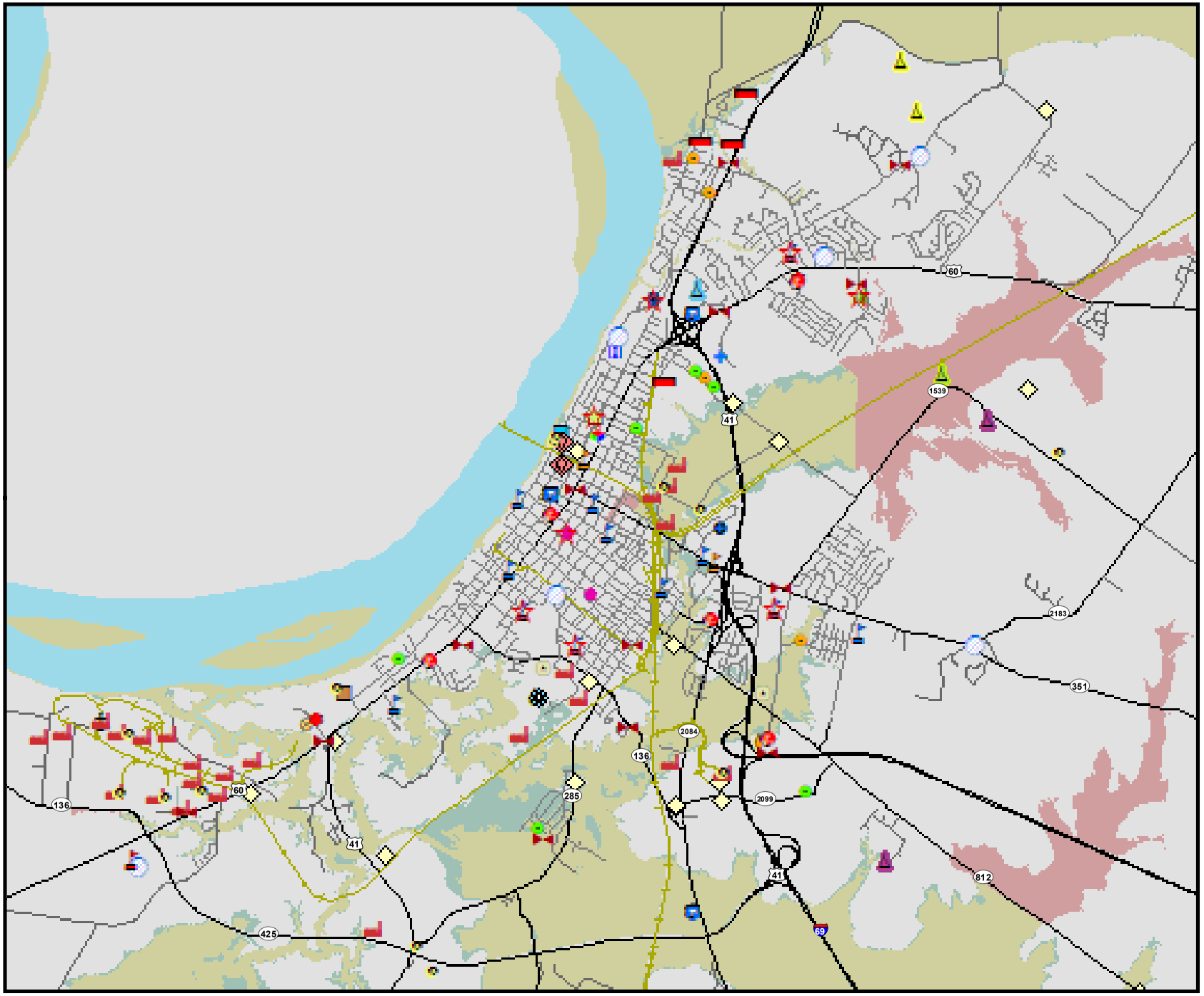
Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

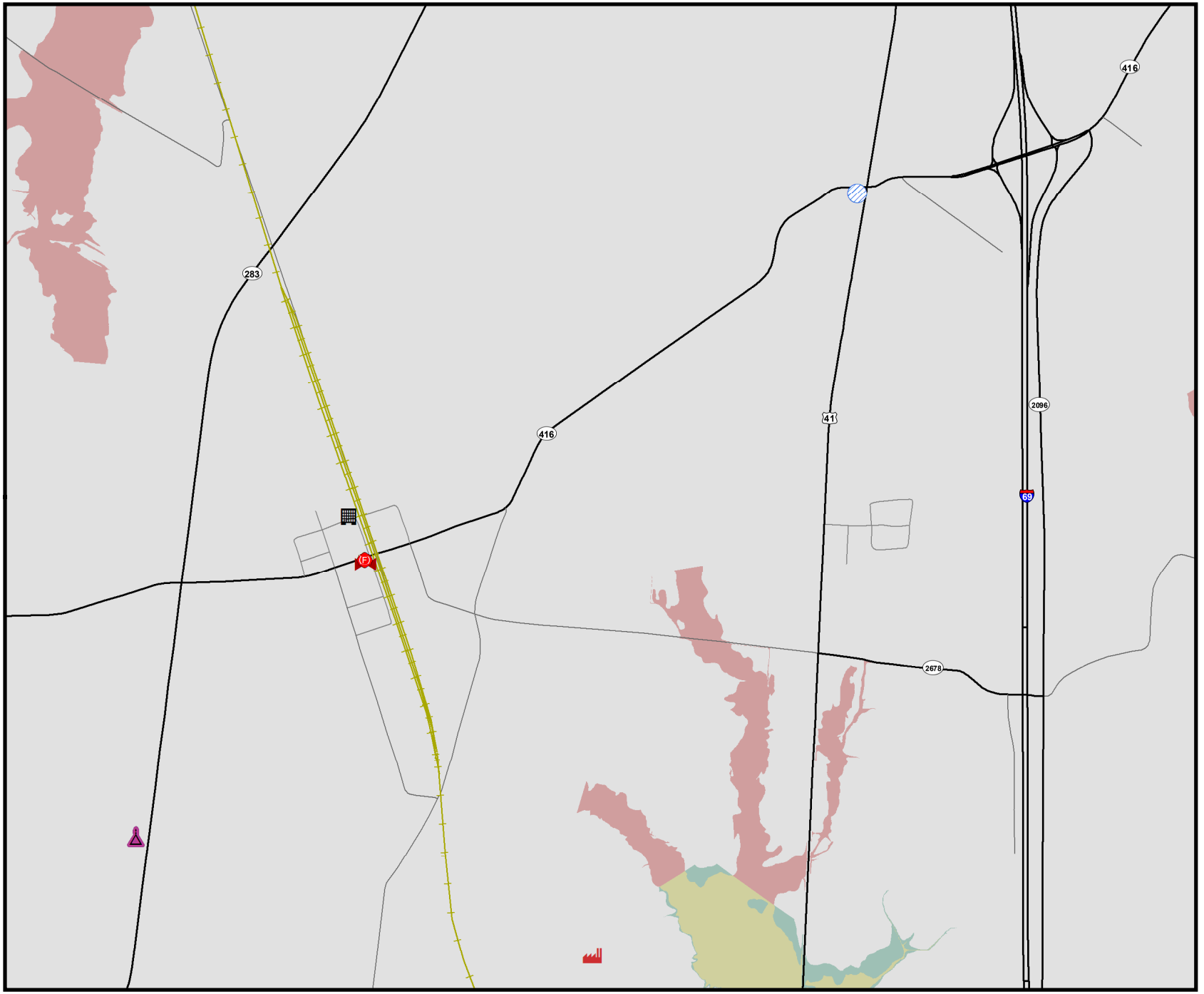
0 2 4
Miles

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S





City of Robards



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- WaterTank
- Substation

Communications

- ConnectGRADD Tower

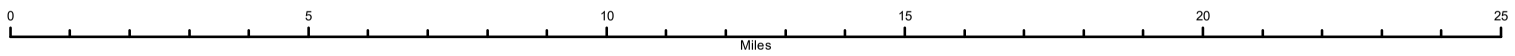
Civic Facilities

- City Hall

Transportation

- Railroad

McLean County

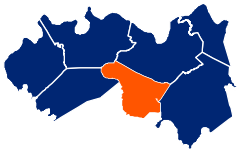


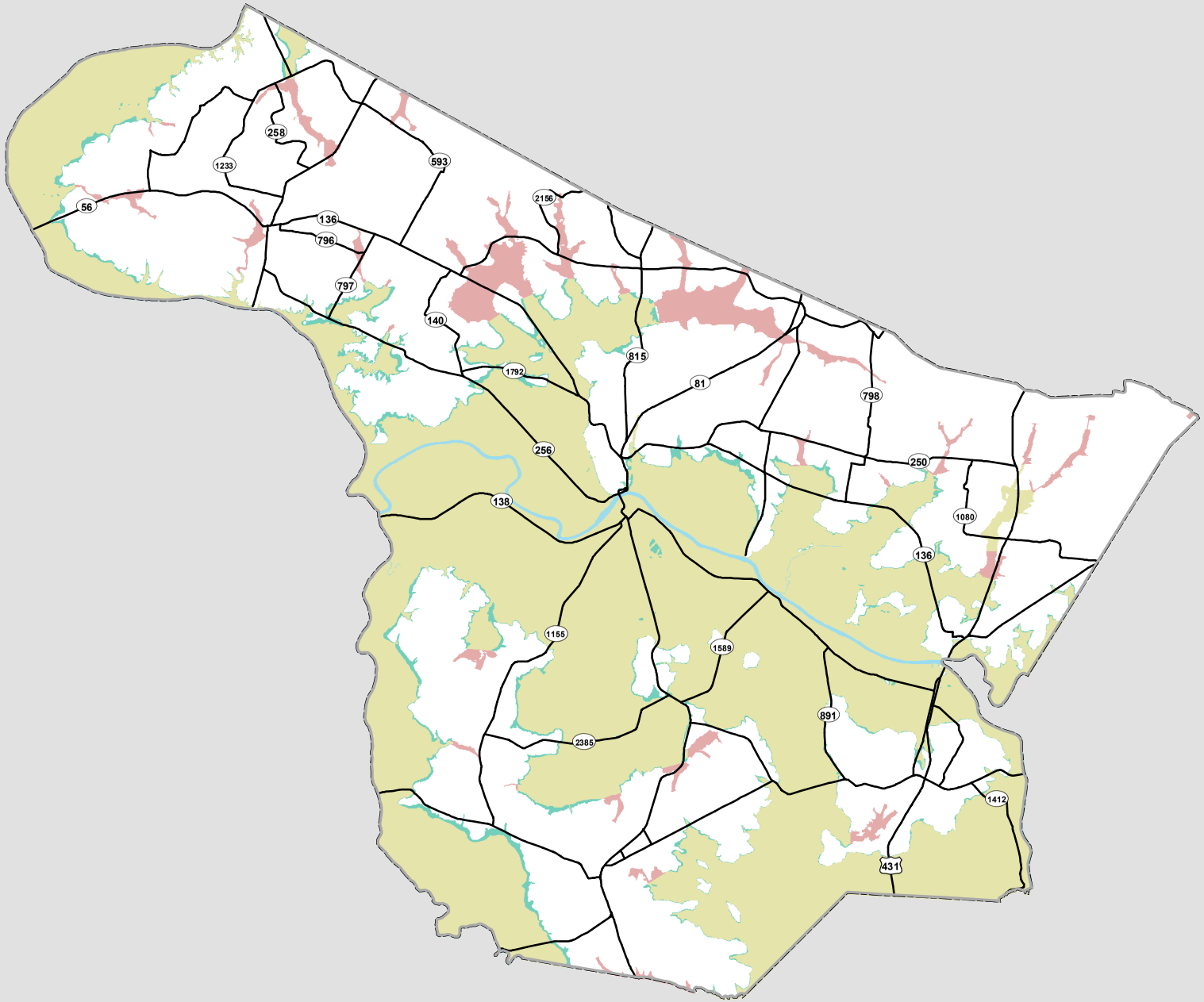


Hazard Type

FEMA Flood Zones

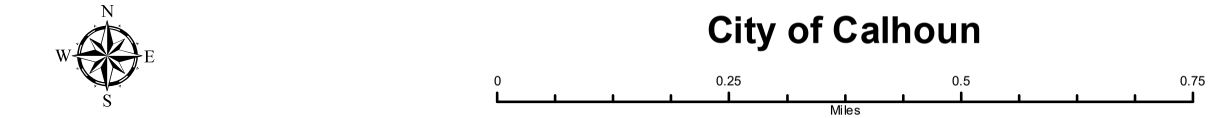
- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





150

City of Calhoun





Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Emergency Shelters

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation
- Dam

Communications

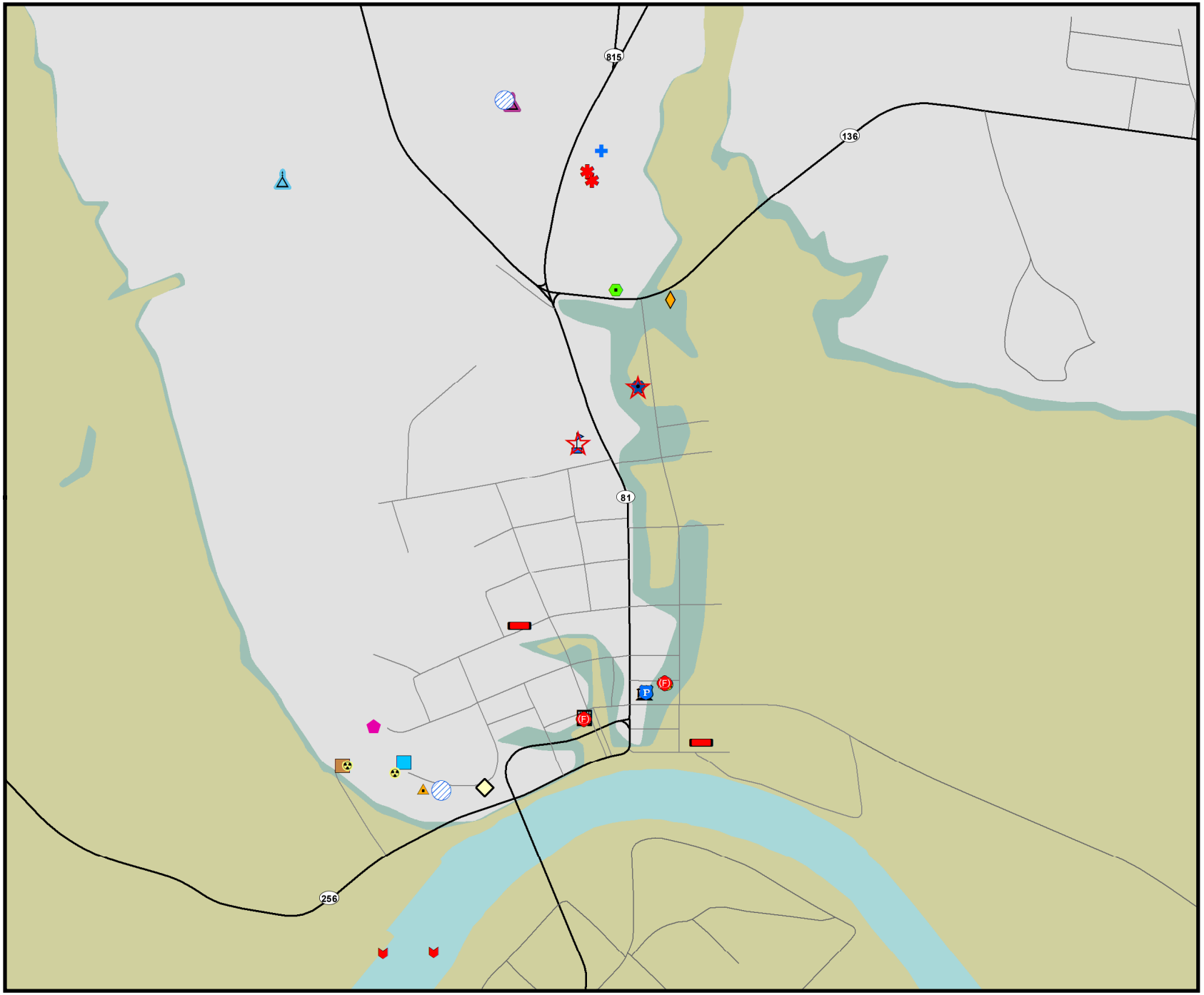
- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

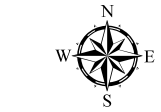
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- School

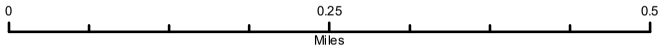
Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Dam



City of Island







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials

Utilities

- SewageTreatmentPlant
- Substation

Communications

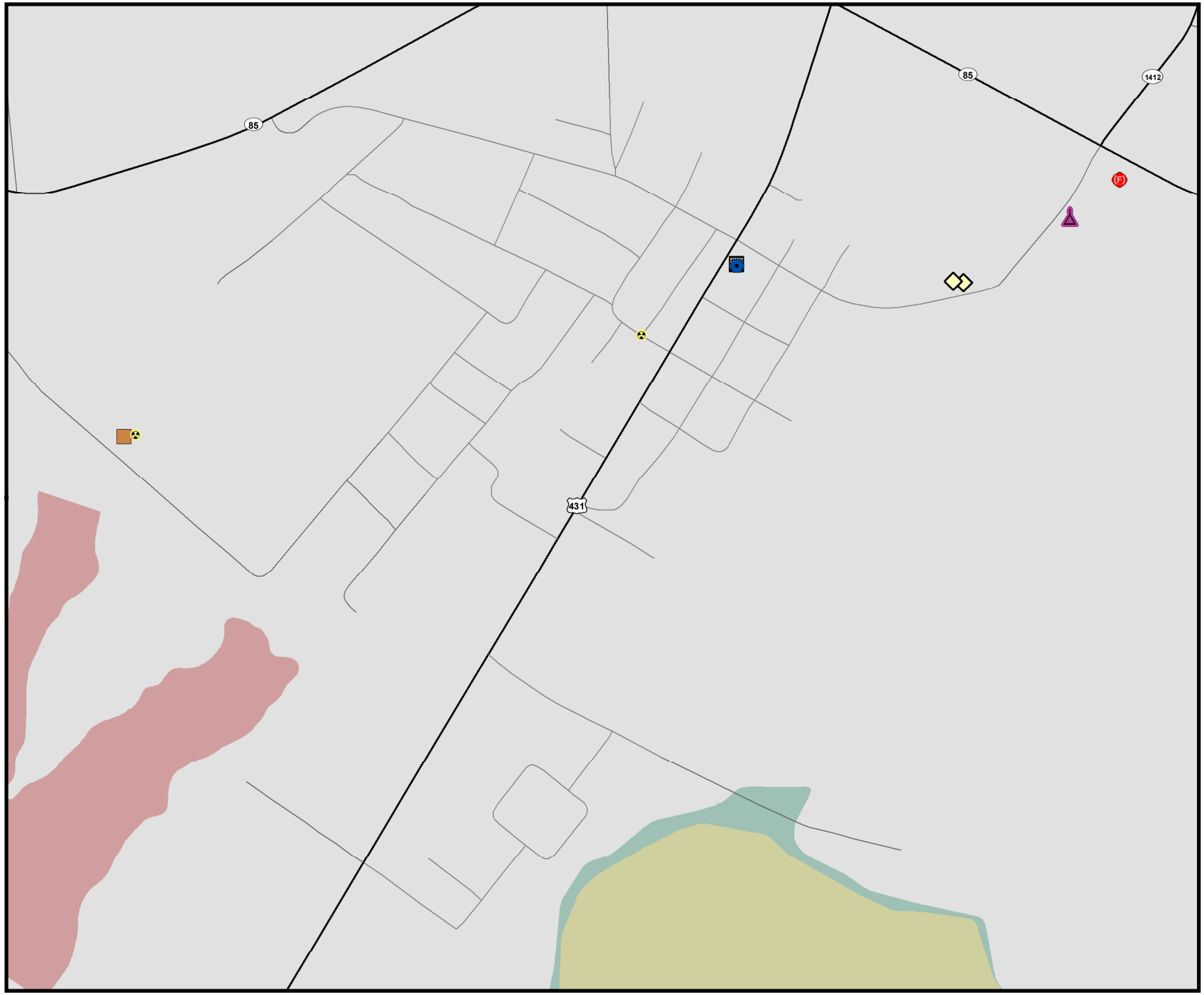
- ConnectGRADD Tower

Vulnerable Population Centers

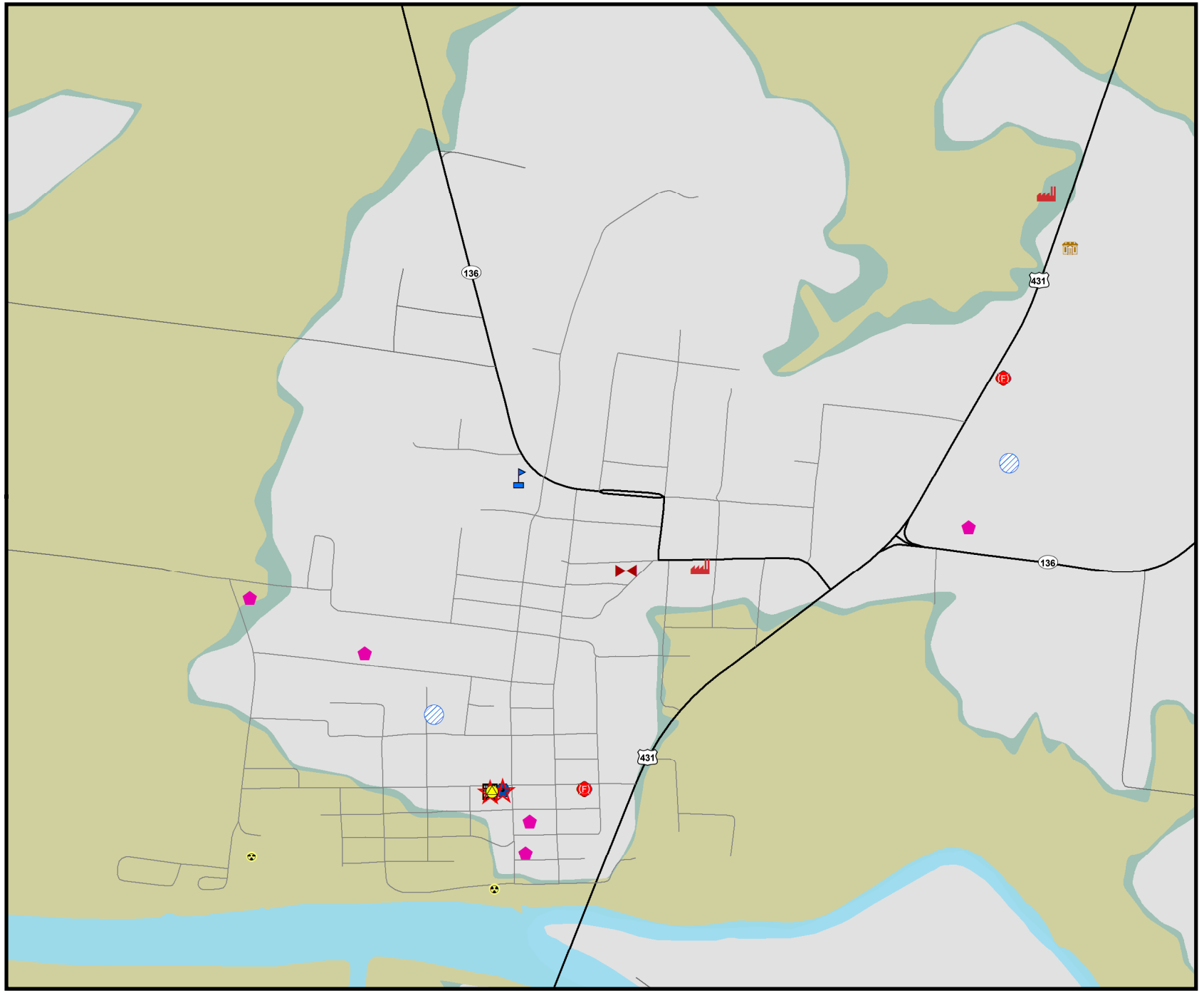
- Senior Center

Civic Facilities

- City Hall



City of Livermore



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Emergency Operations Center
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTank

Communications

- Cellular Tower

Vulnerable Population Centers

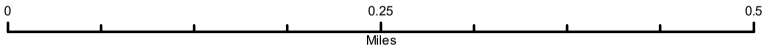
- Apartments
- Senior Center
- School

Civic Facilities

- City Hall

City of Sacramento







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Emergency Shelters

Economic

- Industry

Utilities

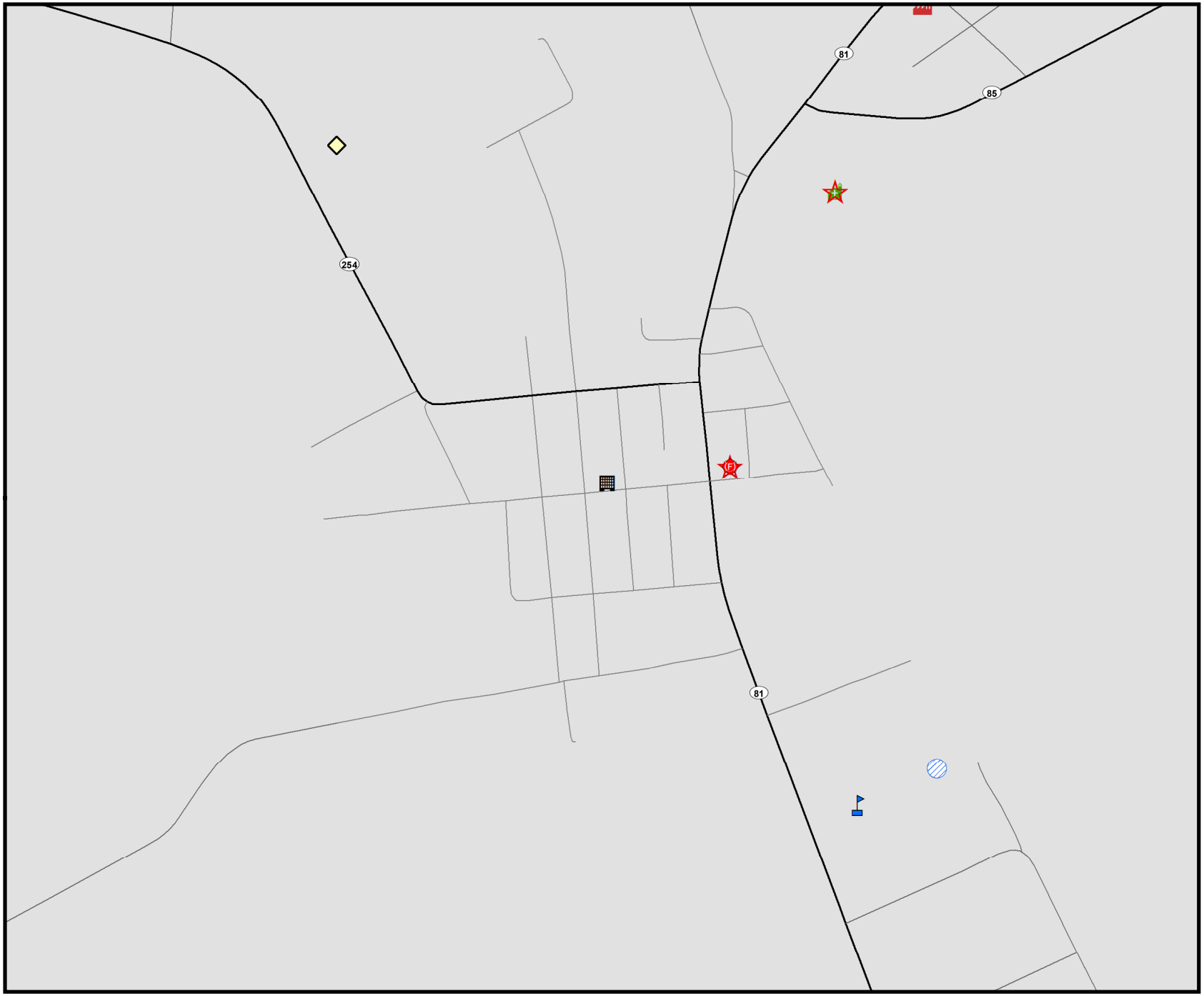
- WaterTank
- Substation

Vulnerable Population Centers

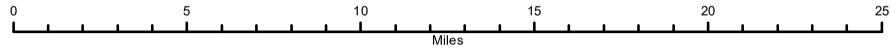
- Senior Center
- School
- Religious
- Entertainment

Civic Facilities

- City Hall



Ohio County

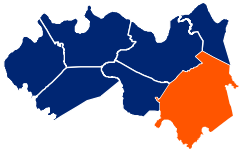


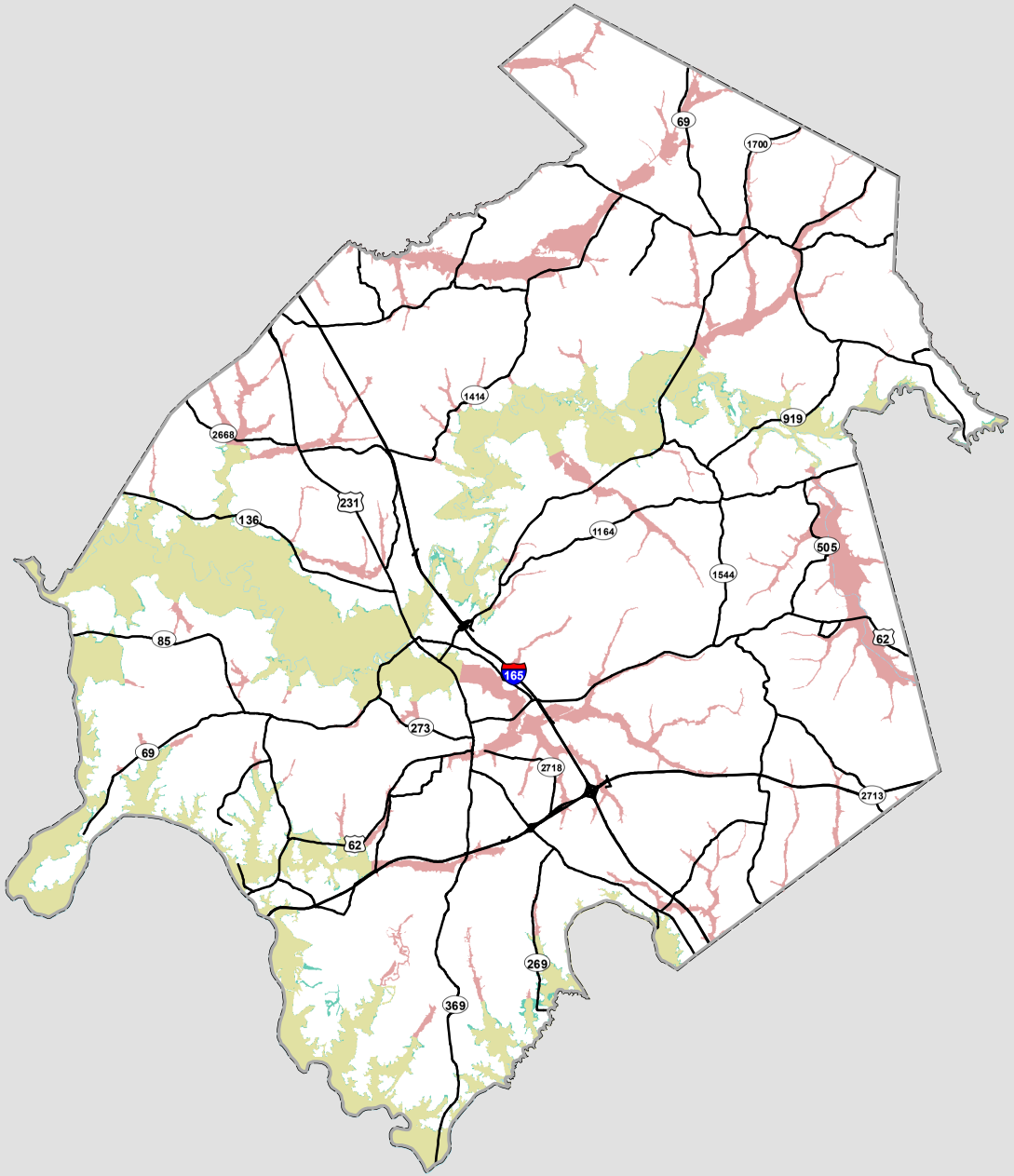


Hazard Type

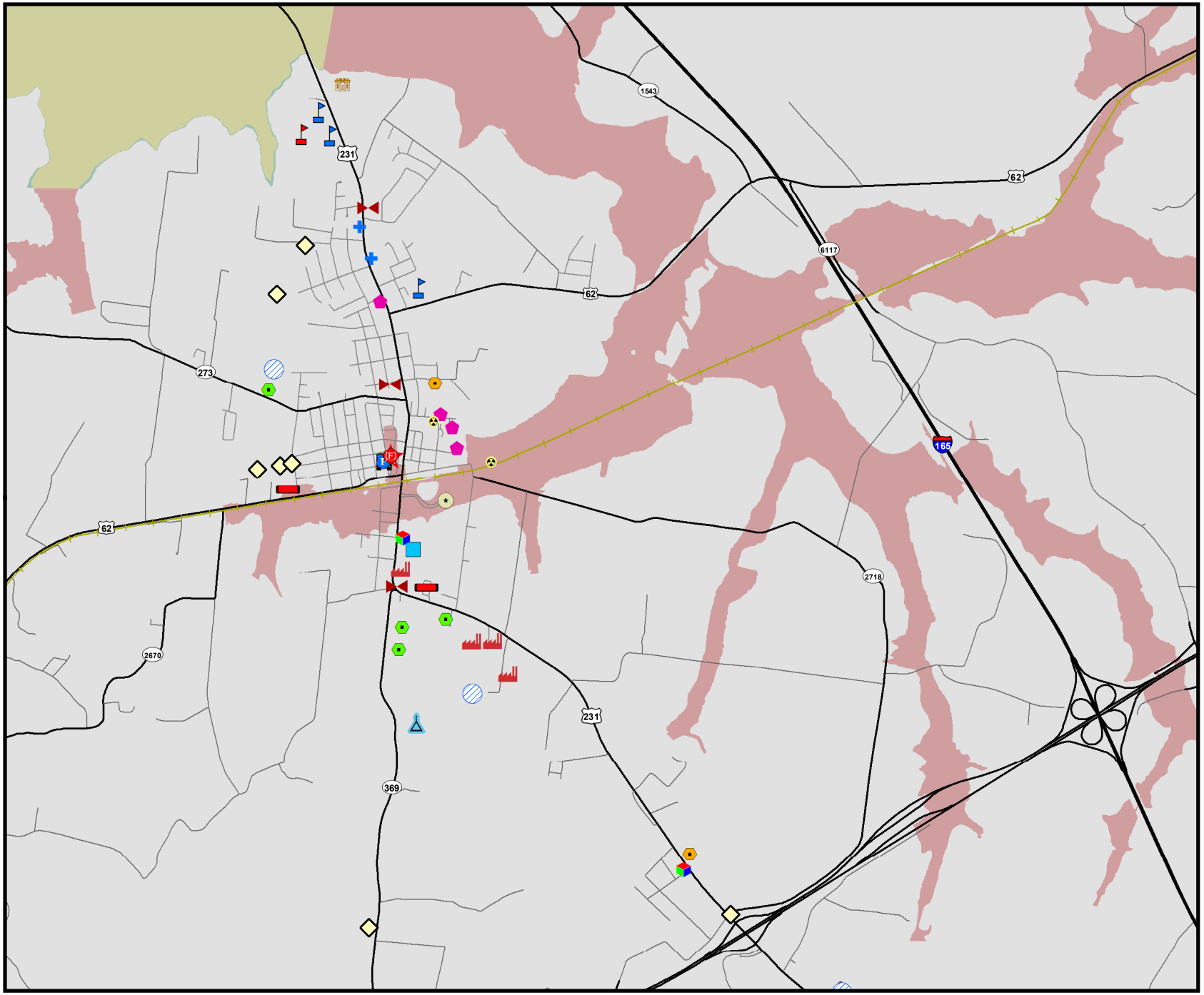
FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





City of Beaver Dam



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- Child Care/Preschool
- Entertainment

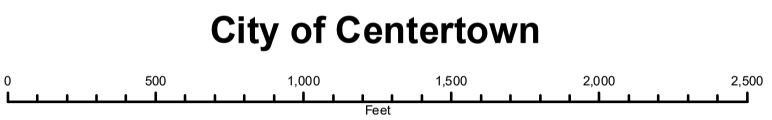
Civic Facilities

- City Hall

Transportation

- Railroad

City of Centertown





Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department

Utilities

- Substation

Communications

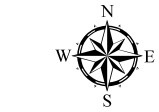
- ConnectGRADD Tower

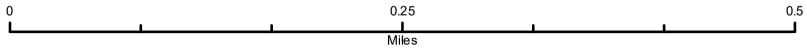
Civic Facilities

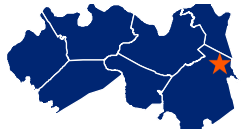
- City Hall



City of Fordsville







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren

Utilities

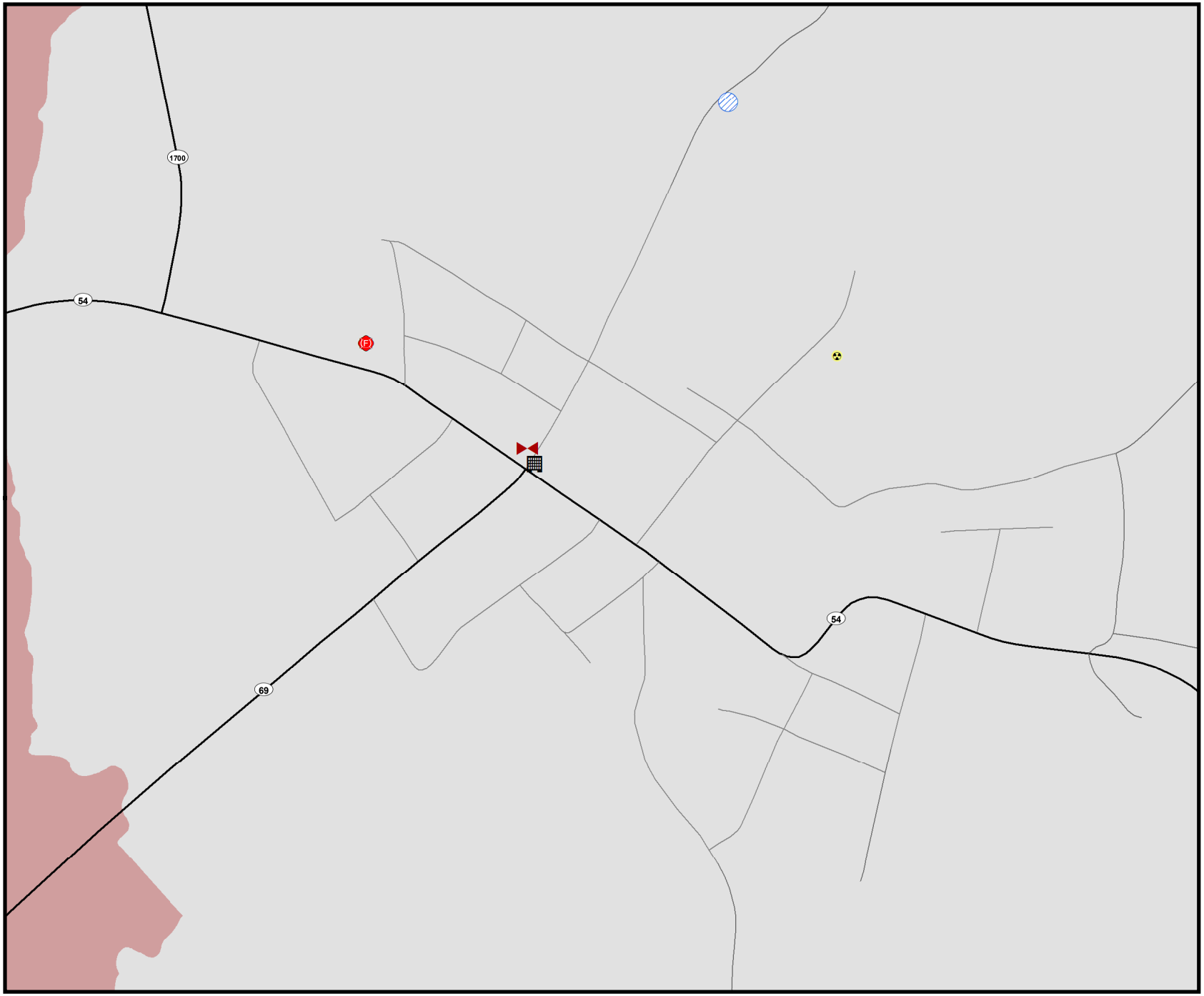
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

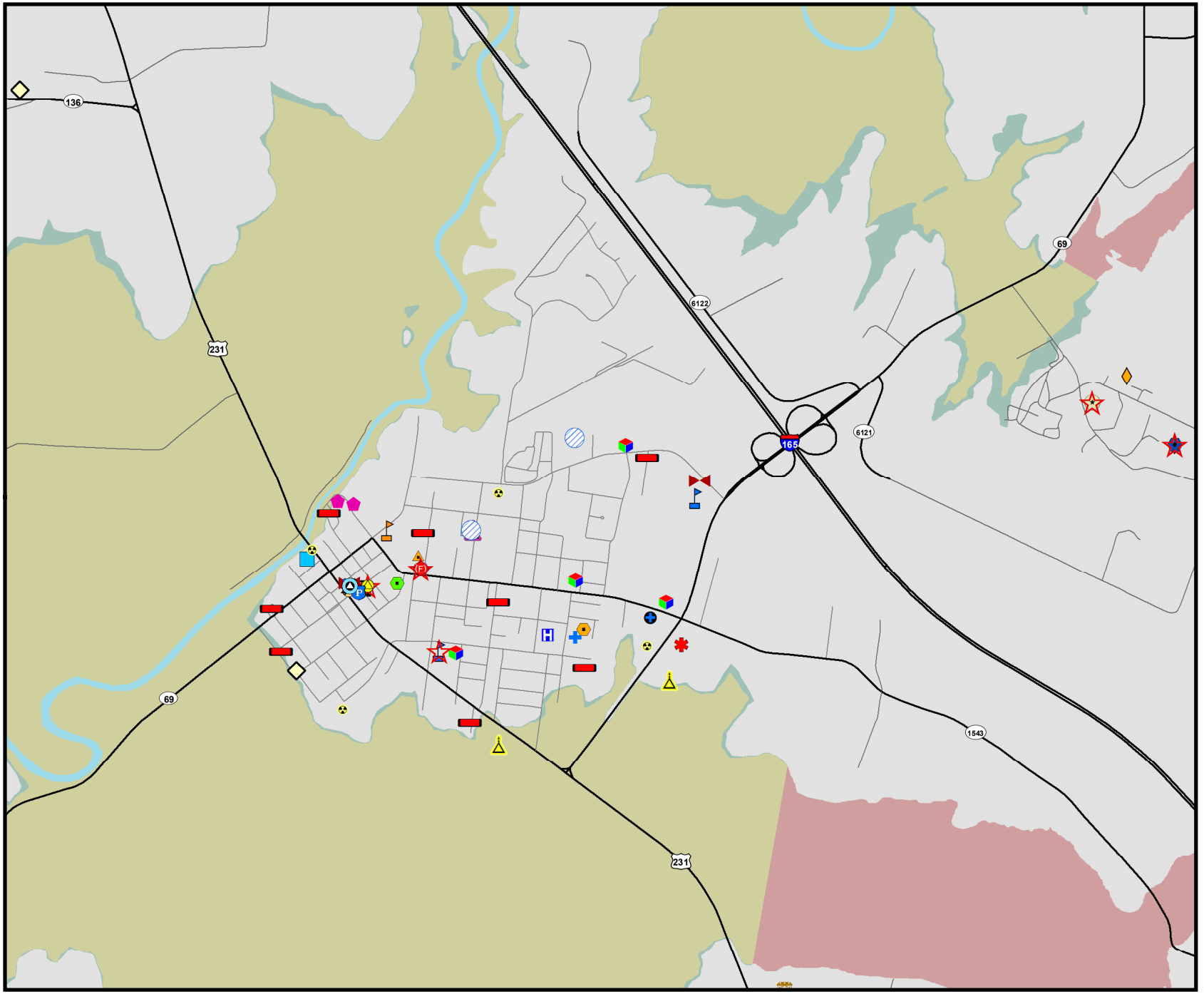
- Cellular Tower

Civic Facilities

- City Hall



City of Hartford



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Child Care/Preschool
- Special Needs
- Entertainment

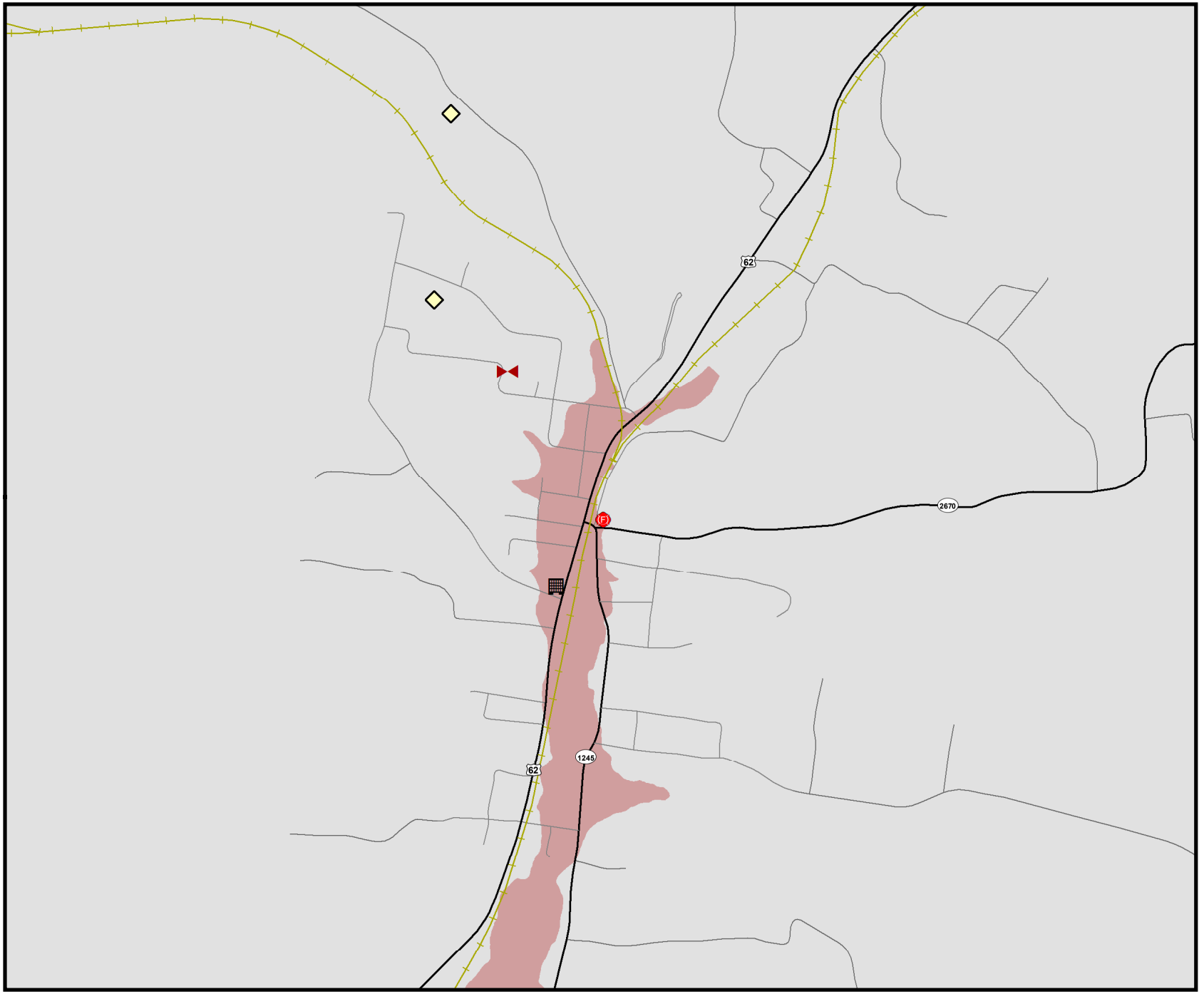
Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional

Transportation

- Railroad

City of McHenry



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

- Substation

Civic Facilities

- City Hall

Transportation

- Railroad

City of Rockport





0 1,000 2,000 3,000
Feet

Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

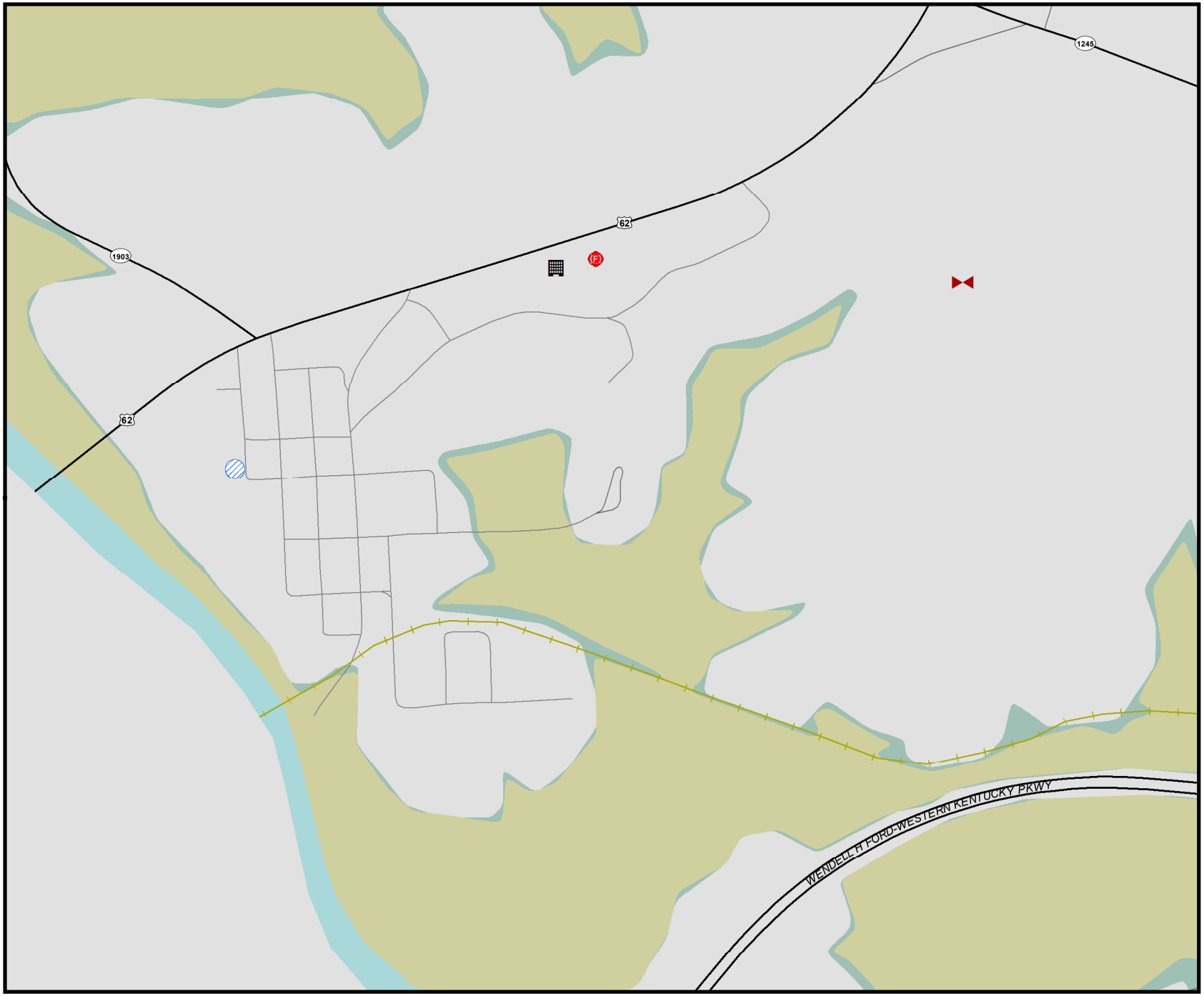
- WaterTank

Civic Facilities

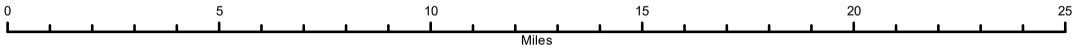
- City Hall

Transportation

- Railroad



Union County

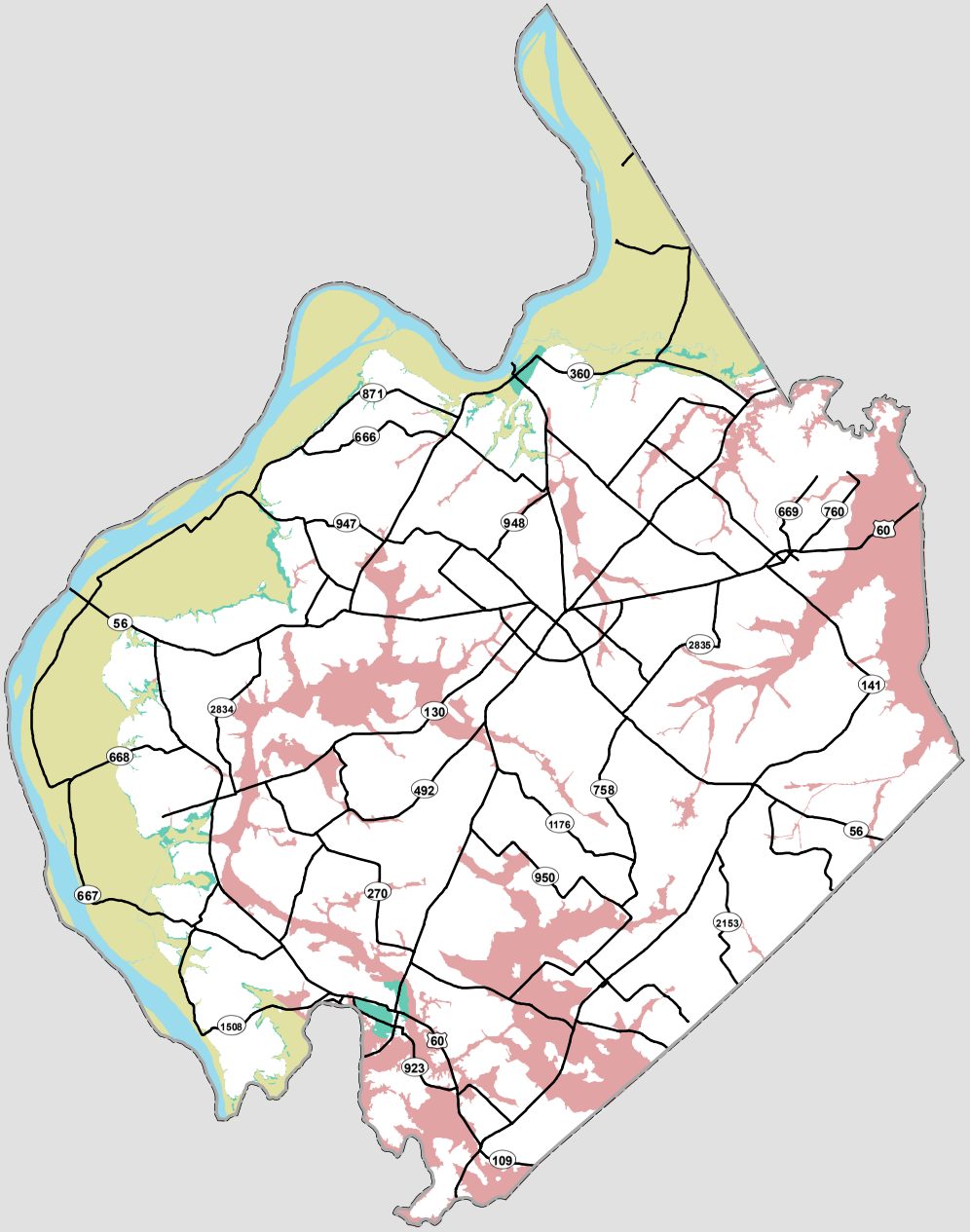


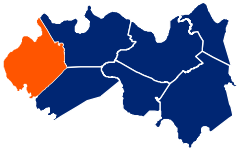


Hazard Type

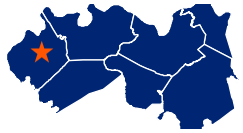
FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

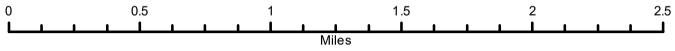




City of Morganfield







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- Hazardous Materials
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

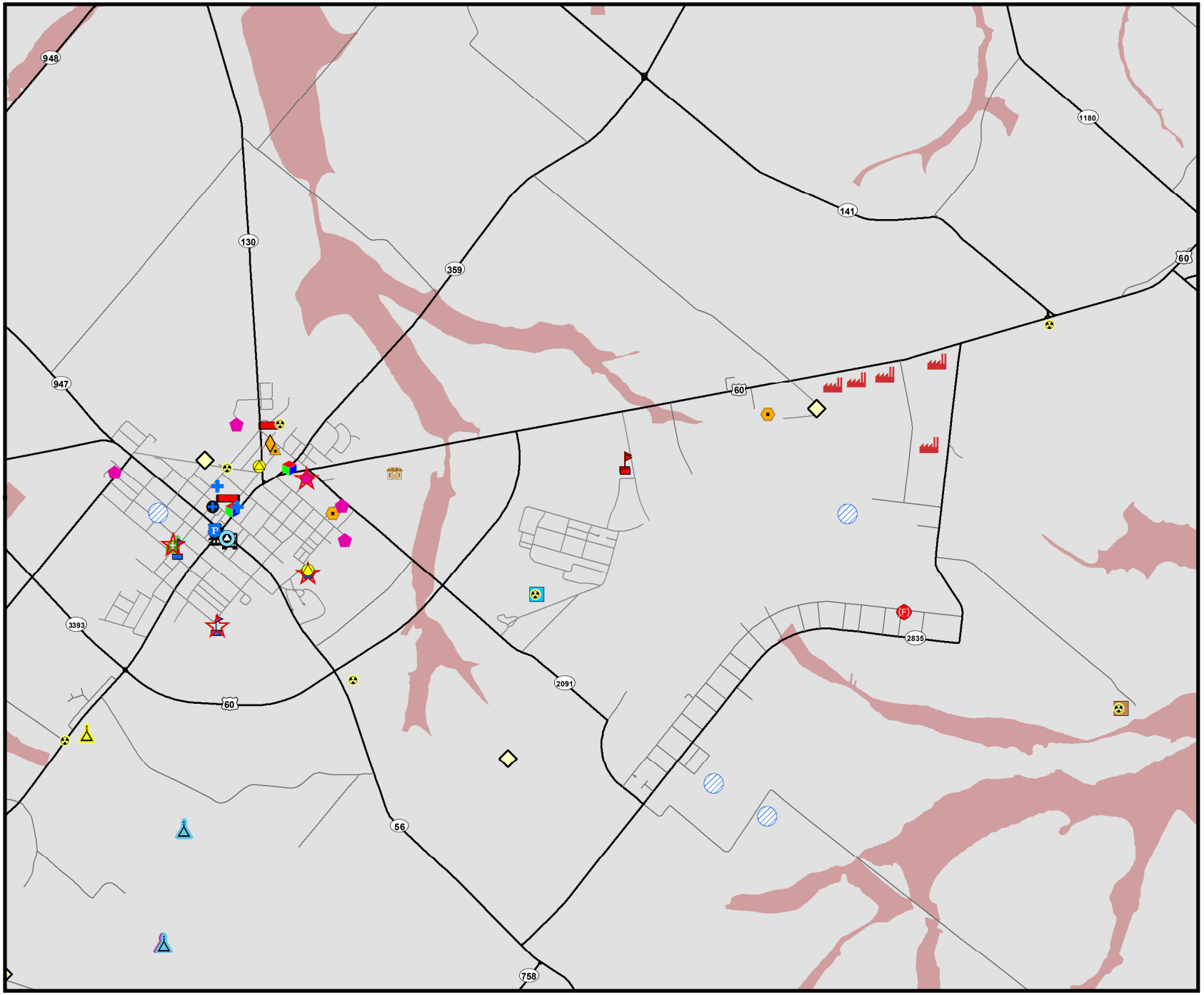
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

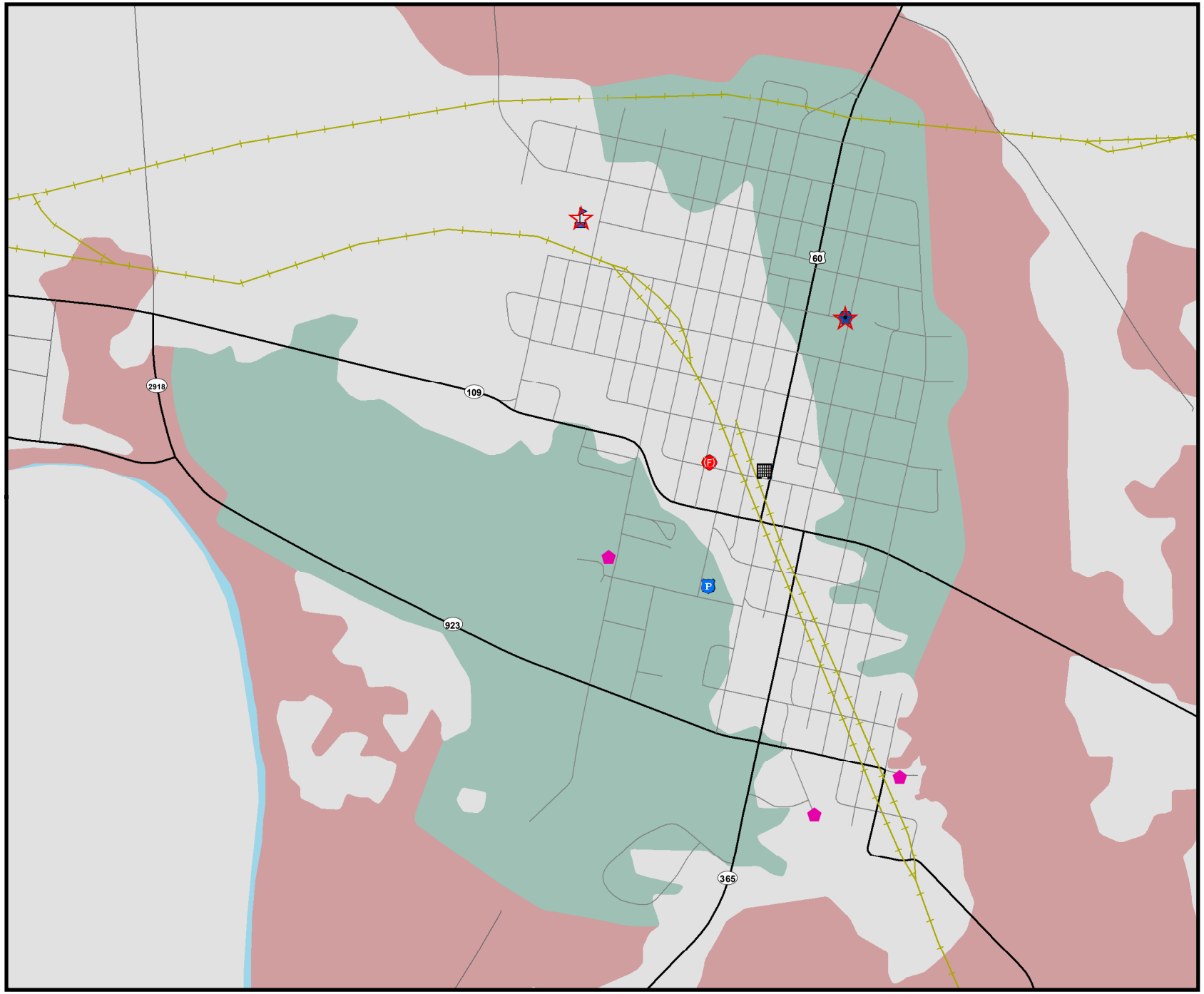
- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- School
- Post Secondary School
- Religious
- Child Care/Preschool

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional



City of Sturgis



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Hazardous Materials
- Emergency Shelters

Economic

- Industry

Utilities

- WaterTank

Vulnerable Population Centers

- Apartments
- Senior Center
- School
- Entertainment

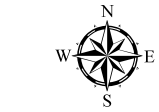
Civic Facilities

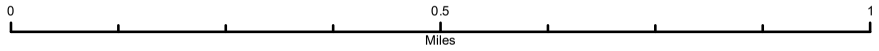
- City Hall
- Public Works

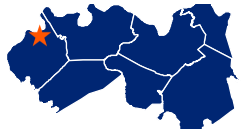
Transportation

- Railroad

City of Uniontown







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Emergency Shelters

Economic

- Industry

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Communications

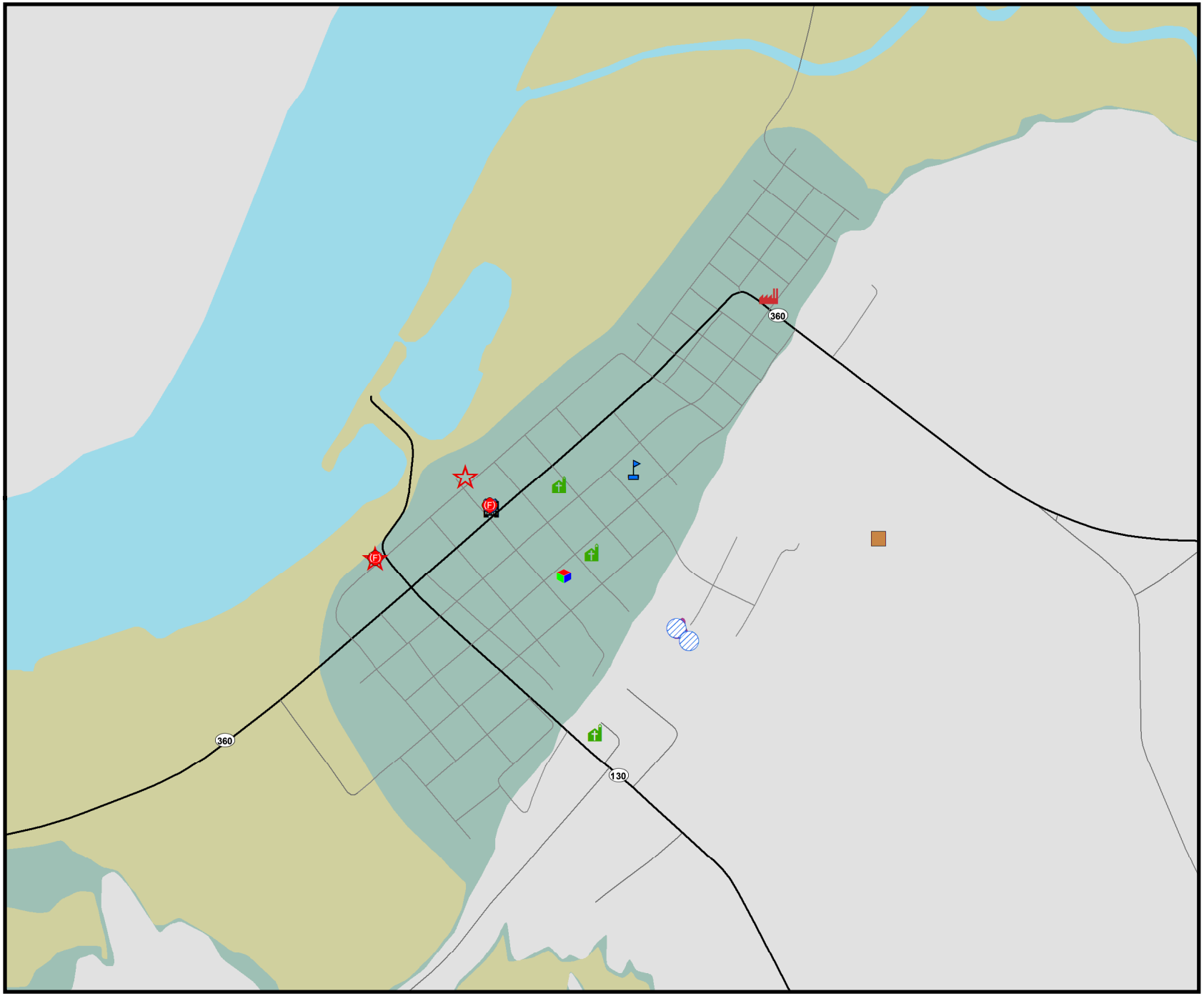
- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers

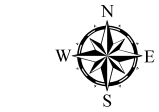
- School
- Religious
- Child Care/Preschool

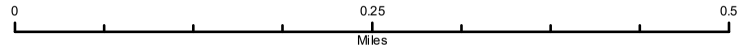
Civic Facilities

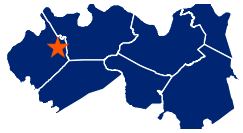
- City Hall



City of Waverly







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department

Utilities

- WaterTank

Communications

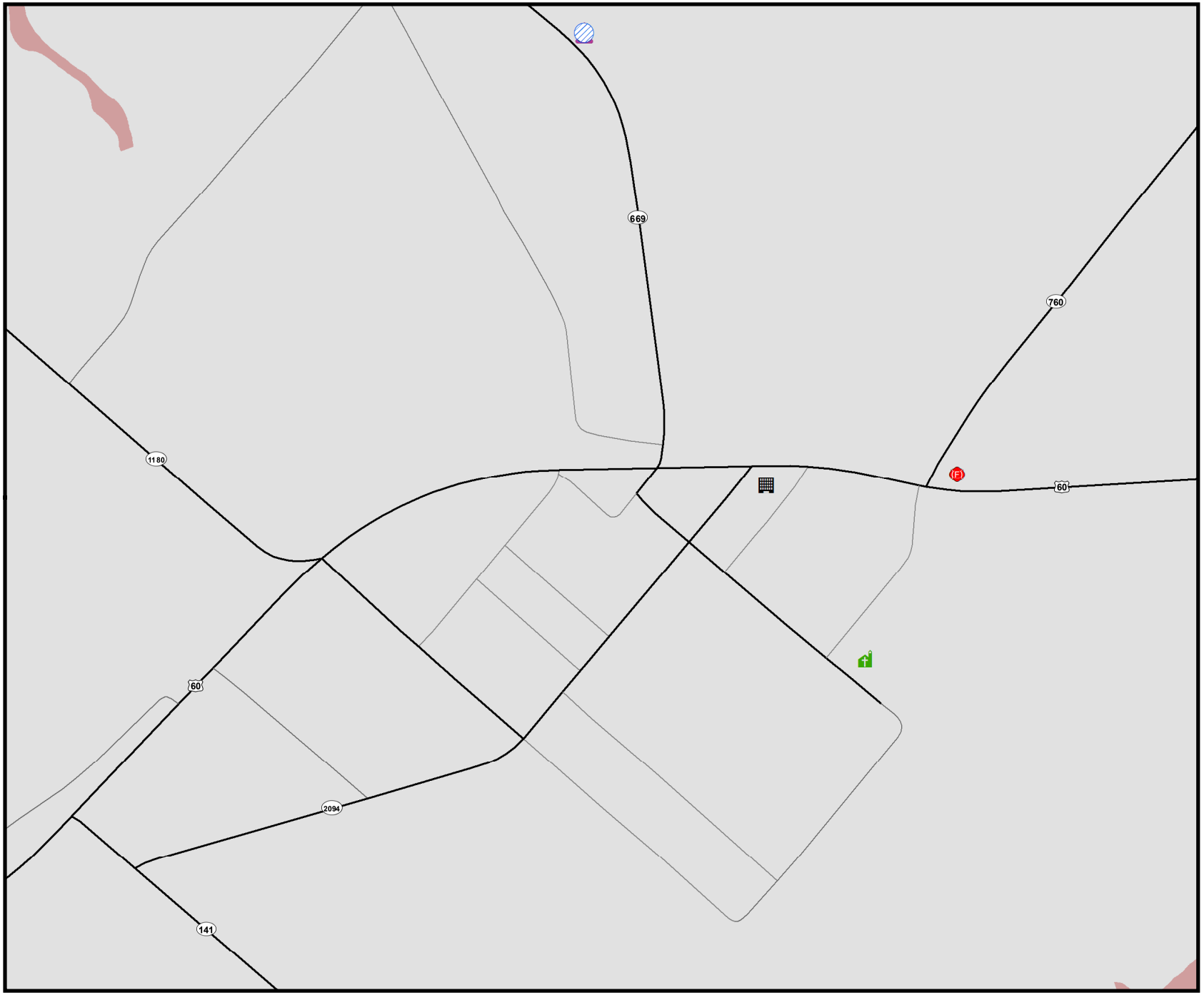
- ConnectGRADD Tower

Vulnerable Population Centers

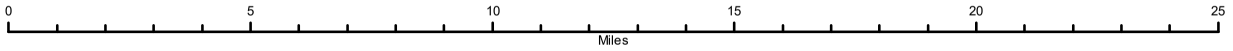
- Religious

Civic Facilities

- City Hall



Webster County

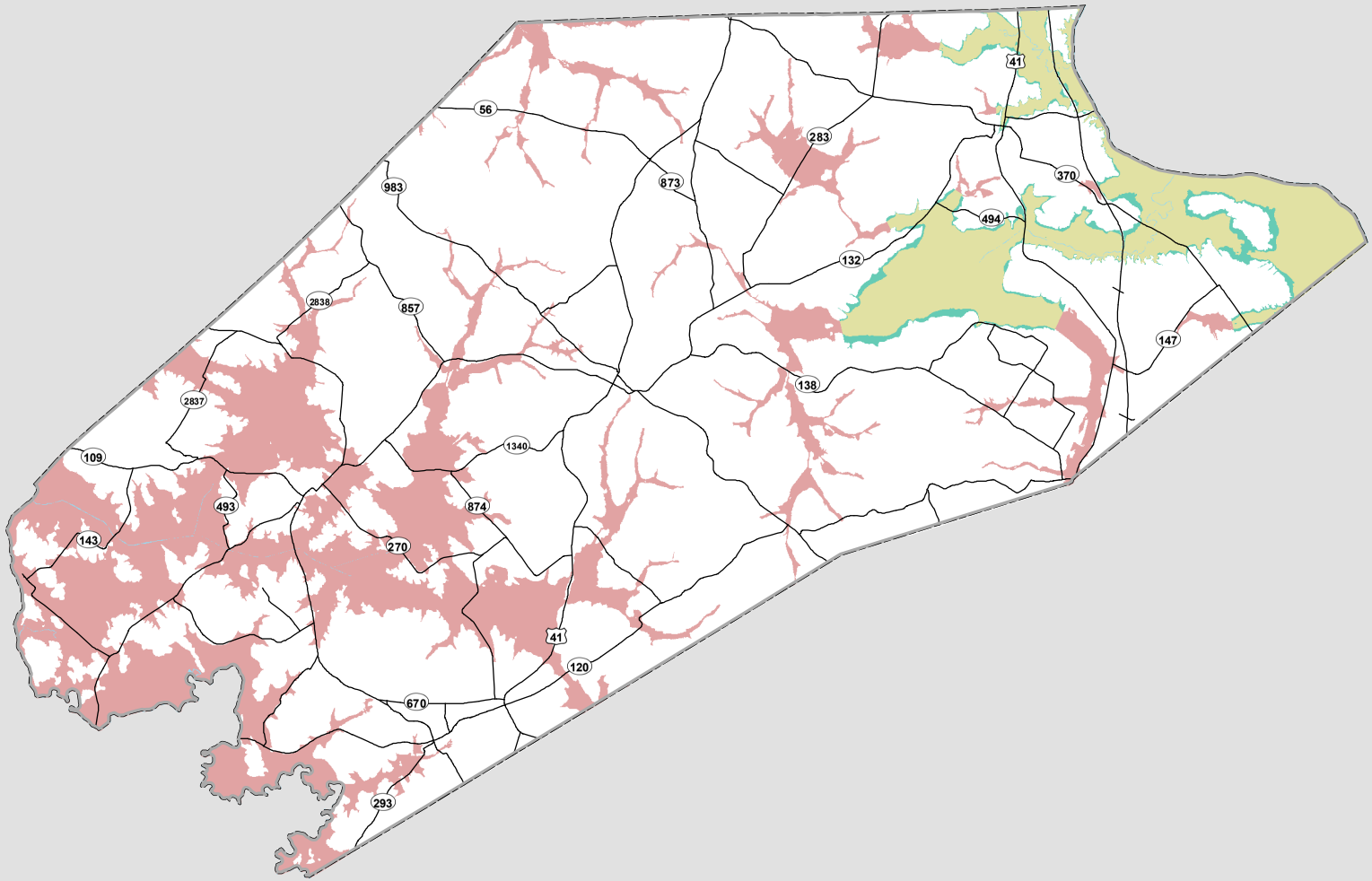


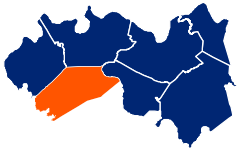


Hazard Type

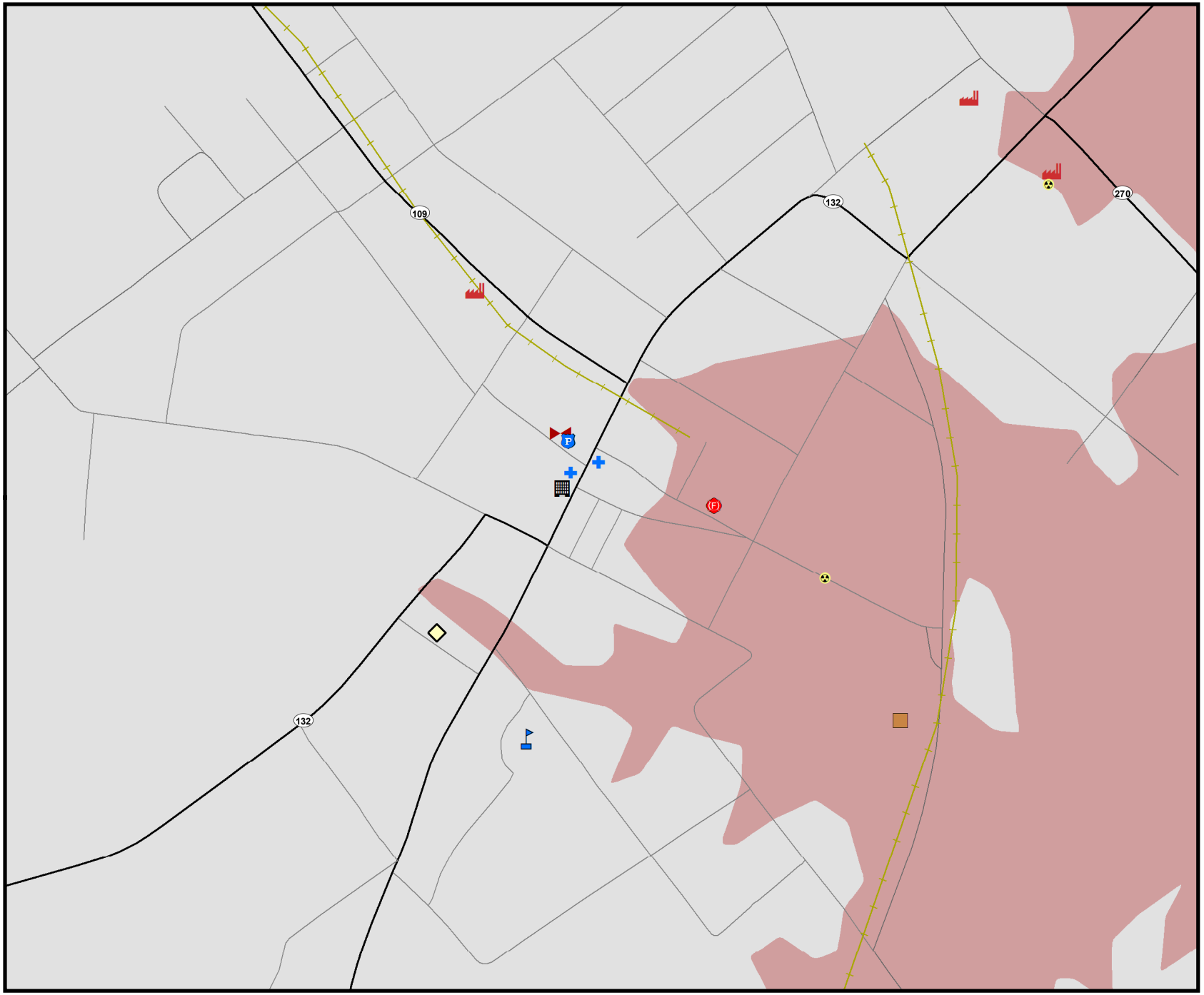
FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance





City of Clay



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Vulnerable Population Centers

- Apartments
- School

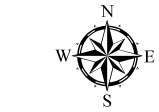
Civic Facilities

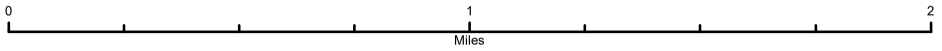
- City Hall

Transportation

- Railroad

City of Dixon







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- EMS
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTank

Communications

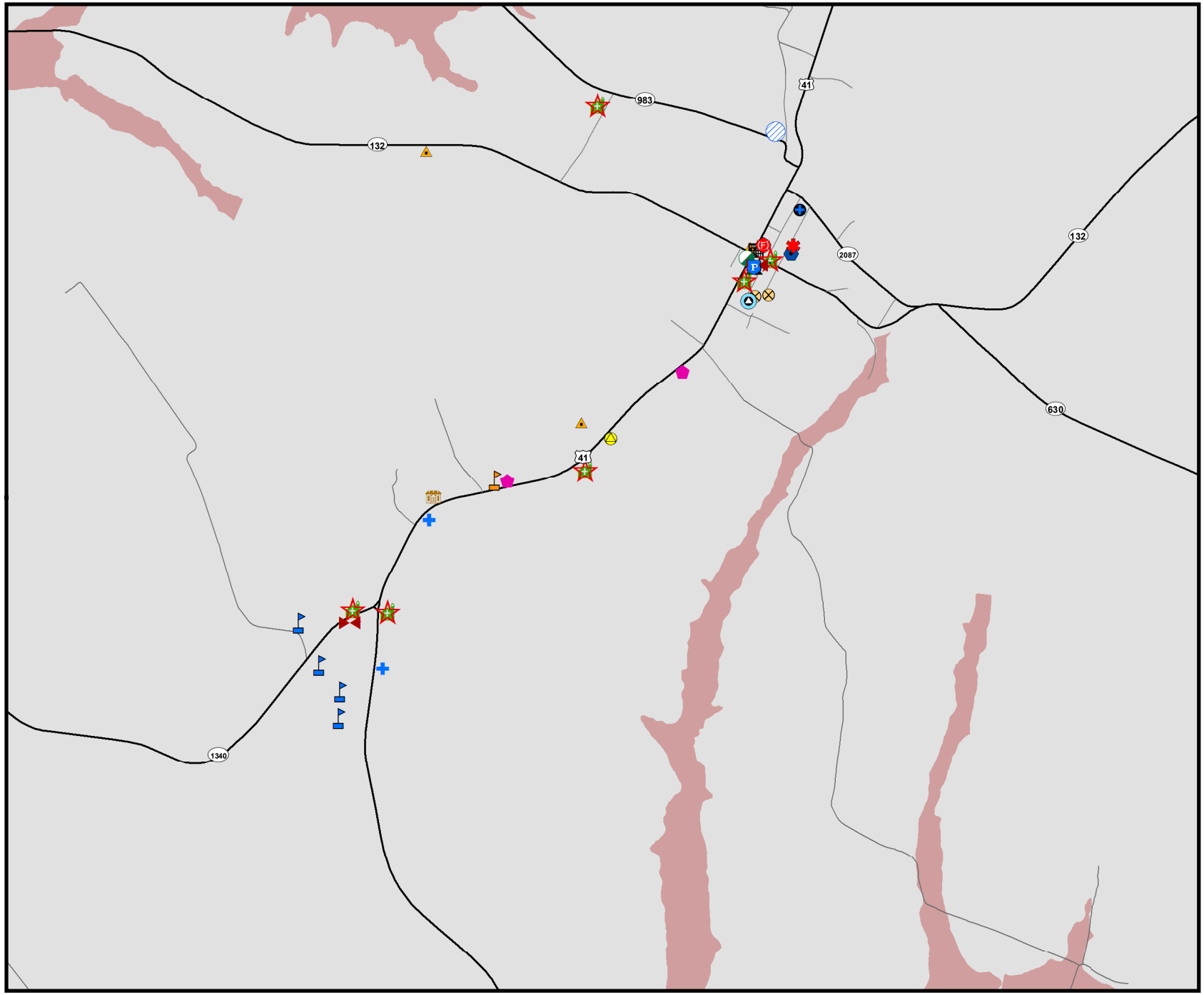
- ConnectGRADD Tower

Vulnerable Population Centers

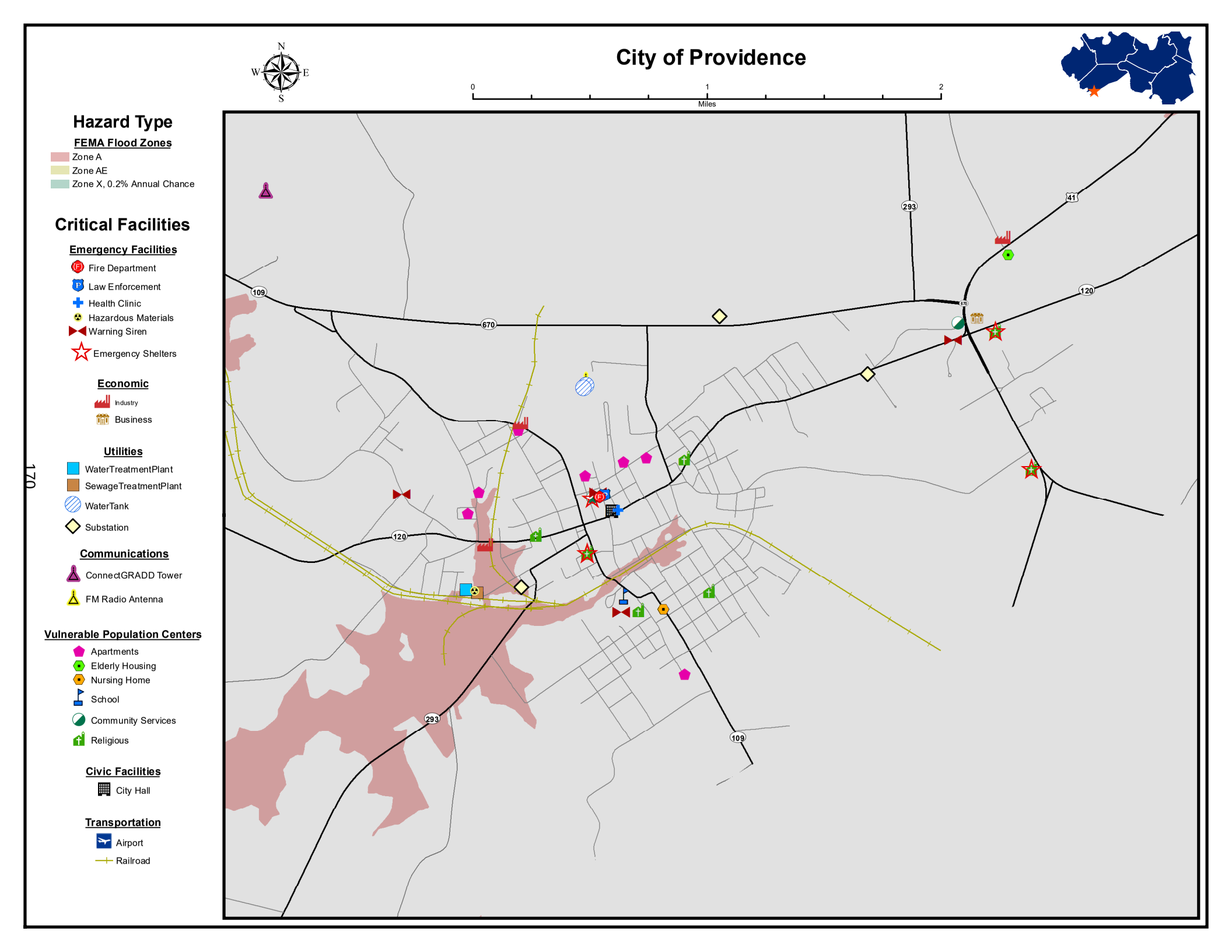
- Apartments
- Senior Center
- School
- School Administration
- Community Services
- Religious

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Correctional



City of Providence



Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers

- Apartments
- Elderly Housing
- Nursing Home
- School
- Community Services
- Religious

Civic Facilities

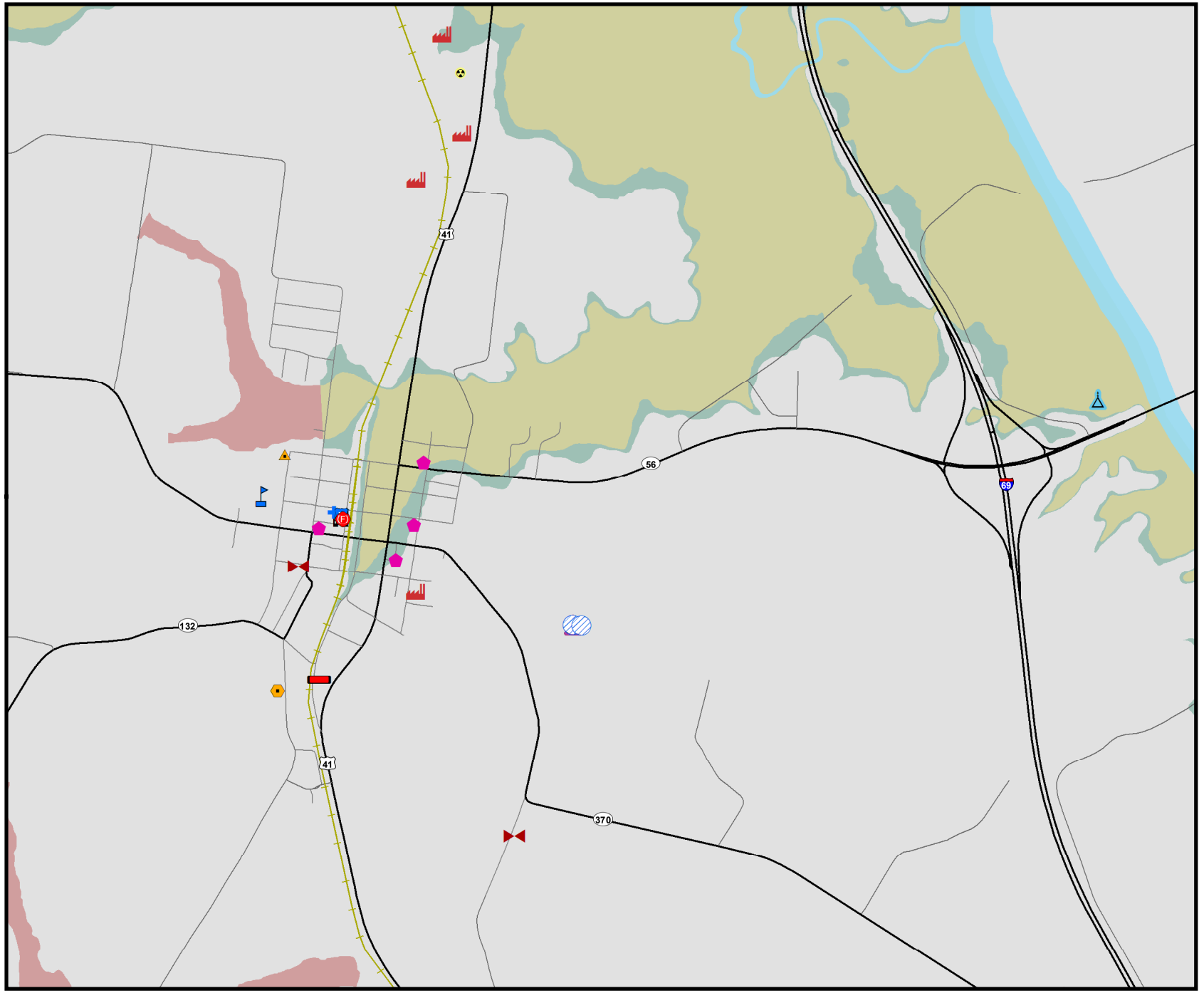
- City Hall

Transportation

- Airport
- Railroad

City of Sebree





Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

Economic

- Industry

Utilities

- WaterTank

Communications

- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers

- Apartments
- Trailer Park
- Nursing Home
- School

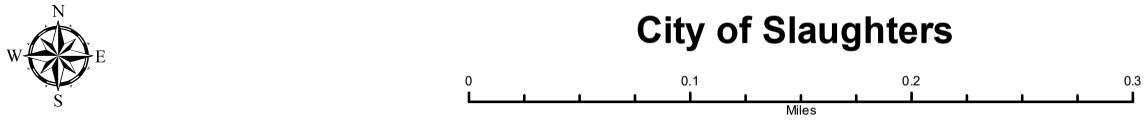
Civic Facilities

- City Hall
- Public Works

Transportation

- Railroad

City of Slaughters





Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Communications

- Cellular Tower

Vulnerable Population Centers

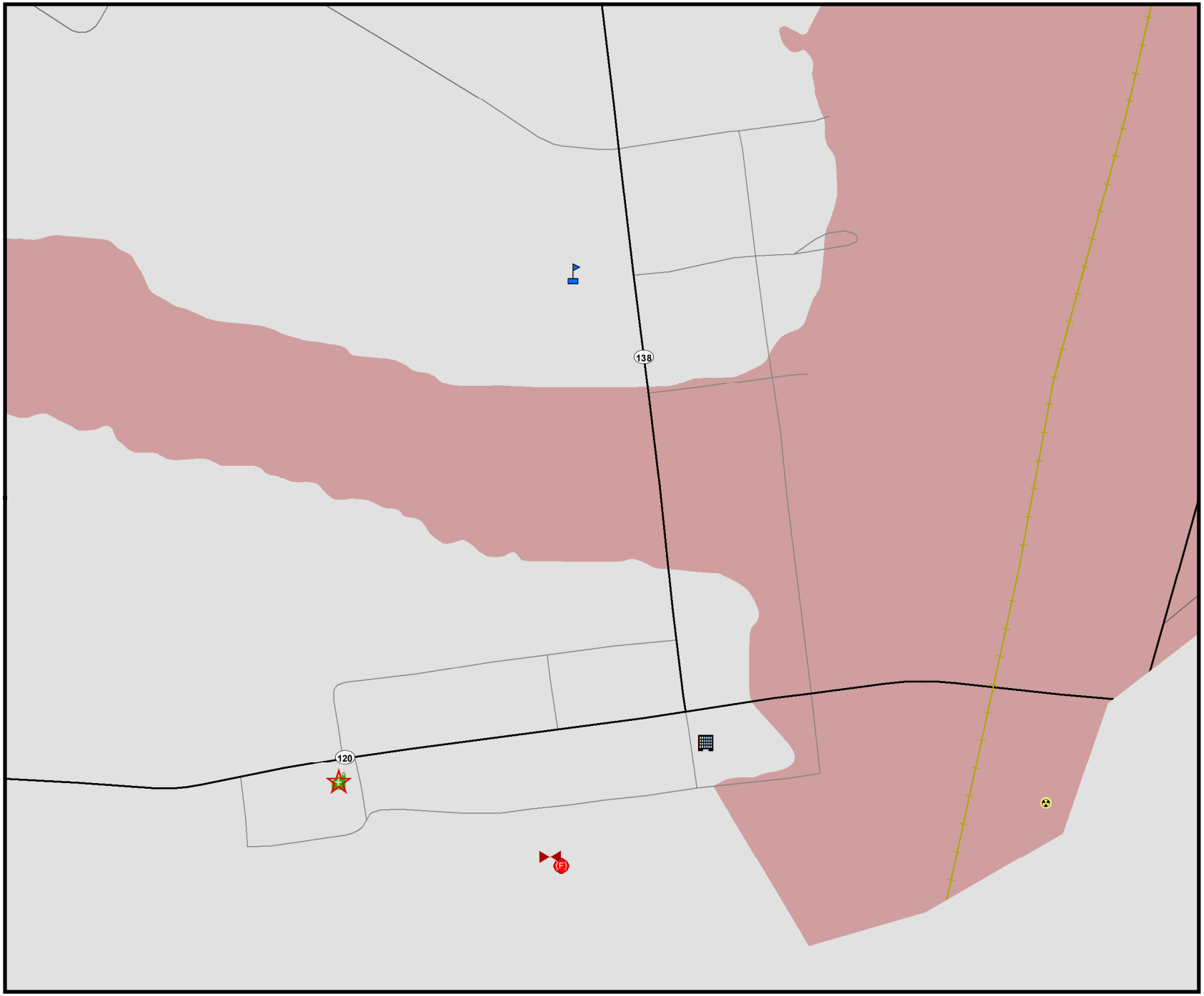
- School
- Religious

Civic Facilities

- City Hall

Transportation

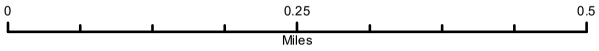
- Railroad



City of Wheatcroft







Hazard Type

FEMA Flood Zones

- Zone A
- Zone AE
- Zone X, 0.2% Annual Chance

Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

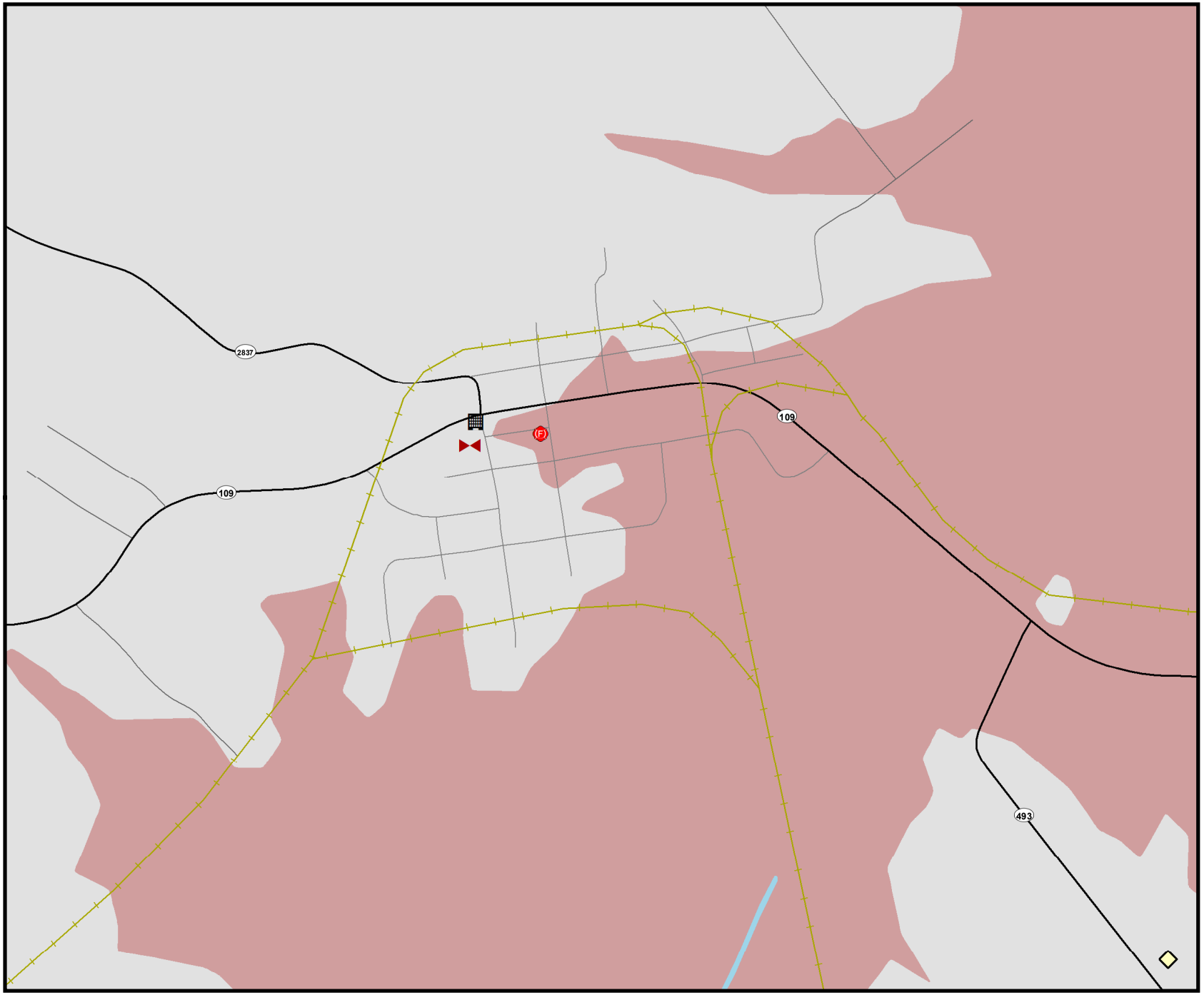
- Substation

Civic Facilities

- City Hall

Transportation

- Railroad



Summary

The natural geography of the GRADD region ensures that flood events will always challenge and threaten local communities. Riverine and backwater flooding present issues that require solutions and action from local, state and national officials. To expand mitigation efforts, improved identification of vulnerable areas and possible mitigation solutions require near constant evaluation. Awareness of the populations and areas that face the greatest risks can influence the development of strategies that could limit loss of life, injuries, property damages and crop damages.

Hazard Profile: Landslide



Figure 4.34 - *Photo courtesy of Hancock County Emergency Management*

The Kentucky Geological Survey states, "Landslides are caused by stresses on a slope that exceed the strength of the hillslope soil. Stresses can include increased pore-water pressure (from rainfall), gravity, or some type of slope modification (loading or excavating). Intense or long-duration rainfall can trigger slides, rock falls, debris flows, or other landslide types. The danger is greatest during the late winter and early spring months, before large tree's leaf out and remove water by evapotranspiration as it infiltrates into hillside soils. These stresses act over time and space at different scales and magnitudes, often making hazard and risk assessment challenging. Diverse terminology and definitions among geologists, engineers and the public reflect the complex landslide processes. Some of the most common terms are landslide, mudslide and rockslide."

In 2020, Hancock County experienced an issue of landslide next to their county courthouse in Hawesville, KY (picture Figure 4.34. Mitigation efforts including rip-rap installation have slowed the effects of the hazard, but much larger scale mitigation projects to address the issue are on the horizon.

Definition & Classification Types

The United States Geological Survey (USGS) distinguishes landslide events by type, focusing on the geologic circumstances and movements involved. Landslide types include:

- Falls: When a rock or boulder dislodges from a steep slope or cliff, a fall occurs.
- Topples: The forward rotation of rocks along a pivot point on a hill or slope is known as a topple.

- Flow: Flows involve the downward movement of debris (dirt, rock and organic matter) combined with water and air. The level of liquid content contributes to the velocity of the flow.
- Lateral Spreads: Occurring along flat terrain or an area with minor slope, lateral spreads are characterized by the liquefaction of fine-grained soils (clay) or sand and silt. The upper level of the ground fractures and spreads, usually at a high rate. Strong ground shaking, as associated with earthquakes, can cause lateral spreads, but they sometimes result from disturbances of the ground during construction efforts.
- Slides: The consideration of slides specifically separates a weak zone that causes the mass movement of materials from the solid, underlying materials. A rotational slide involves slide material rotating around a particular point of the rupture. In a translational slide, the material moves parallel to the weak zone.

Warning Signs

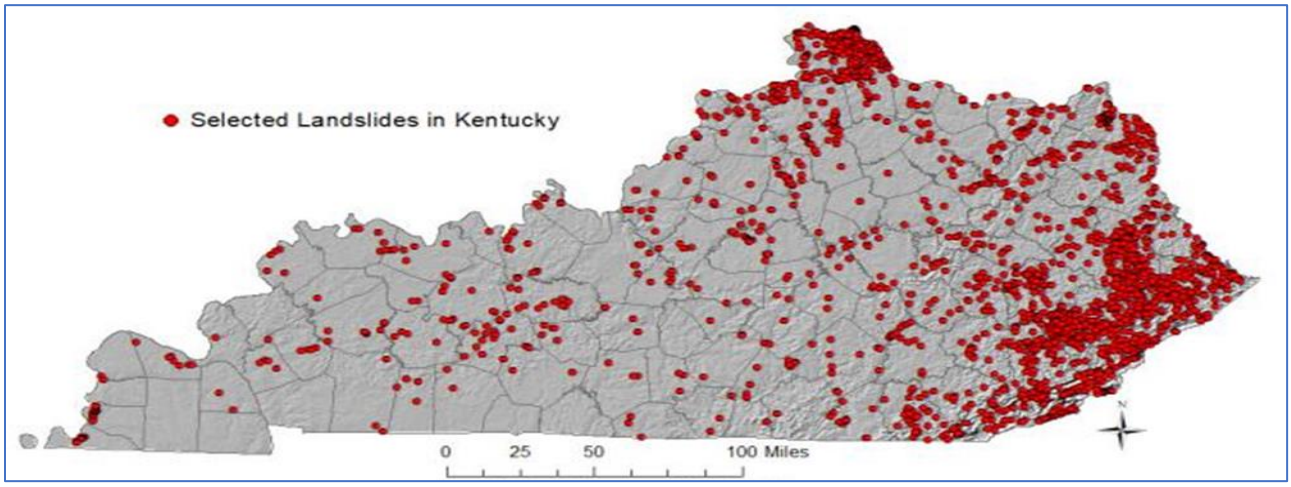
Listed below are warning signs from Kentucky Geological Survey (KGS) that illustrate evidence of hillside movement:

- Steep Slopes–The steeper the slope, the greater the likelihood of slope failure.
- Modified slopes–Human activities are a principal cause of slope failures: cuts and fills; addition of runoff from new roads, roofs and parking lots; water from overuse of septic tanks and excessive lawn watering.
- Stream banks–These fail from erosion on outside stream bends and from a rapid drop in water level in the stream, which leaves excess pore pressure in silts and sands.
- Broken or leaking pipes–Many landslides are associated with cracked or broken sewer lines or water lines that saturate the slope.
- Tilted trees, poles, posts and walls–These conditions on a slope are easy-to-recognize indicators of hillside movement.
- Cracks in buildings, walls and roads–Failures are much easier to see when they cut hard structures. Look for cracks that line up, that have a noticeable offset, or arc displacement.

Frequency

According to the Kentucky Geological Survey, in Kentucky, costs of landslides and rockfall repair exceed $4 million annually, largely costs incurred by the Kentucky Transportation Cabinet. However, many slides unrelated to transportation are unreported and pose significant hazards to people and infrastructure.

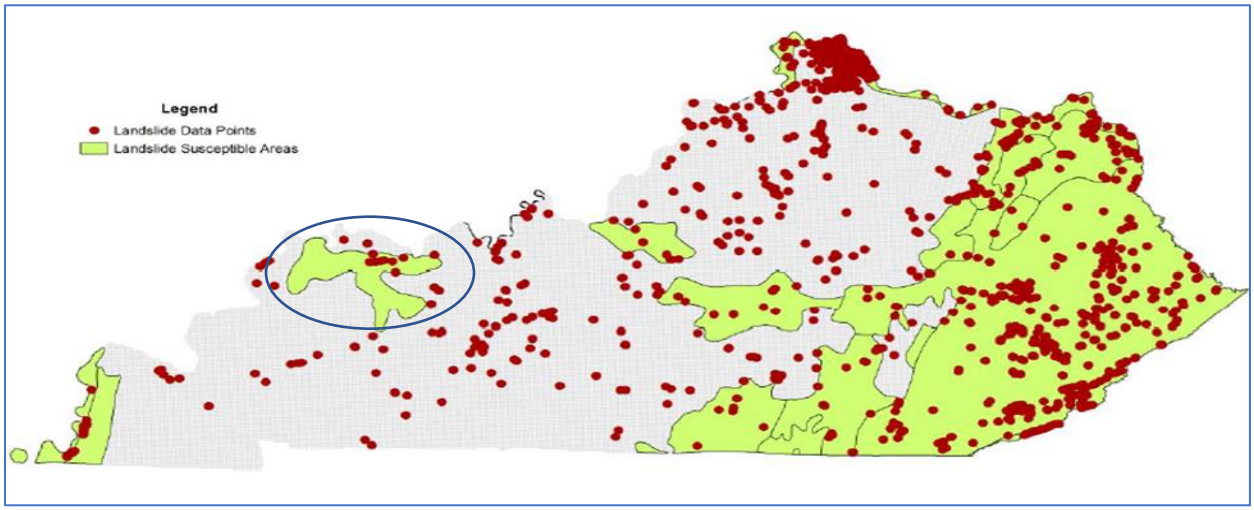
Figure 4.35 - Landslide Events in Kentucky



Source: Kentucky Geological Survey, 2020

The following graphic displays the susceptible areas in Kentucky to landslide events as evidenced in the Enhanced Hazard Mitigation Plan. The Green River region is circled on the map and much of the region is susceptible to landslide events.

Figure 4.36 Landslide Susceptibility



Source: Kentucky Enhanced Hazard Mitigation Plan, 2018

Kentucky Geological Survey's Landslide Database includes data from 1984 and records a total of 45 events in the GRADD region. According to the Kentucky Enhance Hazard Mitigation Plan, 45 events over 36 years in the GRADD region indicates the entire region can expect approximately 1.25 landslide events per year. A list of landslide events is included in the Appendix.

Table 4.22 Landslide Probability Calculated as Frequency of Event

County	Documented Events (1984-2019)	Probability of Future Events
Daviess	5	≈ 1 Event Every 7 Years
Hancock	2	≈ 1 Event Every 18 Years
Henderson	16	≈ 1 Event Every 2 Years
McLean	2	≈ 1 Event Every 18 Years
Ohio	14	≈ 1 Event Every 2 ½ Years
Union	5	≈ 1 Event Every 7 Years
Webster	1	≈ 1 Event Every 36 Years

Sources: Kentucky Geological Survey Landslide Database

Summary

Kentucky is fortunate to have valuable sources of information such as the Kentucky Geological Survey with its landslide mapping initiative as well as the Department of Transportation and its knowledge and resources. While many instances of landslide are outside the purview of the Transportation Cabinet, it serves as a valuable resource for those events surrounding the region's miles of highway and roads. As evidenced in Hancock County, the threat from landslides is real and efforts to address the risks will be key in moving forward with a positive mitigation strategy.

Hazard Profile: Land Subsidence

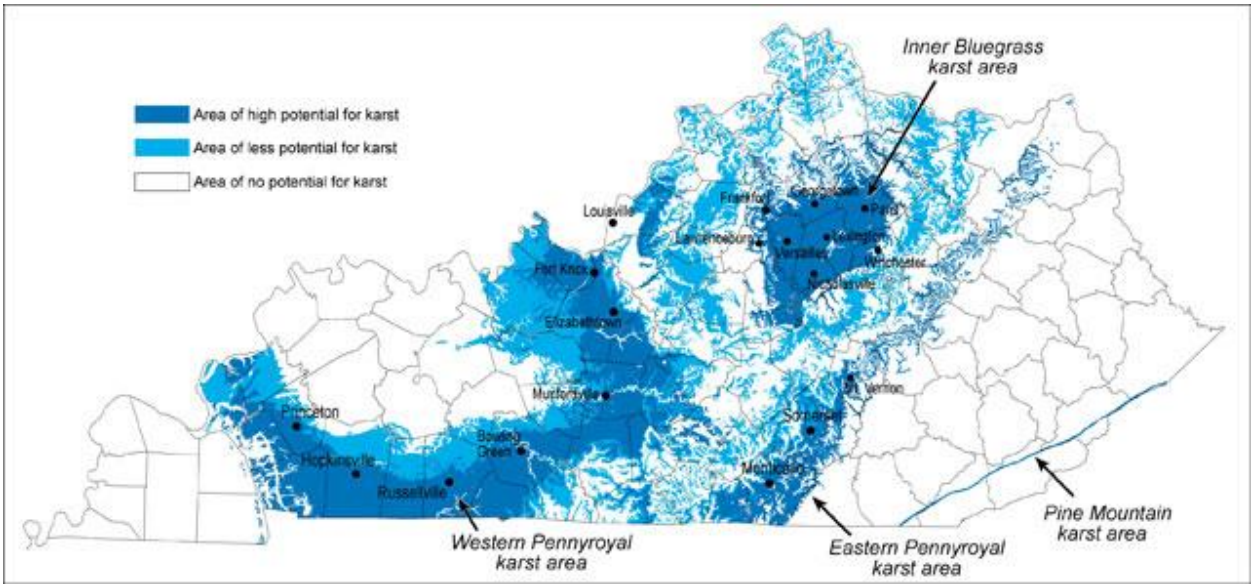
Land subsidence in Kentucky is most prevalent in two forms—karst and mine subsidence. While karst is the most common form of land subsidence in Kentucky and is discussed in the following section, the hazard potential is limited to a small area of the GRADD region. The most common form of land subsidence in the GRADD region is mine subsidence—a human-caused hazard.

In some areas of the coalfield that make up a significant portion of western Kentucky, coal could be found in outcropping where the seam would run to the top of the ground and could be surface mined using bulldozers. To reach other coal seams, miners ride elevators deep underground and send the mined coal out on conveyors that stretch to the riverbanks where barges await. In Kentucky, this deep underground mineral extraction poses a significant geologic hazard, land subsidence. Extracting coal from deep mines can result in mine subsidence when the pillars of coal and the roof supports that were left in the mine can no longer support the bedrock above the mine. This loss of support is transferred to the ground surface which also drops, creating possible structural problems for houses, roads or utilities in the subsidence area, as well as possible surface cracks, holes and voids that can be a public safety concern. When buildings are damaged because of mine subsidence, most insurance policies do not automatically cover the damage to the structure.

Karst

Karst is the most common form of land subsidence in Kentucky, but as shown on the following map, the GRADD region is susceptible to karst limited to a small area in Eastern Hancock and Ohio Counties. From the Kentucky Geological Survey, karst hazards cause less damage than earthquakes or landslides, perhaps a half million to $2 million of economic loss annually but can still have devastating effects on individuals. Four geologic hazards are associated with karst. Two common karst-related geologic hazards—cover-collapse sinkholes and sinkhole flooding—cause the most damage to buildings. A third karst hazard is relatively high concentrations of radon, sometimes found in basements and crawl spaces of houses built on karst. Finally, the hydrogeology of karst aquifers makes the groundwater vulnerable to pollution, and this vulnerability may also be considered a type of geologic hazard.

Figure 4.37 - Karst Potential in Kentucky



Source: Kentucky Geological Survey, 2019

Frequency

A series of maps included in the following pages highlight known mining activity in the GRADD region. Using this data, vulnerability assessments and probability of subsidence events can be produced for the region.

Table 4.23 - Probability of Subsidence in the GRADD Region

County	Probability	Vulnerability
Daviess	Small	Low
Hancock	Small	Low
Henderson	Moderate	Moderate
McLean	Moderate	Moderate
Ohio	Large	High
Union	Large	High
Webster	Large	High

Note: Probability is based on county jurisdiction only. Due to the limited nature of available data, assessing probability for each jurisdiction in the region would be difficult and likely inaccurate. For each county's probability assessment, it is assumed that the hazard event would affect all cities and unincorporated areas of the county in question.

Vulnerability

In December 2001, subsidence affected a nursing home facility in Providence, Kentucky. Residents of the facility faced relocation after several wall and floor cracks were discovered. Neighboring buildings also experienced damages; however, those buildings were not forced to close. During the aftermath of the facility closure, several agencies reported to the site to assess the land and structure. Mapping of the area confirms that mining occurred 320 feet beneath the nursing home facility during the summer of 1977.

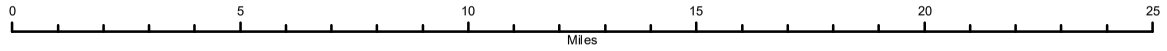
During the summer of 2015, a Walmart Store in Madisonville, KY located in the neighboring Pennyrile Area Development District was forced to build a new store because mine subsidence under the existing store made the building structurally unsafe.

Areas of existing mined out sections pose significant vulnerability to the development above the historic mines. As shown on the following maps, these areas are quite extensive in areas of the GRADD region.

Summary

Land subsidence in Kentucky in the form of karst and mine subsidence is a challenge that requires planners and officials to utilize creative solutions and deep study into land use planning to confront. The most common form of land subsidence in the GRADD region, mind subsidence—a human-caused hazard—is a major hazard in many parts of the region, as shown in the maps. The city of Providence, especially, is at significant risk and officials spend countless hours mitigating future disaster costs as a result.

Daviess County





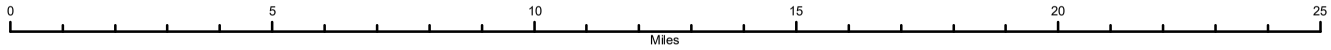
Hazard Type

- Mined Out Areas
- Moderate Karst Potential





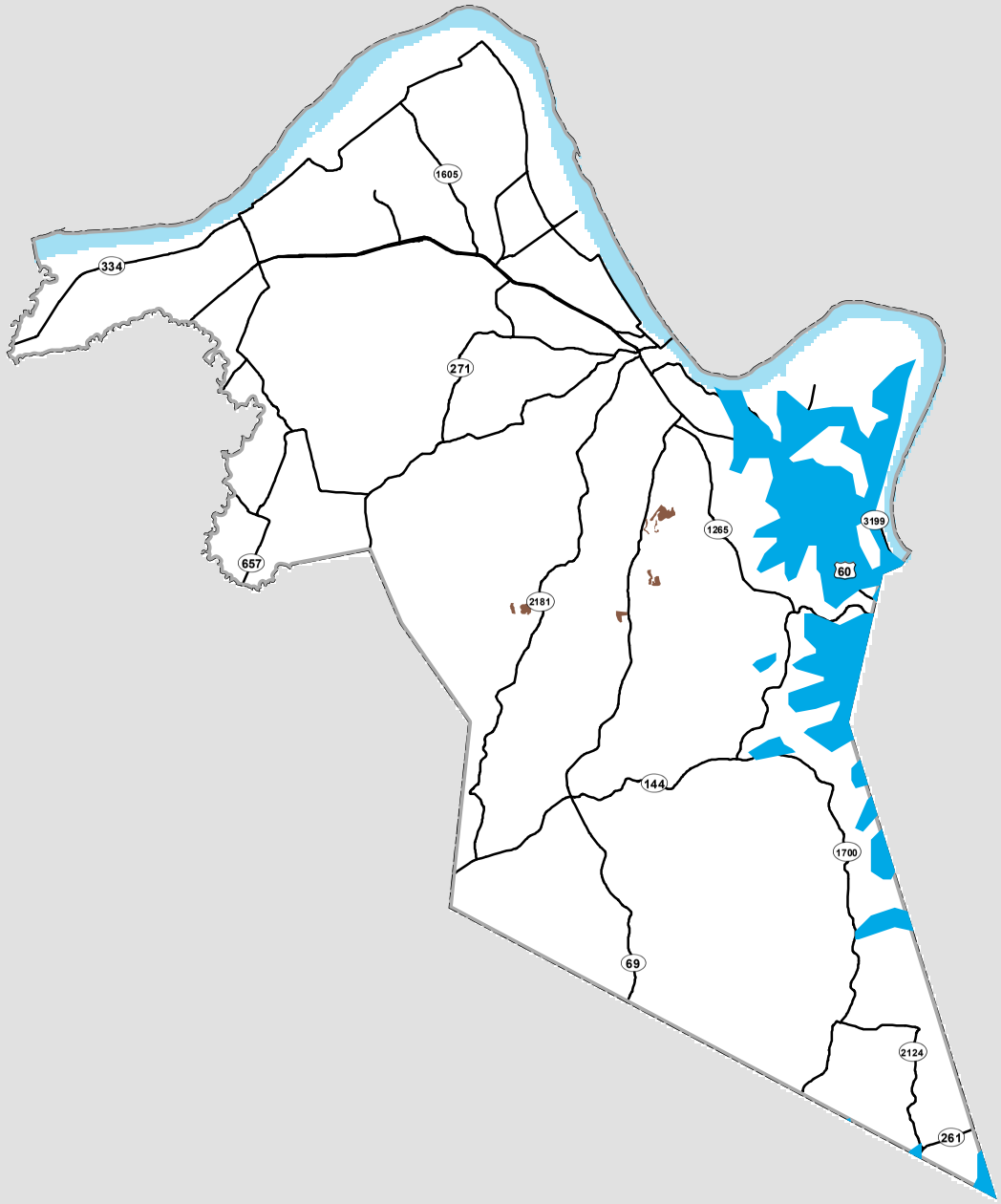
Hancock County

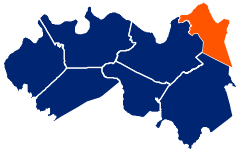




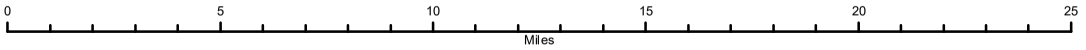
Hazard Type

- Mined Out Areas
- Moderate Karst Potential





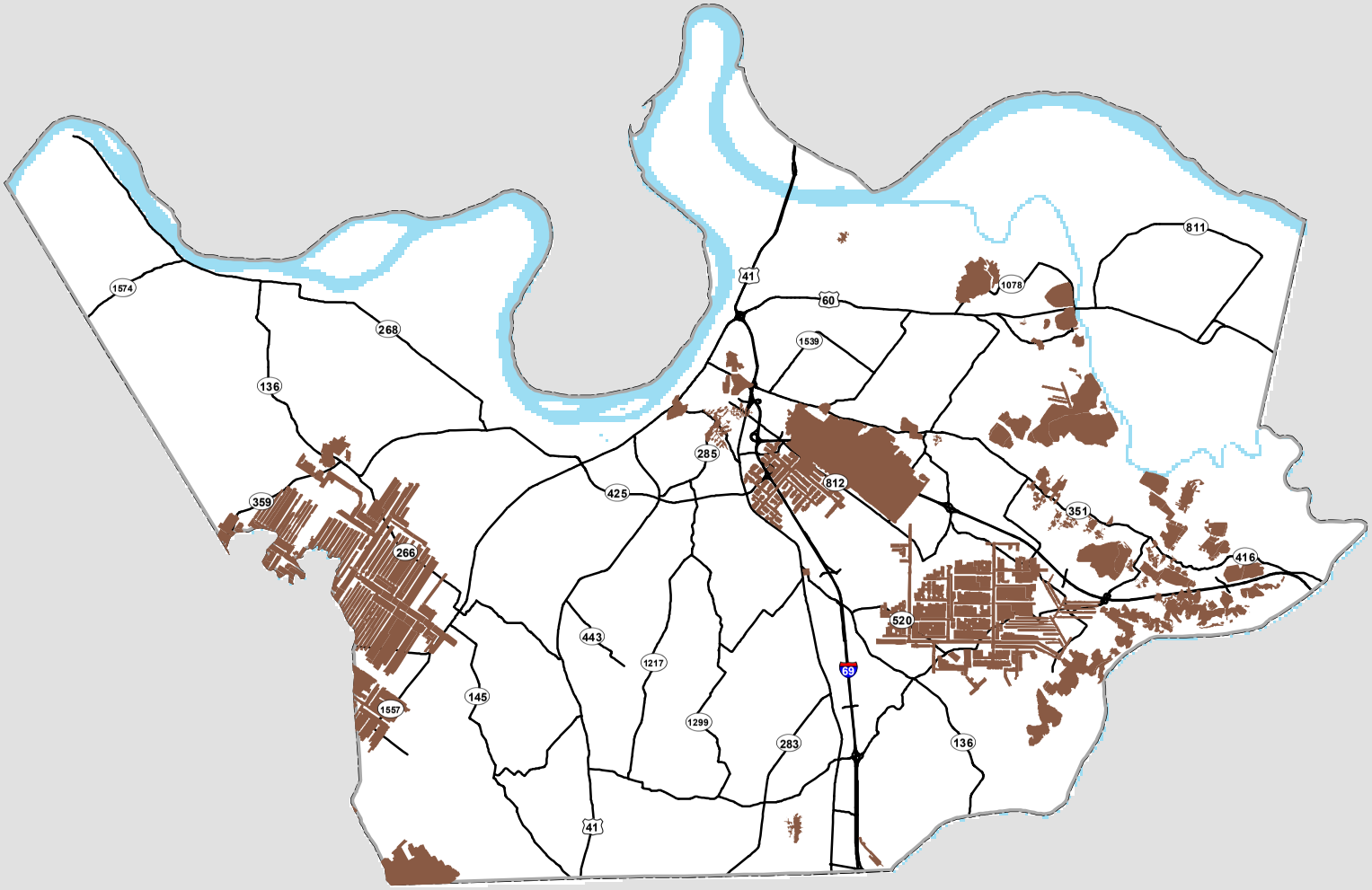
Henderson County

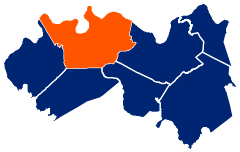




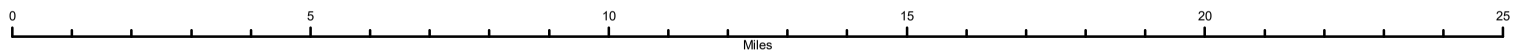
Hazard Type

- Mined Out Areas
- Moderate Karst Potential





McLean County

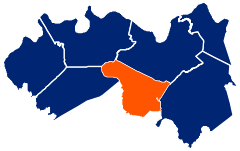




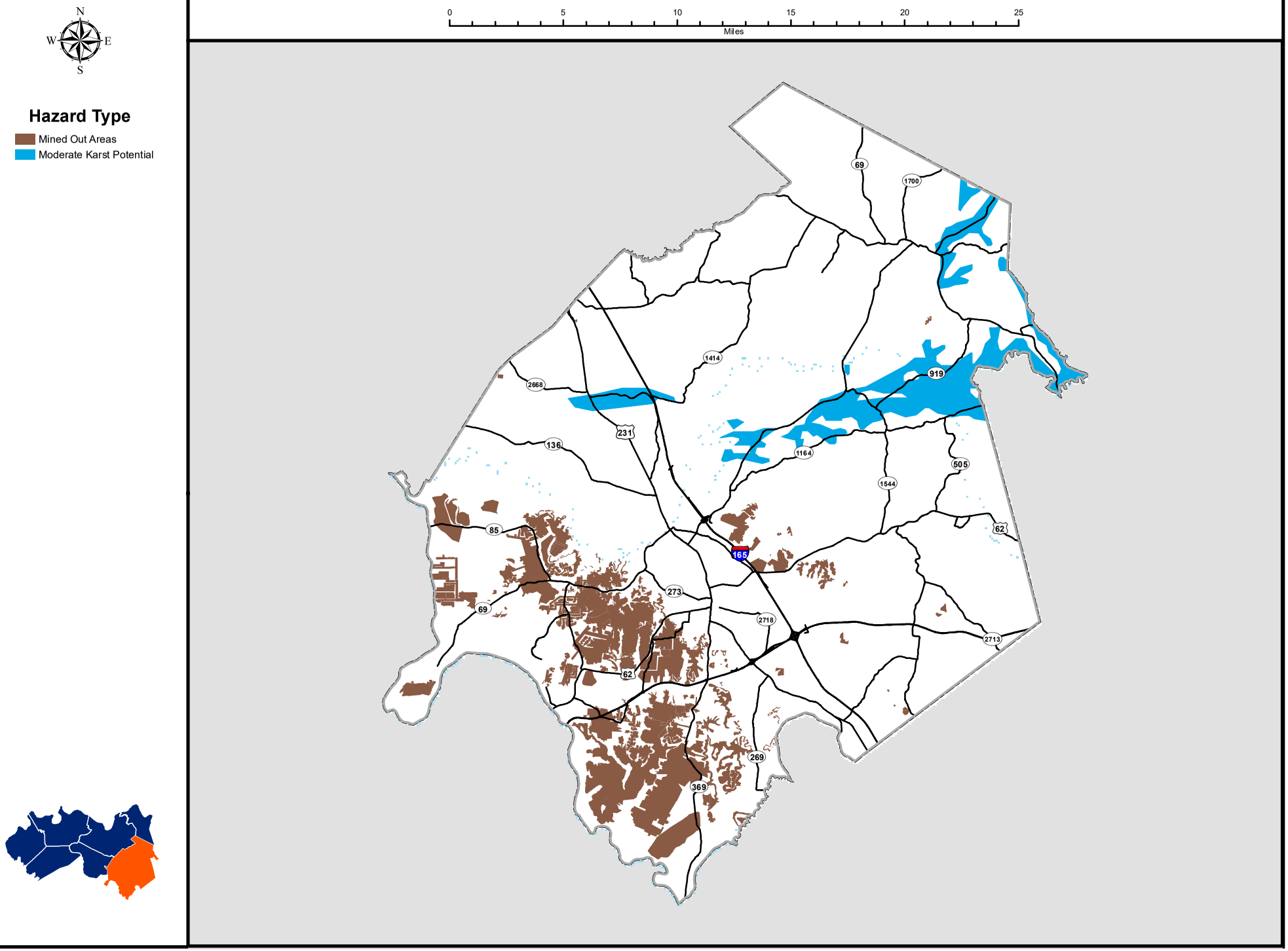
Hazard Type

Mined Out Areas





Ohio County


N
W
E
S
0
5
10
15
20
25
Miles
Hazard Type
Mined Out Areas
Moderate Karst Potential
69
1700
1414
2668
919
231
136
1164
505
1544
85
62
165
273
69
2718
2713
62
269
369

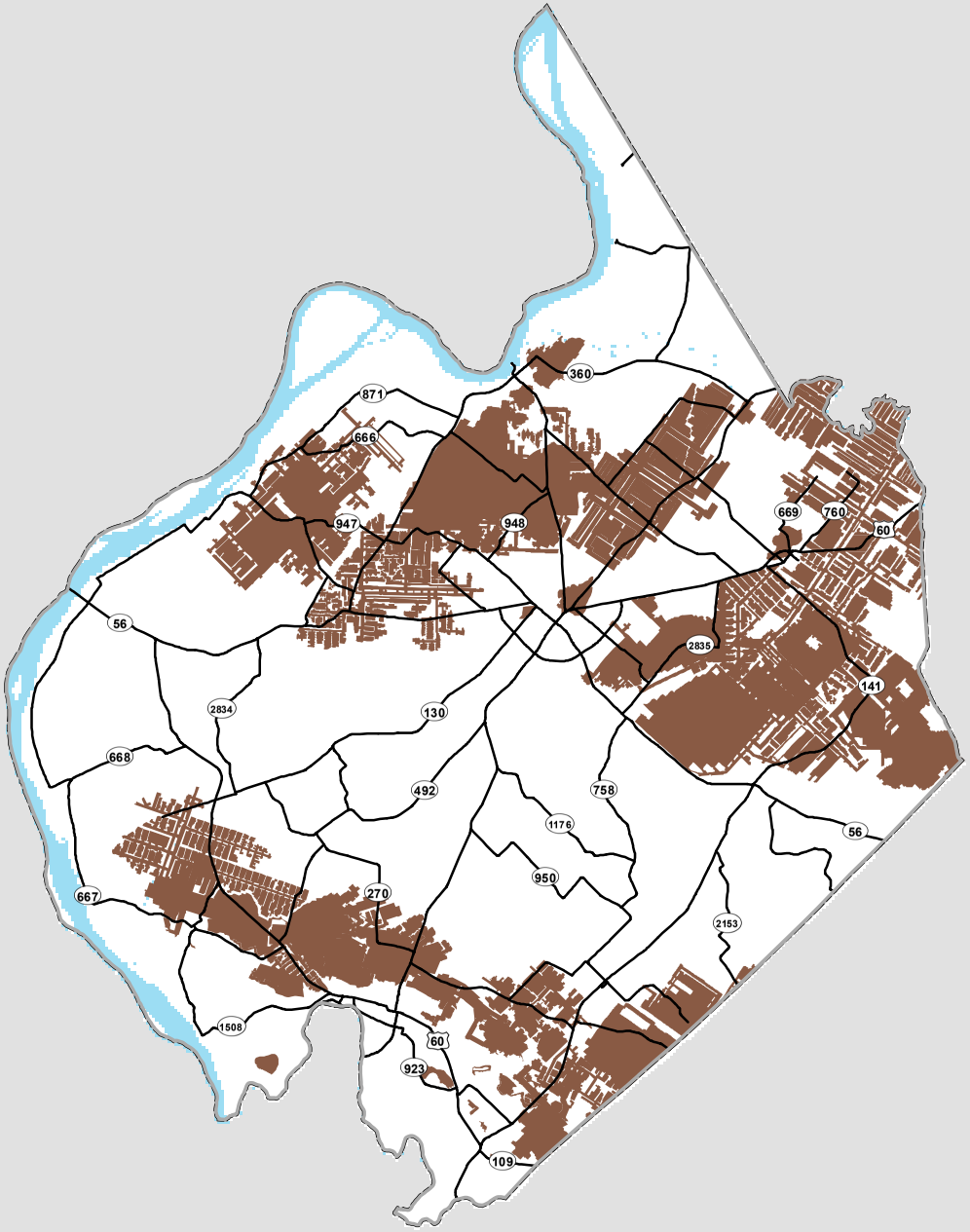
Union County

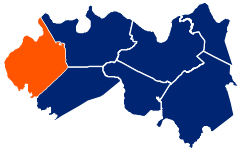




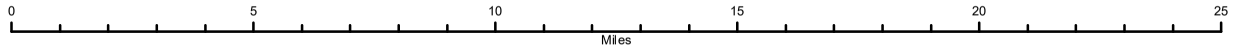
Hazard Type

Mined Out Areas





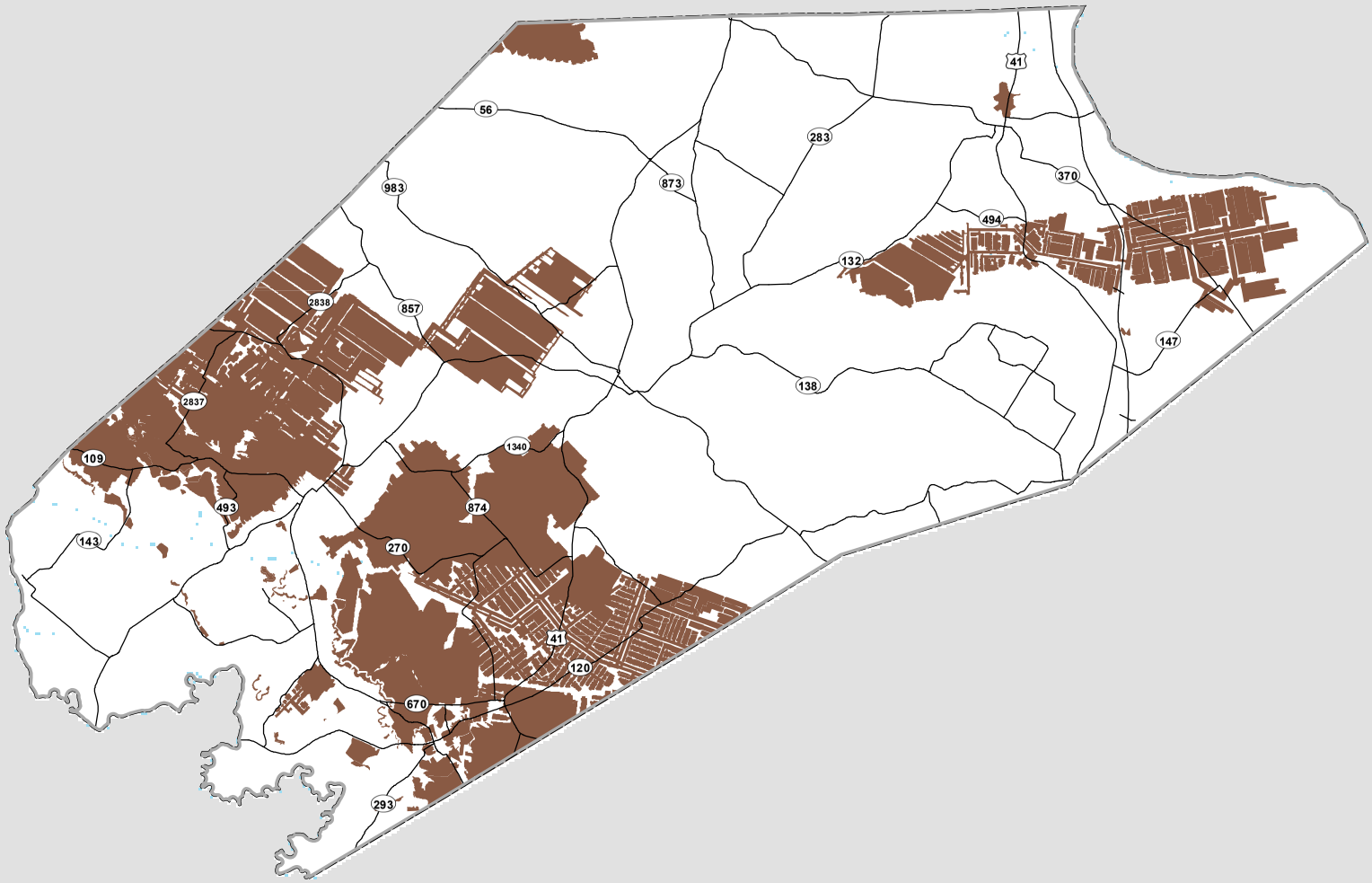
Webster County

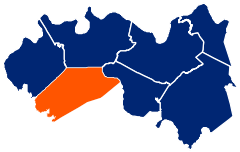




Hazard Type

Mined Out Areas





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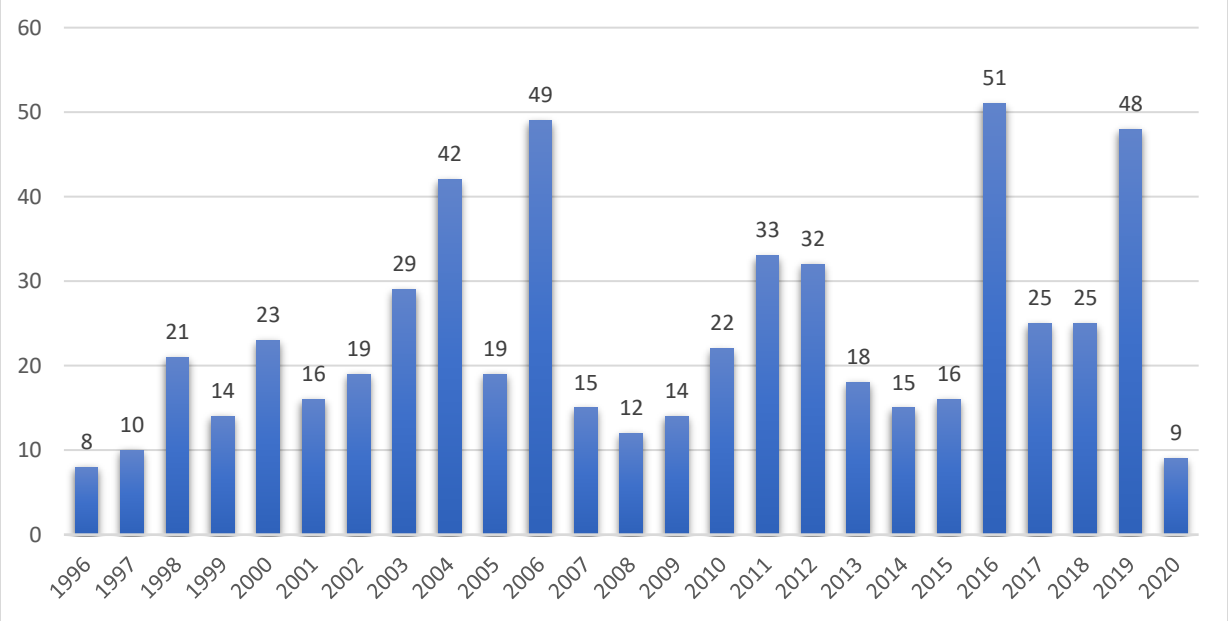
Hazard Profile: Severe Thunderstorm—Hail/Lightning/Wind

This section will highlight severe thunderstorms along with three elements of thunderstorms that produce risk for the GRADD Region. All thunderstorms produce lightning, while some storms can produce damaging hail or winds, which are discussed in this section. Some will produce heavy rain or tornadoes discussed in subsequent sections. The National Weather Service defines a thunderstorm as "severe" if it develops hail at least 1 inch in diameter or larger, gusts of winds reaching 58 mph or higher and/or a tornado. Hail, lightning, and wind produced from thunderstorms generally result in damages to localized areas compared to some other natural weather phenomena. All thunderstorms should be considered dangerous, and caution exercised as resulting damages can be significant.

Thunderstorm

Thunderstorms are very dangerous storms that include lighting and can produce powerful winds over 50 mph, lightning, create hail, cause flash flooding and tornadoes. In most places, they can occur year-round and at any hour. Thunderstorm events are broken down by the subcategories of hail, lightning, and wind. The following chart shows the events each year in the GRADD region since 1996.

Figure 4.38 – Thunderstorm Wind, Hail, and Lightning Events, GRADD Region 1996-2020



Source: National Climatic Data Center (NCDC), 2020

Hail

Hail events in the GRADD region happen regularly, but many times the damages do not result in reported claims. Thirty-five hailstorm events have been recorded in the GRADD region since 1996. Introduced by Jonathan Webb of Oxford, England in 1986, hail events are measured using the TORRO Scale as a means of categorizing hailstorms. The name is derived from his private research body— TORnado and Storm Research Organization. The TORRO Scale measures intensity based on the average diameter of the hail alongside its probable kinetic energy.

Table 4.24 - TORRO Hail Intensity Scale

Category	Intensity	Typical Hail Diameter (mm)	Probable Kinetic Energy2	Typical Damage Impacts
H0	Hard Hail	5	0-20	No damage
H1	Potentially Damaging	43966	>20	Slight general damage to plants, crops
H2	Significant	44124	>100	Significant damage to fruit, crops, vegetation
H3	Severe	20-30	>300	Severe damage to fruit and crops; damage to glass and plastic structures; paint and wood scored
H4	Severe	25-40	>500	Widespread glass damage; vehicle bodywork damage
H5	Destructive	30-50	>800	Wholesale destruction of glass; damage to tiled roofs; significant risk of injuries
H6	Destructive	40-60		Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	50-75		Severe roof damage; risk of serious injuries
H8	Destructive	60-90		(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100		Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open
H10	Super Hailstorms	>100		Extensive structural damage; risk of severe or even fatal injuries to persons caught in the open

Source: Tornado and Storm Research Organization, 2019

Historical Events

May 10, 2016



Figure 4.39 *Photo courtesy of the National Weather Service*

Early in the afternoon on May 10th, a severe storm produced hailstorms and tornadoes and resulted in the most significant property damages from hail for the GRADD region. The severe thunderstorm produced a wide swath of very large hail across western Daviess County. The hail extended as far north as Sorgho, where half-dollar-sized hail fell. On the south side of the swath, golf ball-sized hail was reported on Kentucky Highway 81 near Panther. In total, $10,000 worth of property damage occurred in Webster County, and over $1 million in property damages followed in Daviess County.

Frequency

The following chart reflects the probability for future hail events using the frequency of past events found in 25 years of data. The documented events are divided into the number of years of available data (25), thus creating expected frequency based upon past frequency of events.



Figure 4.40 *Photo courtesy of the National Weather Service*

Table 4.25 "Hail" Event Probability as Frequency of Event Occurrence

County	Documented Events 1996 - 2020	Probability of Future Events	Vulnerability	Associated Damage 1996 - 2020
Daviess	13	1 event every **1.92** years	Moderate	$1,250,000
Hancock	2	1 event every **12.5** years	Low	$0
Henderson	2	1 event every **12.5** years	Low	$0
McLean	1	1 event every **25** years	Low	$0
Ohio	10	1 event every **2.5** years	Moderate	$0
Union	2	1 event every **12.5** years	Low	$0
Webster	5	1 event every **5** years	Moderate	$10,000

Source: National Climatic Data Center, 2020

Lightning

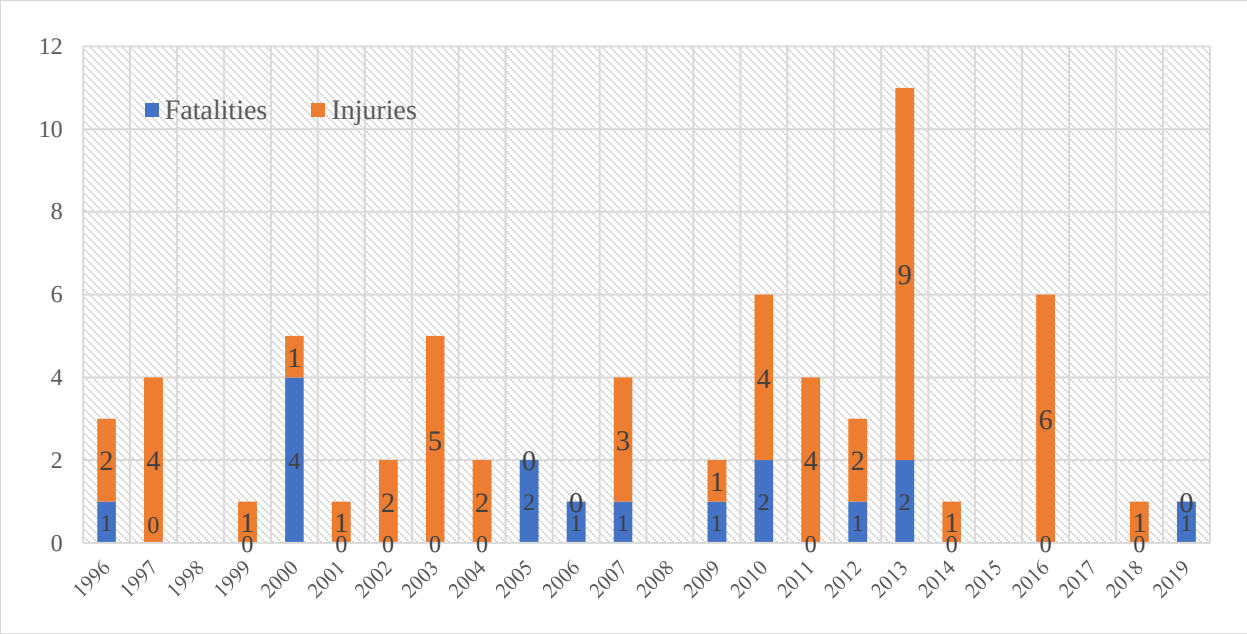


Figure 4.41 *Lightning strikes a tree during a hailstorm in Dixon, KY on March 12, 2020. Photo courtesy of The Weather Channel*

Lightning is one of the oldest observed natural phenomena on earth. It can be seen in volcanic eruptions, extremely intense forest fires, surface nuclear detonations, heavy snowstorms, in large hurricanes and as discussed in this section, thunderstorms. According to the National Oceanic Atmospheric Administration (NOAA), lightning is a giant spark of electricity in the atmosphere between clouds, the air or the ground. In the early stages of development, air acts as an insulator between the positive and negative charges in the cloud and between the cloud and the ground. When the opposite charges build up enough, this insulating capacity of collapsing air creates a rapid discharge of electricity that is known as lightning. The flash of lightning temporarily equalizes the charged regions in the atmosphere until the opposite charges build up again.

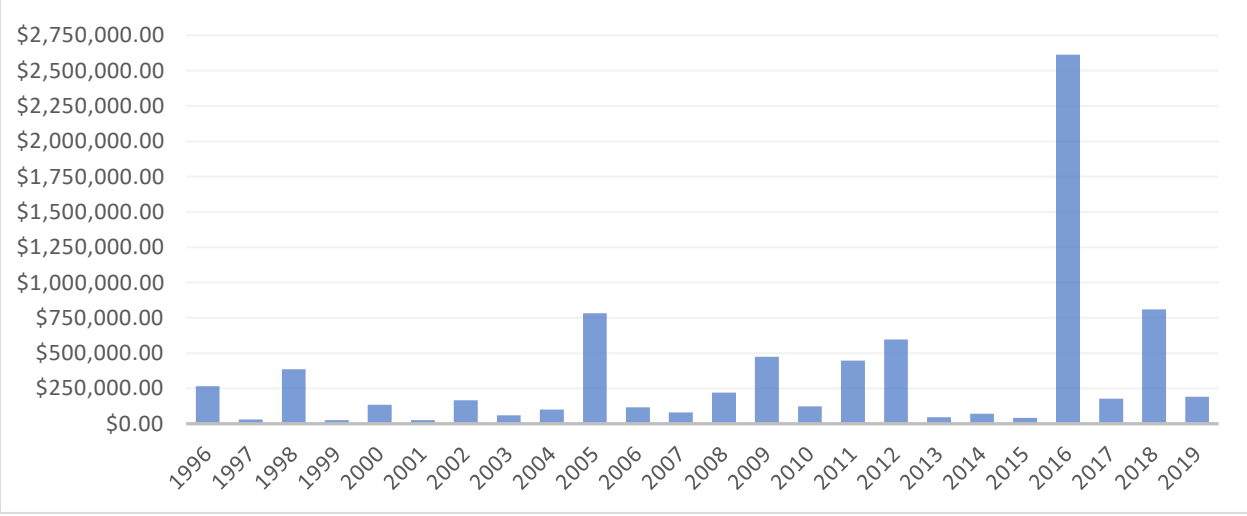
According to Ready.gov, lightning is a leading cause of injury and death from weather-related hazards. In the GRADD region, 2 injuries have been reported along with nearly $330,000 in property damages since 1996. The Commonwealth has experienced a high rate of injury and fatalities, along with significant property damage. The following charts detail that impact throughout the Commonwealth of Kentucky.

Figure 4.42 Kentucky Lightning Event Injuries and Fatalities 1996-2019



Source: National Climatic Data Center, 2019

Figure 4.43 Commonwealth of Kentucky Lightning Events, Property Damage, 1996-2019



Source: National Climatic Data Center, 2019

Historical Events

September 5, 1996

In early September, a five-foot diameter oak tree was struck by lightning and fell on a nearby house, causing extensive damage to the home. No injuries were reported, but nearly $25,000 in damages occurred.

May 25, 2006

Numerous rounds of thunderstorms produced lightning responsible for heavy damage to a six-unit apartment complex in Daviess County. The lightning strike punctured a hole in the roof of one apartment and ignited a fire. Two apartments were heavily damaged, and at least two others had water damage. No injuries were reported, but over $50,000 in damages resulted.

October 6, 2009

A lightning strike produced along a line of isolated thunderstorms ahead of a cold front started a house fire in Owensboro. The lightning struck through a television antenna connected to the back of the house. The antenna and house around it had scorch marks, and there were burns in wet grass around its base. The home sustained heavy smoke and fire damage. A pet cat died as a result, but no injuries were sustained by other occupants of the home. This same storm produced lightning striking a house on U.S. Highway 41-A in the Webster County seat of Dixon. The lightning damaged several appliances. A telephone line was shredded. The bolt exited the house on the back side, ripping pieces of vinyl siding at the exit point. The house sustained unspecified damage inside. Total damages because of the lightning strikes during this storm topped $70,000.

September 25, 2011

Strong to severe thunderstorms embedded within a large area of rain produced a lightning strike in Owensboro that caused two house fires across the street from each other. Damages resulting from these fires totaled $30,000.

July 2, 2012

During the heat of the July afternoon, clusters of thunderstorms developed and produced lightning that struck an oil storage tank, causing a large explosion at the Webster County Airport. The top of one of the tanks landed on U.S. Highway 41-A. Two other tanks at the airport caught

fire. U.S. Highway 41-A was closed for several hours and the explosion damaged power lines at the site, causing an extended power outage. Damages totaled $80,000.

Frequency

The following chart reflects the probability for future hail events using the frequency of past events found in 25 years of data. The documented events are divided into the number of years of available data (25), thus creating expected frequency based upon past frequency of events.

Table 4.26 - Lightning Event Probability as Frequency of Event Occurrence

County	Frequency of Events 1996 - 2020	Probability of Future Events	Vulnerability	Damage Totals
Daviess	12	1 event every 2 years	High	$195,000
Hancock	0	0 events every 25 years	Low	$0
Henderson	3	1 event every 8 years	Moderate	$21,000
McLean	2	1 event every 12 years	Moderate	$12,000
Ohio	1	1 event every 25 years	Low	$0
Union	1	1 event every 25 years	Low	$5,000
Webster	3	1 event every 8 years	Moderate	$100,000

Source: National Climatic Data Center, 2020

Straight Line Winds

The National Severe Weather Laboratory defines damaging winds as “straight-line” winds to differentiate the damage they cause from tornado damage. Most thunderstorm winds that cause damage at the ground are a result of outflow generated by a thunderstorm downdraft. Straight-line winds are classified as those exceeding 50-60 mph and are responsible for most of the damages related to thunderstorms in the GRADD region. Damage from severe thunderstorm winds account for half of all severe reports in the lower 48 states and is more common than damage from tornadoes. Wind speeds can reach up to 100 mph and can produce a damage path extending for hundreds of miles.

Classification

The Beaufort Wind Scale, as shown in the following graphic is used to classify wind speeds. The scale calculates the mean speed over a period of ten minutes and is not used to classify gusts.

Figure 4.44 Beaufort Wind Scale

Beaufort number	Wind Speed (mph)	Seaman's term		Effects on Land
0	Under 1	Calm		Calm; smoke rises vertically.
1	1-3	Light Air		Smoke drift indicates wind direction; vanes do not move.
2	4-7	Light Breeze		Wind felt on face; leaves rustle; vanes begin to move.
3	8-12	Gentle Breeze		Leaves, small twigs in constant motion; light flags extended.
4	13-18	Moderate Breeze		Dust, leaves and loose paper raised up; small branches move.
5	19-24	Fresh Breeze		Small trees begin to sway.
6	25-31	Strong Breeze		Large branches of trees in motion; whistling heard in wires.
7	32-38	Moderate Gale		Whole trees in motion; resistance felt in walking against the wind.
8	39-46	Fresh Gale		Twigs and small branches broken off trees.
9	47-54	Strong Gale		Slight structural damage occurs; slate blown from roofs.
10	55-63	Whole Gale		Seldom experienced on land; trees broken; structural damage occurs.
11	64-72	Storm		Very rarely experienced on land; usually with widespread damage.
12	73 or higher	Hurricane Force		Violence and destruction.

Source: Weather.gov, 2021

Historical Events

The following events and damage estimates were compiled using the NCEI and NCDC databases.

July 21, 1994

Strong winds resulted in damages more than $500,000 in Daviess County. These strong winds blew down trees and resulting power lines, while blowing down structural steel already in place on a construction site in Daviess County.

May 27, 2004

Severe thunderstorms with widespread straight line winds impacted Union, Henderson, and Daviess Counties. A series of intense downbursts with peak winds up to 120 mph struck northern Daviess County. Forty to fifty houses received major damage, mostly due to trees falling on them and another fifty homes received minor damage along with several barns and buildings that were destroyed. Hundreds of downed trees, power lines, and power poles blocked roads throughout the impacted area.

Union and Henderson Counties mainly dealt with widespread tree damage, with trees down across many primary roads, including the main arteries of the Pennyrile Parkway and U.S. Highways 41 and 60. A National Weather Service damage survey estimated peak winds near Geneva in Henderson County were near 75 mph. In Henderson County, 75 mph winds knocked down numerous trees, blew a sunroom off a house and resulted in minor structural damage, such as broken windows and shingles off roofs. A survey of the damage in eastern Henderson County revealed a very short-track tornado near Spottsville.

In Union County, many trees were down in Uniontown and Morganfield, and some power poles were snapped off. Some roof damage occurred at a shopping center on Highway 60 West near Morganfield, as well as two job corps center buildings in the same area. In the same location about a mile west of Morganfield, 50 to 75 trees were down. A garage was damaged in Uniontown. A national Weather Service damage survey indicated peak winds were near 75 mph at Uniontown. Most of the significant damage was in the northern half of Union, Henderson and Daviess Counties, but the winds toppled several trees in extreme northern McLean County at Beech Grove. In total, $3.1 million worth of damage was reported in the GRADD region.

November 6, 2005

Strong winds preceding a cold front impacted the GRADD region, where a 64 mph wind gust was measured by a trained spotter in Dixon, KY (Webster County). Webster County High School, located in Dixon, sustained major damage. A portion of the roof was damaged, as well as several classrooms, an exit door and hallway. Some parts of the school sustained water damage. Numerous trees were blown down, and on Kentucky 132 near Sebree, a mobile home was overturned. Damages of more than $200,000 were reported resulting from the damaging winds.

June 22, 2009

Winds caused substantial damage in downtown Morganfield (Union County). Large trees were uprooted, and roofs were torn off businesses and apartments. Downtown business fronts were damaged and a few partially collapsed. Roof debris became entangled in power lines. Two windows were blown out of a furniture store. Utility poles were snapped. Kentucky Route 56 was closed because of streetlamps on the ground, downed trees and roof debris. A few miles north of Morganfield, strong winds downed a large tree and some tree limbs up to two inches in diameter.

May 25, 2011

Straight line winds destroyed four poultry houses in Webster County, resulting in storm damages exceeding $1 million dollars.

January 22, 2012

Damaging winds preceding a storm system destroyed Two mobile homes were destroyed, and many trees were blown over. One of the mobile homes was abandoned, and the residents of the other were not at home. One of the mobile homes was left in the middle of a road about four miles north of Calhoun (McLean County). Six power poles were blown over on Kentucky Highway 81 about six miles northeast of Calhoun. Kentucky Highway 140 was closed due to power lines and power poles across the road. A barn was destroyed less than a mile from the Daviess County line. The damage swath extended from just north of Calhoun northeast to the Daviess County line. Total damages $125,000.

April 25, 2015

Destructive thunderstorm winds swept across a 16-mile swath of Henderson County crossing directly through the Corydon area. Two mobile homes were destroyed. Two other mobile homes received major damage. At least a dozen houses sustained minor damage, primarily loss of shingles and fascia. Approximately a dozen barns, sheds or garages received roof or siding damage. Dozens of trees were uprooted. About ten power poles were snapped or blown down. Transformers were damaged at a power substation. An elderly woman was transported to the hospital after her mobile home was flipped over and destroyed. The damage area was up to 1.25 miles wide. Peak winds were estimated near 100 mph. Total damages $210,000.

March 31, 2016

A swath of wind damage nine miles long and up to 3.5 miles wide was surveyed by a National Weather Service damage survey team. The swath began on the west side of U.S. Highway 231 near Masonville (Daviess County). This area is the approximately where the EF-1 tornado lifted from the same storm. Utility poles were snapped along U.S. Highway 231. The damage swath continued east to the Whitesville (Daviess County) area, where about a dozen more utility poles and trees were snapped. The heaviest damage was on the west side of Whitesville, where metal roof panels were blown off a metal manufacturing building on Highway 54. A small grain bin was blown about 150 feet. A barn and carport were destroyed, and a recreational vehicle about 30 feet long was overturned. Greenhouses were heavily damaged. At least one of the downed trees and utility poles were blown across a roadway. Peak winds were estimated near 90 mph on the northwest side of Whitesville. Total damages from straight-line winds were $225,000.

November 18, 2017

A microburst, with estimated wind speeds near 75 mph, downed hundreds of trees and limbs in and near Providence in Webster County. Numerous trees were snapped or uprooted. The damage path was approximately 1.25 miles long across the community of Providence. At least 50 homes sustained partial shingle loss or structural damage. A porch was blown off one home. A wall was blown out of a barn. Garage doors were blown in at a residence. Widespread damage was observed across town. Numerous power lines were down, and the entire community of Providence was without power. Damage totals were estimated at $450,000.

May 26, 2019

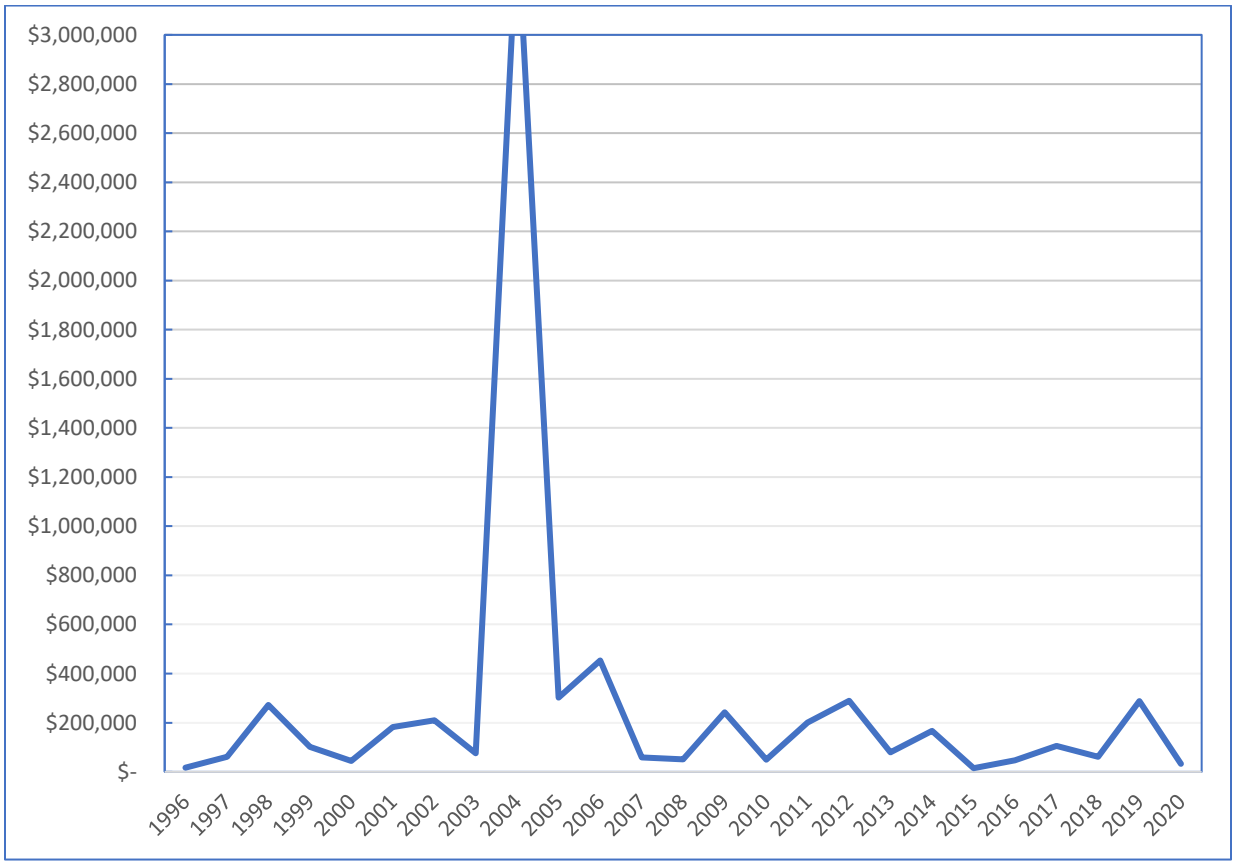
A National Weather Service damage survey determined that a microburst, with peak winds near 90 mph, struck the St. Joseph and West Louisville (Daviess County) areas. The most significant structural damage occurred less than a mile north of St. Joseph, where a storage shed sustained extensive damage. The west-facing wall collapsed inward, despite the presence of hurricane straps. Roofing and roof trusses were blown to the east across County Road 500. A pull-behind covered trailer weighing over 2,000 pounds was pushed about 30 feet. At a house adjacent to the trailer and metal shed, there was partial loss of shingles, along with minor damage to windows, decking and gutters. Some of the damage appeared to be associated with a short, brief gustnado. Elsewhere across the affected area, most of the damage consisted of scattered snapped



Figure 4.45 *Straight Line Wind Damage, Clay, KY. Photo courtesy of Webster County EM Director, Jeremy Moore.*

and uprooted trees. Some trees were several feet in diameter. Several old wooden barns were damaged or destroyed, and a few outbuildings were damaged. A mobile home was unroofed. Over 100 trees were down at a campground on Diamond Lake near West Louisville (Daviess County). A few of the trees landed on campers or vehicles. There were downed power poles and lines. The total length of the damage area was three miles, and the width was about 2.2 miles.

Figure 4.46 Thunderstorm Wind Damage in the GRADD Region 1996-2020



Source: National Climatic Data Center, 2020

Frequency

The following chart reflects the probability for future hail events using the frequency of past events found in 25 years of data. The documented events are divided into the number of years of available data (25), thus creating expected frequency based upon past frequency of events.

Table 4.27 "Thunderstorm Wind" Event Probability as Frequency of Event Occurrence

County	Documented Events 1996 - 2020	Probability of Future Events	Vulnerability
Daviess	111	4.4 events per year	High
Hancock	74	2.96 events per year	Moderate
Henderson	84	3.36 events per year	High
McLean	34	1.36 events per year	Low
Ohio	131	5.24 events per year	High
Union	44	1.76 events per year	Low
Webster	50	2 events per year	Moderate

Source: NCDC Storm Database, 2020

Summary

The frequency of thunderstorm events, their related damages and risks require planning and mitigation efforts to limit their impact. Property damages, injuries and death can and do result from these events; however, the nature of localized impact and storm prediction expanded capabilities allow residents to remain safe and prepare for these events. Officials must ensure residents have access to and participate in the preparations and warnings for these events.

Hazard Profile: Tornado

According to the National Center for Environmental Information, tornadoes are not restricted to a certain geography and have been documented in every U.S. state and on every continent except Antarctica. From the NCEI:

> *Some parts of the world are much more prone to tornadoes than others. Globally, the middle latitudes, between about 30° and 50° North or South, provide the most favorable environment for tornado genesis. This is the region where cold, polar air meets against warmer, subtropical air, often generating convective precipitation along the collision boundaries. In addition, air in the midlatitudes often flows at different speeds and directions at different levels of the troposphere, facilitating the development of rotation within a storm cell. Interestingly, the places that receive the most frequent tornadoes are also considered the most fertile agricultural zones of the world. This is due in part to the high number of convective storms delivering needed precipitation to these areas. Simply because of the large number of convective storms and the favorable environment, the odds are increased that some of these storms will produce tornadoes.*

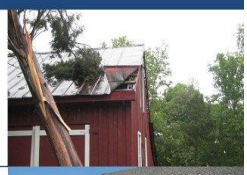
The GRADD region falls in this area prone to tornadoes and although just outside tornado alley, weather patterns are very conducive to tornado production during most months of the year.

Definition & Classification

In 1971, Dr. T. Theodore Fujita of the University of Chicago devised a six-category scale to classify U.S. tornadoes into six damage categories, called F0-F5. F0 describes the weakest tornadoes and F5 describes only the most destructive tornadoes. The Fujita tornado scale (or the "F-scale") has subsequently become the definitive scale for estimating wind speeds within tornadoes based upon the damage caused by the tornado. It is used extensively by the National Weather Service in investigating tornadoes, by scientists studying the behavior and climatology of tornadoes and by engineers correlating damage to different types of structures with different estimated tornado wind speeds.

The EF-scale was unveiled by the NWS to the public and the full meteorological community early in 2006. On February 1, 2007, the Enhanced Fujita scale replaced the original Fujita scale in all tornado damage surveys in the United States. It is important to note despite the improvements, the EF-scale remains a set of wind estimates based on eight levels of damage to 28 different types of structures and vegetation.

Figure 4.47 - Tornado Classification

EF Rating	Wind Speeds	Expected Damage		
EF-0	65-85 mph	'Minor' damage: shingles blown off or parts of a roof peeled off, damage to gutters/siding, branches broken off trees, shallow rooted trees toppled.		
EF-1	86-110 mph	'Moderate' damage: more significant roof damage, windows broken, exterior doors damaged or lost, mobile homes overturned or badly damaged.		
EF-2	111-135 mph	'Considerable' damage: roofs torn off well constructed homes, homes shifted off their foundation, mobile homes completely destroyed, large trees snapped or uprooted, cars can be tossed.		
EF-3	136-165 mph	'Severe' damage: entire stories of well constructed homes destroyed, significant damage done to large buildings, homes with weak foundations can be blown away, trees begin to lose their bark.		
EF-4	166-200 mph	'Extreme' damage: Well constructed homes are leveled, cars are thrown significant distances, top story exterior walls of masonry buildings would likely collapse.		
EF-5	> 200 mph	'Massive/incredible' damage: Well constructed homes are swept away, steel-reinforced concrete structures are critically damaged, high-rise buildings sustain severe structural damage, trees are usually completely debarked, stripped of branches and snapped.		

F SCALE		EF SCALE (U.S.)
F0 • 40–72 mph (64–116 km/h)	light damage	EF0 • 65–85 mph (105–137 km/h)
F1 • 73–112 mph (117–180 km/h)	moderate damage	EF1 • 86–110 mph (138–178 km/h)
F2 • 113–157 mph (181–253 km/h)	considerable damage	EF2 • 111–135 mph (179–218 km/h)
F3 • 158–207 mph (254–332 km/h)	severe damage	EF3 • 136–165 mph (219–266 km/h)
F4 • 208–260 mph (333–419 km/h)	devastating damage	EF4 • 166–200 mph (267–322 km/h)
F5 • 261–318 mph (420–512 km/h)	incredible damage	EF5 • over 200 mph (over 322 km/h)

Source: National Weather Service, 2020

Notable Events in the GRADD Region

The following events and damage estimates were compiled using the NCDC and NCEI database.

January 3, 2000

During the afternoon of January 3, severe storms struck the Commonwealth. Two F3 tornadoes generated in western Kentucky during this event. One of these tornadoes moved through Daviess County and the city of Owensboro. The tornado developed near Rome, Kentucky, moving across the southern portion of the Owensboro-Daviess County Regional Airport before entering the heart of the city of Owensboro. The National Weather Service estimated that the storm's peak winds reached upwards of 180 mph. As the storm moved through Daviess County and Owensboro it caused extensive damage. Twelve hundred homes and businesses sustained varying degrees of damage. One hundred and one homes were destroyed while 573 sustained major damage. The storm resulted in 18 injuries and no fatalities.

April 28, 2002

Severe storms developed in western Kentucky, generating tornadoes in the process. One tornado struck the GRADD region, traveling through southern Webster County before entering Hopkins County. In Webster County, the storm produced major damage as the storm paralleled KY 120 through the city of Providence. While traveling through Providence, the storm was rated at F3 intensity. Roughly two dozen people were injured by the storm in Webster County. The storm destroyed 16 mobile homes and ten permanent homes. One hundred additional homes were damaged because of the storm. Upon entering Hopkins County, the storm caused significant damage to 10-15 additional residences.

May 11, 2003

In May 2003, a series of tornado outbreaks occurred, spawning over 400 tornadoes across 19 US states and one Canadian province. Kentucky was one of the states affected with several tornadoes during the outbreak, including one in the GRADD region. On Sunday May 11, the town of Sacramento in McLean County was struck by an F3 tornado. This tornado left a swath of damage 80 yards wide and one and ¾ miles long. Two minors were injured, and three homes were severely damaged by the storm. In addition, numerous barns, sheds and other structures were also damaged or destroyed.

November 6, 2005

This tornado caused limited damage in the GRADD region and was mainly confined to Ellis Park. The tornado's proximity to the region, Evansville's impact on the GRADD region and the tornado's effect on communities throughout the region warrant discussion of this event.



Figure 4.48 *The only known photograph of the 2005 tornado, taken here from Deaconess Hospital in Evansville. Photo Courtesy of the National Weather Service*

During the middle of a Sunday night, an F3 tornado touched down near Smith Mills in Henderson County. The tornado moved northwest, snapping trees, throwing a pickup truck and destroying a house in its path. The tornado crossed the Ohio River and tore through Ellis Park, causing extensive damage to the grandstands and killing horses stabled there. The tornado crossed the Ohio River again and tore through the Eastbrook Mobile Home Park, killing 20 people and destroying 100 homes while damaging another 125. Firsthand accounts of the damage and destruction encountered in that mobile home park led communities to change the way they considered community safe rooms and to explore the commitment to funding them. In total, this deadly tornado had winds of 200 mph caused over $80 million in damages in Kentucky and Indiana and was responsible for 24 fatalities and 238 injuries. The time of the storm, approximately 2 a.m. contributed to the impact. This impact resulted in GRADD communities to significantly increase spending on warning sirens and notification improvements for residents.



Figure 4.49 *Damage from the 2005 Tornado. Photo courtesy of the National Weather Service*

October 18, 2007

A cold front swept east across the Mississippi Valley causing several rounds of scattered thunderstorms developing late in the afternoon. The storms organized into supercells and short lines during the evening. A dozen tornadoes occurred in western Kentucky. The Paducah National Weather Service office issued over 130 warnings in Western Kentucky and Southern Illinois on Thursday. The EF2 tornado first touched down in McLean County near Beech Grove. Fifteen agriculture buildings were damaged, and eight barns were destroyed. Four houses received damage while one home was nearly demolished. A garage and several vehicles were damaged beyond repair. Numerous trees and power lines were out of commission. The tornado continued its path into Daviess County. In Daviess County, approximately 12 homes were destroyed, and 150 others were damaged. Residential structures sustained about $1 million in damage. An additional 20 commercial and public buildings were destroyed or condemned, including churches and schools. Damages were estimated near $10.5 million.

First Christian Church suffered severe damage, as shown at right. One hundred twenty-five people were in the church at the time of the collapse, but all moved to the basement minutes before the storm hit, sparing anyone from death or serious injury. Four persons were injured in the West Louisville area when their mobile home was destroyed. A man was injured after being trapped in his overturned mobile home. Almost every building at Brescia University was damaged, and the most serious damage was in a 15 square block area downtown. A motel was heavily damaged, with nearly the entire roof blown off. Several guests at the motel were treated for injuries, mostly abrasions from falling debris. Peak winds were estimated at 155 mph where the EF-3 damage occurred in downtown Owensboro.

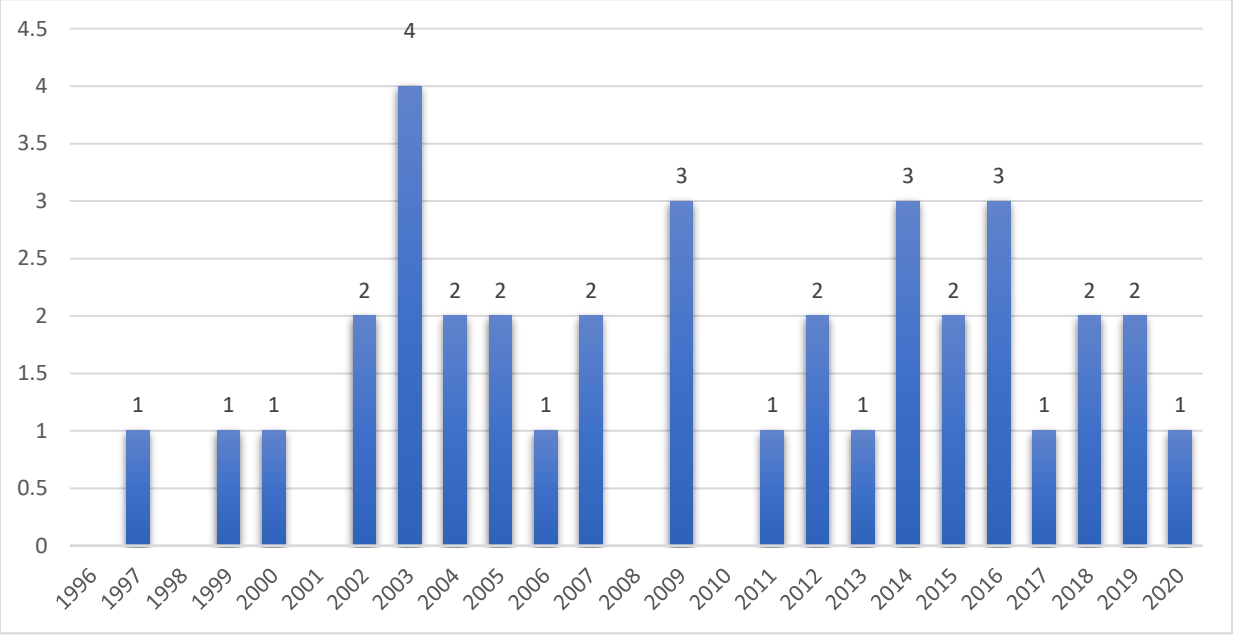


Figure 4.50 *First Christian Church. Photo courtesy of the National Weather Service*

April 22, 2011

Severe thunderstorms produced damaging winds and tornadoes. An F2 tornado was recorded that night around 10 p.m. moving from Union County through Webster and Henderson Counties before weakening to an F0 in Daviess County. Peak winds were estimated near 125 mph. Several grain bins and barns were destroyed along the Union/Webster County line at Highway 56. Dozens of trees were uprooted and snapped. The tornado entered Webster County along Highway 56 and exited into Henderson County near Poole. While over Webster County, roofs were completely removed from three homes on the north and west side of Poole. Several homes and garages suffered partial loss of shingles and damage caused primarily by falling trees. In Henderson County, a barn and garage were destroyed southwest of Robards. Dozens of trees were snapped or uprooted.

Table 4.28 - Tornado Events in the GRADD Region 1996-2020



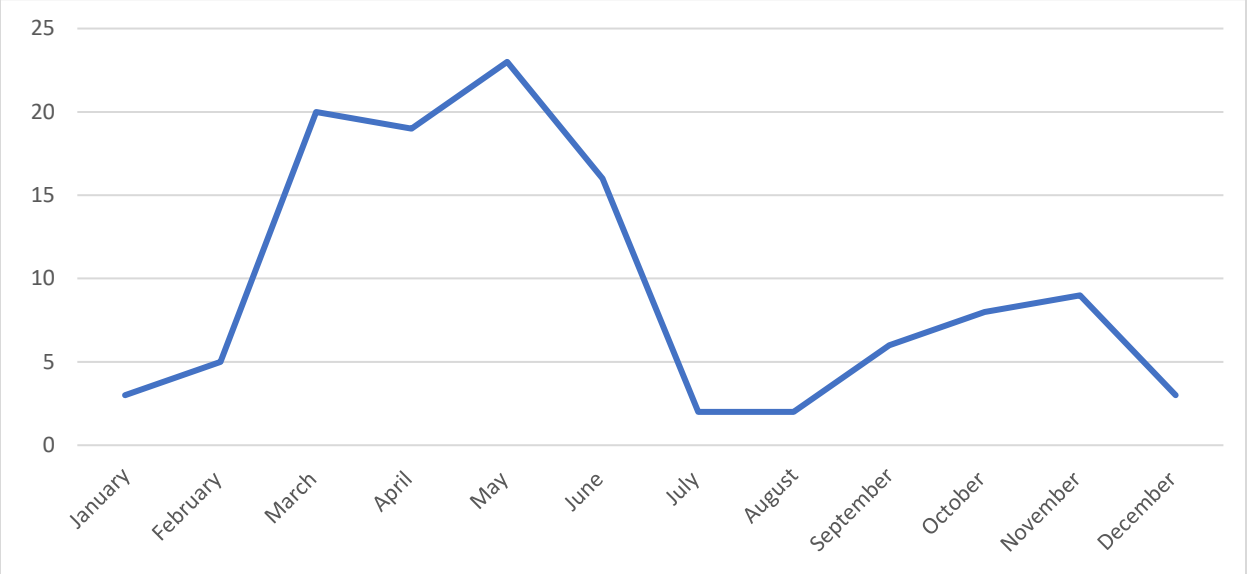
*Source***:** *National Climatic Data Center, 2020*

Table 4.29 - Tornado Event Impact by Year, GRADD Region 1996-2020

Year	Highest Magnitude	Injuries	Property Damage
1999	F1	2	$200,000
2000	F3	18	$66,400,000
2002	F3	26	$16,500,000
2003	F3	4	$2,575,000
2004	F1	0	$195,000
2005	F3	0	$7,178,000
2006	F1	0	$225,000
2007	EF3	0	$15,253,000
2008	F1	0	$500,000
2009	EF3	2	$640,000
2011	EF2	2	$883,000
2012	EF2	3	$170,000
2013	EF3	0	$750,000
2014	EF1	0	$104,000
2015	EF0	0	$20,000
2016	EF1	0	$450,000
2017	EF1	1	$250,000
2018	EF1	0	$409,000
2019	EF1	1	$78,000
2020	EF2	0	$503,000
Total		**59**	**$113,283,000**

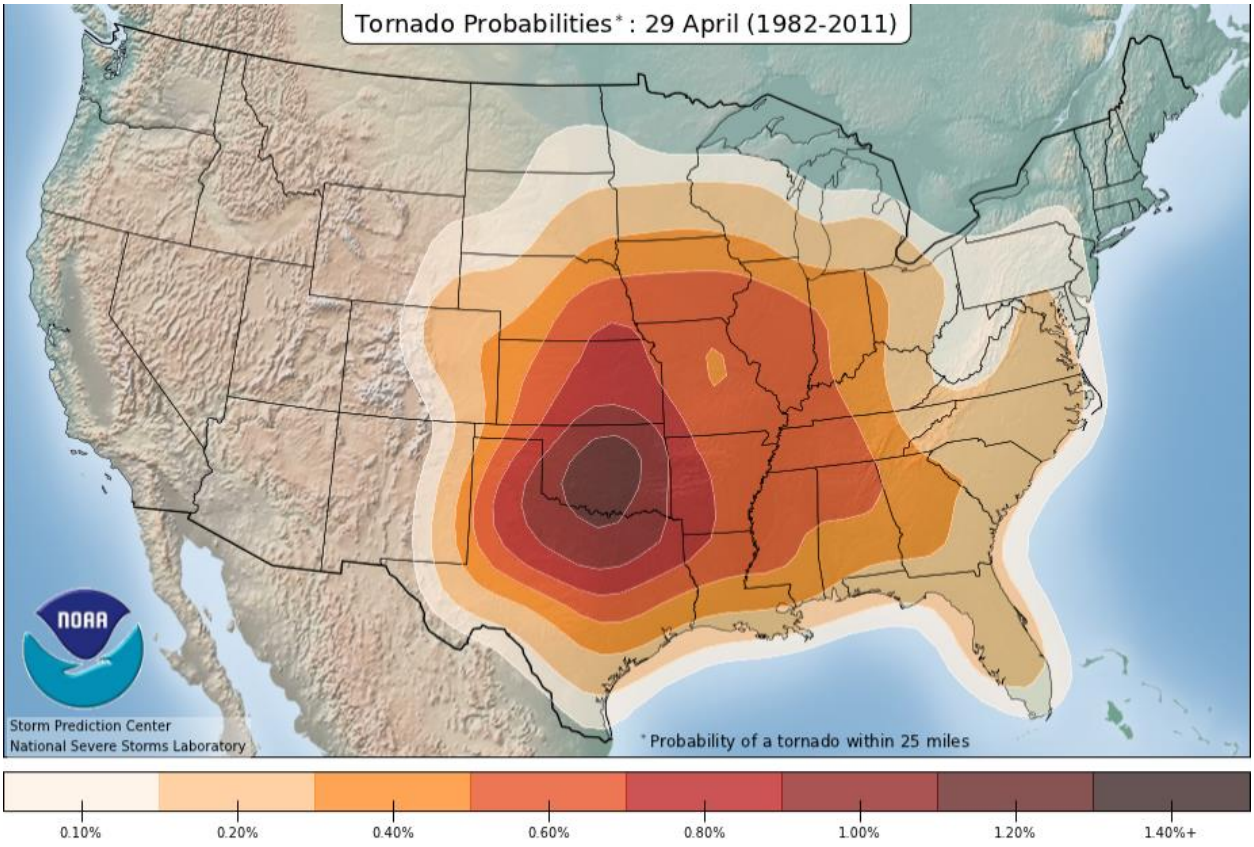
*Source***:** *National Climatic Data Center, Storm Events Database, 2020*

Figure 4.51 - GRADD Region Tornadoes Distributed Historically By Month



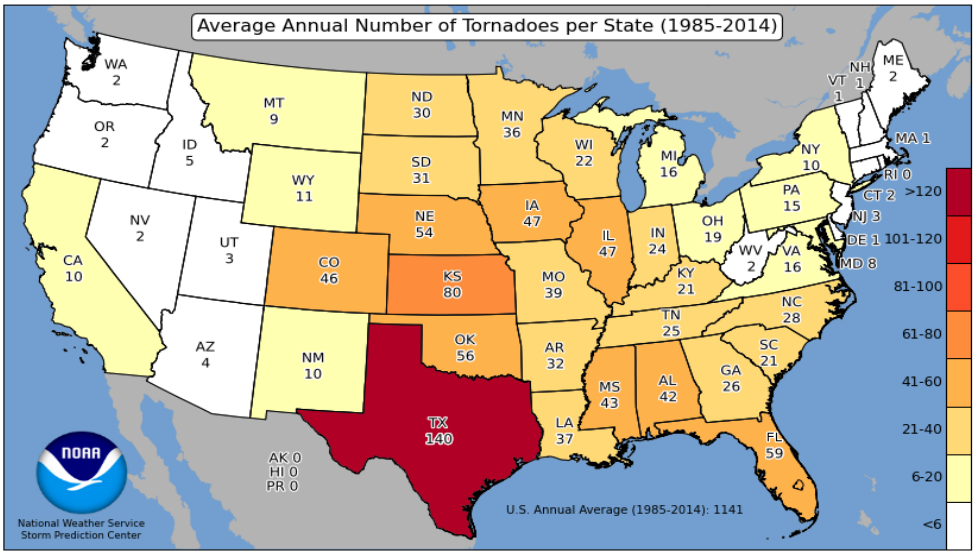
*Source***:** *SHELDUS, 2020*

Figure 4.52 - Tornado Historic Probability for the Month of April



Source: NOAA, 2020

Figure 4.53 - Average Number of Annual Tornadoes



Source: National Weather Service Storm Prediction Center, 2014

Frequency

The following chart reflects the probability for future hail events using the frequency of past events found in 25 years of data. The documented events are divided into the number of years of available data (25), thus creating expected frequency based upon past frequency of events.

Table 4.30 - Tornado Event Probability as Frequency of Event Occurrence

County	Documented Events 1996 - 2020	Probability of Future Events	Vulnerability
Daviess	13	1 event every 2 years	High
Hancock	3	1 event every 8 years	Moderate
Henderson	14	1 event every 2 years	High
McLean	5	1 event every 5 years	Moderate
Ohio	4	1 event every 6 years	Moderate
Union	9	1 event every 3 years	High
Webster	15	1 event every 1.5 years	High

Source: National Climatic Data Center, Storm Events Database, 2019

Summary

The Green River Area Development District lies just outside the area of the country commonly known as tornado alley, but the region is still a vulnerable area for the destruction caused by tornadoes. The historical tornado events that have occurred throughout the GRADD region make these storms a priority for officials to reduce future impacts.

Hazard Profile: Severe Winter Storm

Severe winter storms that affect GRADD's seven counties do not typically account for as many recorded damages as some other hazards. The exception is the 2009 Ice Storm which will be discussed in detail, but the impact severe winter storms have stretches beyond pure financial numbers. As will be noted throughout this hazard profile, severe winter storms can impact all areas of life over a substantial geographic region.

Definition & Classification

A Winter Storm is defined by the NCEI as a winter weather event that has more than one significant hazard (i.e., heavy snow and blowing snow; snow and ice; snow and sleet; sleet and ice; or snow, sleet and ice) and meets or exceeds locally/regionally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements. Normally, a Winter Storm would pose a threat to life or property.

Blizzards are dangerous winter storms that are a combination of blowing snow and wind resulting in very low visibility. While heavy snowfalls and severe cold often accompany blizzards, they are not required. Sometimes strong winds pick up snow that has already fallen, creating a ground blizzard. This incident happened with the Blizzard of '78 where hurricane force winds took existing snow and created snow drifts eight feet high.

An ice storm is a storm which results in the accumulation of at least .25" of ice on exposed surfaces. They create hazardous driving and walking conditions. Tree branches and power lines can easily snap under the weight of the ice. The Ice Storm of 2009 served as a benchmark of sorts for local and state officials along with residents impacted by the storm. Many processes and protocols changed after the Ice Storm to incorporate issues discovered that were not known before the ice fell.

Regional Snowfall Index (RSI)

The Regional Snowfall Index (RSI) helps improve public understanding about the impacts associated with snowstorms, ranking snowstorm impacts on a scale from 1 to 5, like the Fujita scale for tornadoes, except that the RSI includes population factors in the indices. RSI is based on the spatial extent of the storm, the amount of snowfall and the juxtaposition of these elements with population. Including population information ties the index to societal impacts.

Table 4.31 - Regional Snowfall Index Chart (RSI)

Category	RSI Value	Description	Example
1	1–3	Notable	February 2008
2	3–6	Significant	March 1996
3	6–10	Major	January 1994
4	10–18	Crippling	December 2004
5	18.0+	Extreme	Blizzard of ‘78

Source: NCDC.NOAA.gov, 2020

Watches & Warnings

The following weather notices related to Severe Winter Storms are described according to the National Severe Storms Weather Library.

Blizzard Warning: Issued when winds of 35 mph or greater are combined with blowing and drifting snow with visibilities of ¼ mile or less. Seek indoor shelter immediately and stay indoors until the severe conditions end.

Winter Storm Warning: Issued when a combination of hazardous winter weather in the form of heavy snow, heavy freezing rain or heavy sleet is imminent or occurring. Winter Storm Warnings are usually issued 12 to 24 hours before the event is expected to begin.

Winter Storm Watch: Issued 12-48 hours in advance of the onset of severe winter conditions. The watch may or may not be upgraded to a winter storm warning, depending on how the weather system moves or how it is developing.

Winter Storm Outlook: Issued prior to a Winter Storm Watch. The Outlook is given when forecasters believe winter storm conditions are possible and are usually issued three to five days in advance of a winter storm.

Winter Weather Advisories: Issued for accumulations of snow, freezing rain, freezing drizzle and sleet which will cause significant inconveniences and, if caution is not exercised, could lead to life-threatening situations.

Notable Event Narratives

These events were compiled from the NCEI and NCDC database.

January 23-28, 1978

The legendary "Blizzard of '78" crippled much of the Midwest. Due to the constant cold during the month of January, much of the snow that had fallen during the month was still on the ground at the start of the blizzard, seven inches in many areas. On the morning of the 25th, more snow fell and added four additional inches to the snowpack. Near hurricane strength winds pushed the heavy snowfall into eight-foot drifts that closed roads, trapping drivers on the roads and employees at businesses. A state of emergency was issued for nearly the entire Commonwealth. Residents and businesses across the region were crippled for days. Many residents were trapped in their homes for two to three days due to the snow drifts. Many businesses were closed for at least two days and schools were out of session for at least a week.

Wind chills dropped to -50 below zero in some areas of the tri-state. A firsthand account from a hazard mitigation community meeting told of the difficulties faced due to the extreme cold. On school buses the day before the blizzard, the temperature dropped more than 30 degrees from the time students were picked up on rural routes until a radio message was sent to bus drivers notifying of school closings. Buses turned around and started dropping students back at home.

January - February 1994

The months of January and February 1994 produced several events that could individually be included on this list of historic events but together shaped a very difficult winter for the entire area. While these storms were not responsible for significant property damages, they were debilitating and combined, resulted in a difficult time for residents throughout Kentucky. Bitter cold temperatures in the week leading up to the night of January 16th included some nighttime temps up to -20 degrees below zero, and the town of Shelbyville, KY set a record with a low temperature of -37 degrees below zero in the Commonwealth.

The cold air and resulting ground temperature increased the hazards from the snow produced during the night of January 16th, some at a rate of three inches per hour. On the morning of January 17th, residents across the region awoke to 17 inches of snow. The bitter cold made salt ineffective and treatment of roads impossible. The heavy snow and ice weighed down trees and powerlines, resulting in power outages for thousands of homes across the region. All travel was halted due to the snow amounts and cold temperatures. The record cold and snow totals rendered much of the state immobile for the next week.

Though a near record high of 72 degrees on February 8th, a cold front moved through that night and brought heavy precipitation with it. Cold temperatures again led to the heavy precipitation freezing on contact and by the end of the precipitation on the 11th of February, some areas saw two inches of ice. Across the state, over 200,000 people were without power. Substations were frozen and power lines draped across roadways, making travel impossible. In areas just south of the GRADD region, power was out for as long as two weeks.

March 19, 1996

A late winter storm produced heavy wet snow and strong winds with snowfall accumulations between eight and twelve inches in a band from Hopkinsville to Owensboro and Henderson. Drifts to three or four feet were common, with up to six-foot drifts in the Henderson and Owensboro areas. This heavy snow and strong winds brought down trees and power lines and forced emergency shelters to open due to widespread power outages and loss of heat. Counties were declared under a state of emergency and National Guard troops were dispatched to rescue snowbound people in remote areas. Roads, especially county roads, were impassable due to abandoned vehicles, deep drifts, or downed tree limbs. Over 150 vehicles were abandoned in Daviess County. By March 24th, power had been restored to nearly all areas and the emergency shelters were able to close.

December 22, 2004

A record-setting winter storm dumped up to 18 inches of snow across western Kentucky. Some local areas along the river receiving up to 22.5 inches, as measured in Lewisport on December 23rd. The snow fell in two waves, the first during the early and mid-morning hours and the second from mid-afternoon through midnight. Gusty north winds up to 35 miles per hour caused snow drifts up to five feet in open, rural areas and made roads impassable

Governor Fletcher declared a state of emergency. Near blizzard conditions made travel impossible. Vehicles were abandoned on roads across western Kentucky. Mail delivery was suspended in most areas for at least one day. The Owensboro and Paducah Airports were closed for a day. Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as 8 below zero on Christmas morning.

Total damages for the storm were not significant as compared to other events but still were costly at $40,000. These damages included two commercial buildings in Owensboro where roofs collapsed due to heavy snow. Perhaps the most crippling aspect of this event was its timing. Since it occurred right before the Christmas holidays, many commercial businesses lost millions of last-minute customers. Local businesses lost up to 80 % of their expected Christmas sales due to the storm.

February 11, 2008

Low pressure system across the Great Plains causing widespread heavy precipitation combined with a high-pressure system over the Ohio Valley resulted in a paralyzing ice storm. It produced up to one inch of ice along with two to four inches of sleet and snow. Ice destroyed many trees and power lines and caused power outages across western Kentucky lasting up to a week for some areas. Damages were recorded at $1,500,000 for the GRADD region, according to the NCEI Database.



Figure 4.54 *Crews clean the Morganfield Branch following the 2008 Ice Storm. Photo Courtesy of CSX.*

January 26, 2009

The historic Ice Storm was called the biggest disaster in modern Kentucky history by Governor Steve Beshear. The ice storm began the evening of January 26th as light freezing rain, which changed over to sleet and then snow, accumulating up to six inches in some parts of Kentucky. The following day it changed back to freezing rain. The storm ended with a few hours of snow, accumulating up to six inches in some areas. Across the GRADD region, liquid equivalents from three to four inches were common, including two inches of ice. Combined with cold temperatures and gusty winds, the days following the ice storm became a benchmark for storm preparations and response.

The storm caused Kentucky's largest power outage on record, with 609,000 homes and businesses without power across the Commonwealth, including 100,000 without power for over one week. By late evening January 27th, 90 % of western Kentucky was without power. Utility companies reported damage to utility infrastructure in western Kentucky. One utility reported over 20 % of its infrastructure required rebuilding. At least 5,000 poles had to be replaced or reconstructed. By February 4th, most residents in cities had power restored. However, residents of rural areas would see power outages remain—several thousand customers in rural counties remained without power three weeks after the storm.



Figure 4.55 *Photo courtesy of OwensboroRadio.com*

Thousands of people stayed in shelters during the cold days and nights after the storm. Several hundred people stayed at a shelter in Owensboro. Dozens of house fires were sparked by alternate heat sources or electrical problems. Phone and internet communication were lost in the days following the storm. Both land line and cell phone service were sporadic. Many cell phone towers were damaged or inoperable due to power outages. Due to power outages, water and sewer plants were inoperable for a time. Tap water was not available in some communities. Many radio stations were off the air due to power outages. Damage to trees from the storm remained visible for years.



Figure 4.56 *Photo courtesy of The Gleaner*

In the days immediately after the precipitation ended, gasoline and kerosene were difficult to obtain. At open stores, gasoline and kerosene pumps were inoperable, and reserves were inaccessible. These fuel reserves were identified during community meetings as presenting significant challenges to cleanup and recovery for local officials. Equipment and vehicles could not run without being able to access fuel supply.

National Guard troops were called to assist with food and water distribution at shelters. Troops helped clear roads, enforced curfews and conducted door-to-door welfare checks. More Kentucky National Guard troops were activated for this storm than the 1997 floods.

The ice storm killed 65 people nationwide, 35 of those in Kentucky. Eleven deaths were also indirectly attributed to the ice storm. Ice storm damages totaled $59,000,000 throughout the GRADD region, but local officials say that number does not account completely for the destruction caused by this storm. Impacting parts of Oklahoma, Arkansas, Missouri, Illinois, Indiana, Ohio, West Virginia and Kentucky, the 2009 Ice Storm serves as a benchmark in operations and procedure preparations for emergency planning, response and recovery, utility operations and commerce. The standard of service and planning changed following the 2009 Ice Storm and altered the way disaster is prepared for.

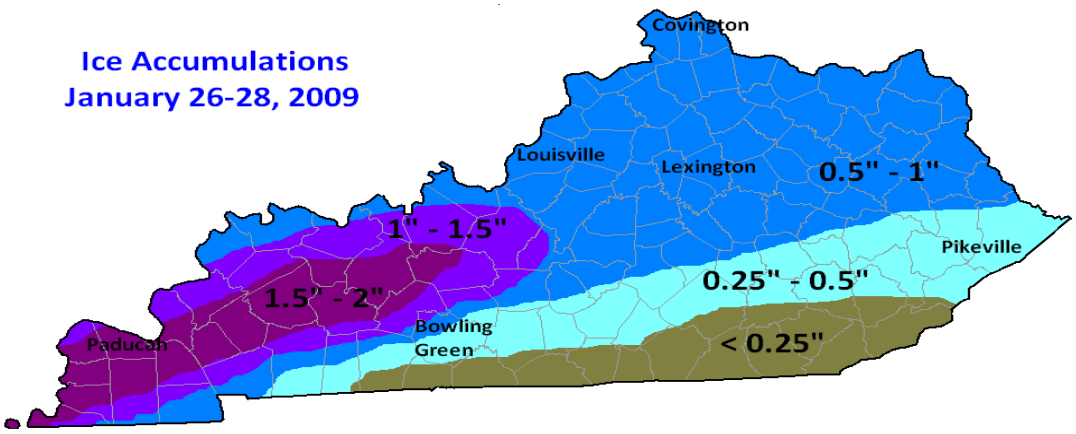


Figure 4.57 *Source: National Weather Service, 2019*

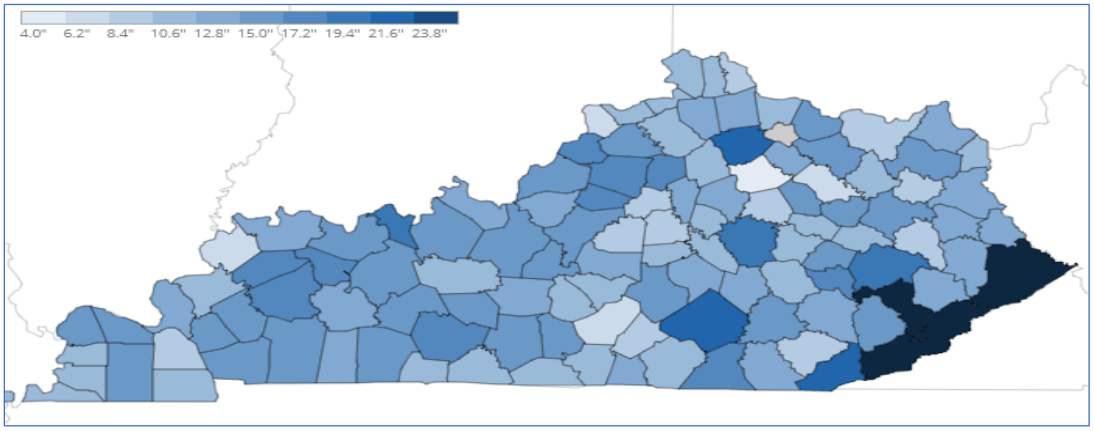
Impact

The GRADD region's geographic location allows for residents to experience all types of weather events. July and August may experience temperatures above 100 degrees and long periods of drought. Winter months experience extended periods of severe cold with high temperatures around zero. The chart below displays the winter weather events experienced in the seven counties since 1996. On average, each county experiences 3.35 winter weather events per year, including snow, ice, freezing rain, or sleet. NOAA describes a recordable winter weather event through the following—has more than one significant hazard (i.e., heavy snow and blowing snow; snow and ice; snow and sleet; sleet and ice; or snow, sleet, and ice) and meets or exceeds

locally defined 12 and/or 24 hour warning criteria for at least one of the precipitation elements. Normally, a Winter Storm would pose a threat to life or property.

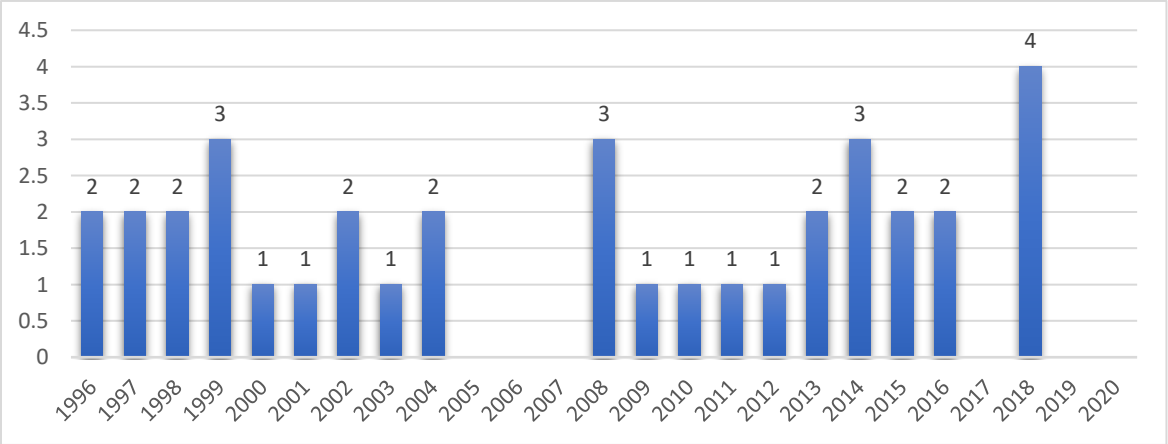
Total property damages for the GRADD region since 1996 according to the NCDC are just over $61,065,000. Nearly $59 million of that amount was associated with the 2009 Ice Storm. This total is more than half of the property damages associated with the damage from tornadoes in the GRADD region. These storms may not be responsible for as much property damage as other types of events, but they are life-threatening, and the widespread nature of the events justify the need to include them in the vulnerability analysis of the region. The following graphic illustrates the one-day maximum snowfall in Kentucky by county. For the GRADD region, the highest total was measured in Hancock County during the December 2004 snowstorm.

Figure 4.58 – 1 Day Max Snowfall Extreme



Source: https://www.ncdc.noaa.gov/snow-and-ice/snowfall-extremes/KY/1, 2020

Figure 4.59 - Winter Weather Events in the GRADD Region 1996-2020



Source: National Climatic Data Center, 2020

Frequency

The following chart reflects the probability for future hail events using the frequency of past events found in 25 years of data. The documented events are divided into the number of years of available data (25), thus creating expected frequency based upon past frequency of events.

Table 4.32 - Winter Storm Event Probability as Frequency of Event Occurrence

County	Documented Events 1996 - 2020	Probability of Future Events	Vulnerability
Daviess	29	1.16 events per year	High
Hancock	13	1 event every 2 years	Moderate
Henderson	30	1.2 events per year	High
McLean	29	1.16 events per year	High
Ohio	15	1 event every 1.6 years	Moderate
Union	29	1.16 events per year	High
Webster	29	1.16 events per year	High

Source: National Climatic Data Center, Storm Events Database, 2020

Summary

Severe winter storms impact the Green River Area Development District with regularity and although the property damages associated with each storm are not normally significant, the impact on the region and its residents is substantial and as such, should be studied when analyzing the hazard vulnerability for the region. The widespread and dangerous nature of these events justify its inclusion in the assessment as a focal point.

Hazard Profile: Wildfire

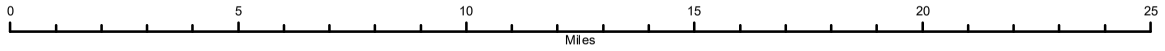
Timber resources have a far-reaching effect in Kentucky and affect all 120 counties in the Commonwealth. In 2018, timber was harvested by more than 2,500 loggers and processed at 731 different facilities in 113 counties throughout Kentucky. These facilities employ nearly 26,000 Kentuckians, according to the Kentucky Division of Forestry. More than 3,500 industries in the state employ 59,000 people directly or indirectly due to timber. In 2016, Kentucky's forests accounted for an economic impact of more than $13.3 billion, making it a vital industry and asset for the Commonwealth.



Figure 4.60 *Source: Kentucky Division of Forestry*

Forty-eight percent of Kentucky is forested—12.4 million acres of forest; 88 % of that forest is owned by private landowners. According to the Kentucky Division of Forestry, historical data averages show 1,447 fires occur each year in Kentucky. Arson remains the number one cause of those fires while uncontrolled debris burning is the second leading cause. No single agency can combat the number of wildfires each year with private owned forested acreage. However, the Kentucky Division of Forestry and the United States Department of Agriculture focus on marketing campaigns to help combat the accidental causes of forest fires and prosecute those intentionally setting them.

Daviess County





Landuse Classification

- Barren Land
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- Deciduous Forest
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- Scrub/Shrub
- Woody Wetlands



Hancock County

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Miles

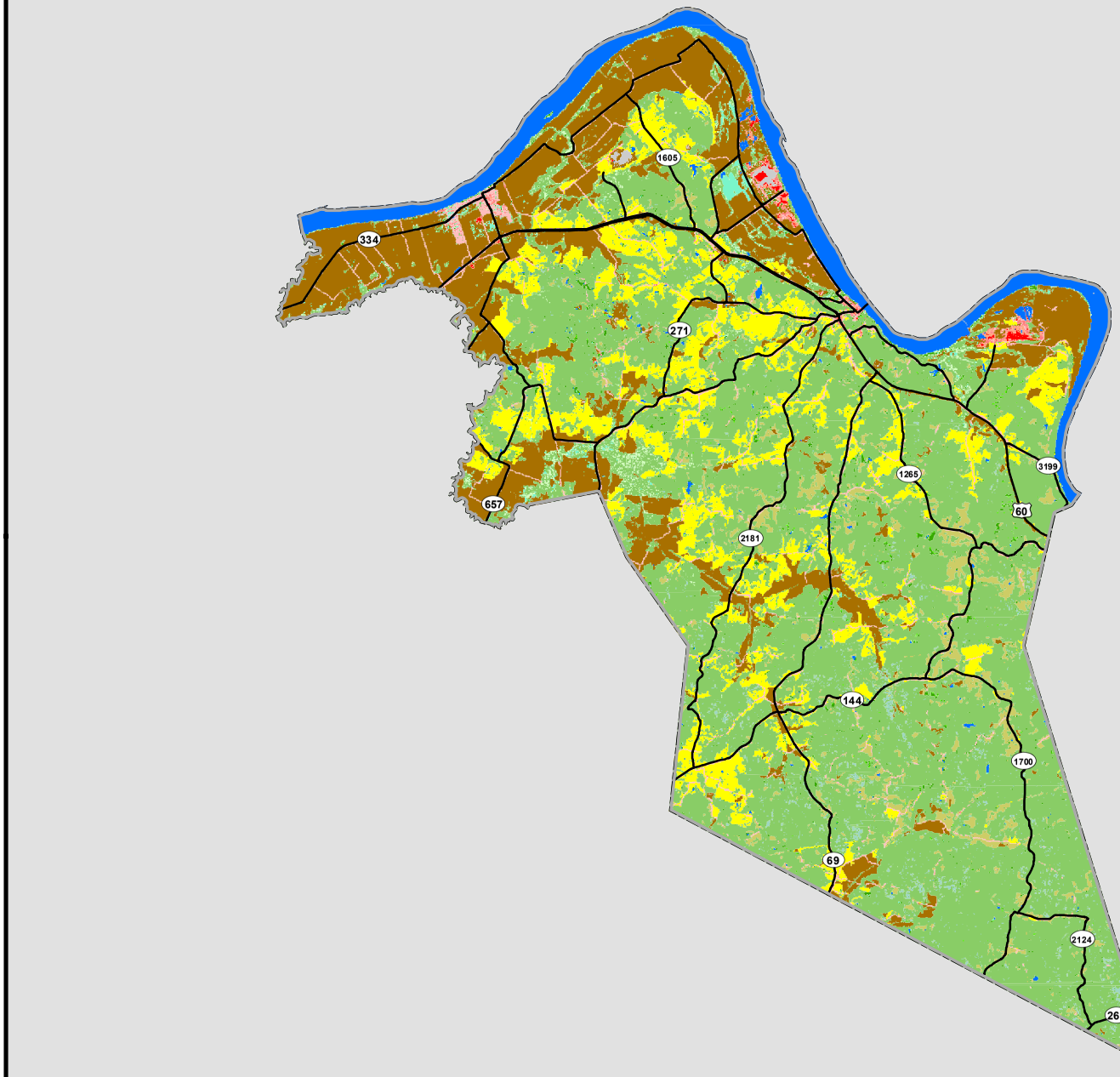
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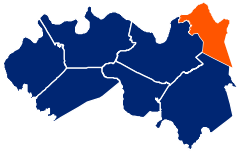
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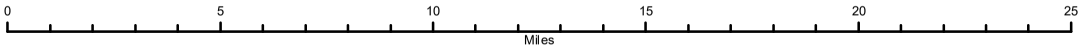
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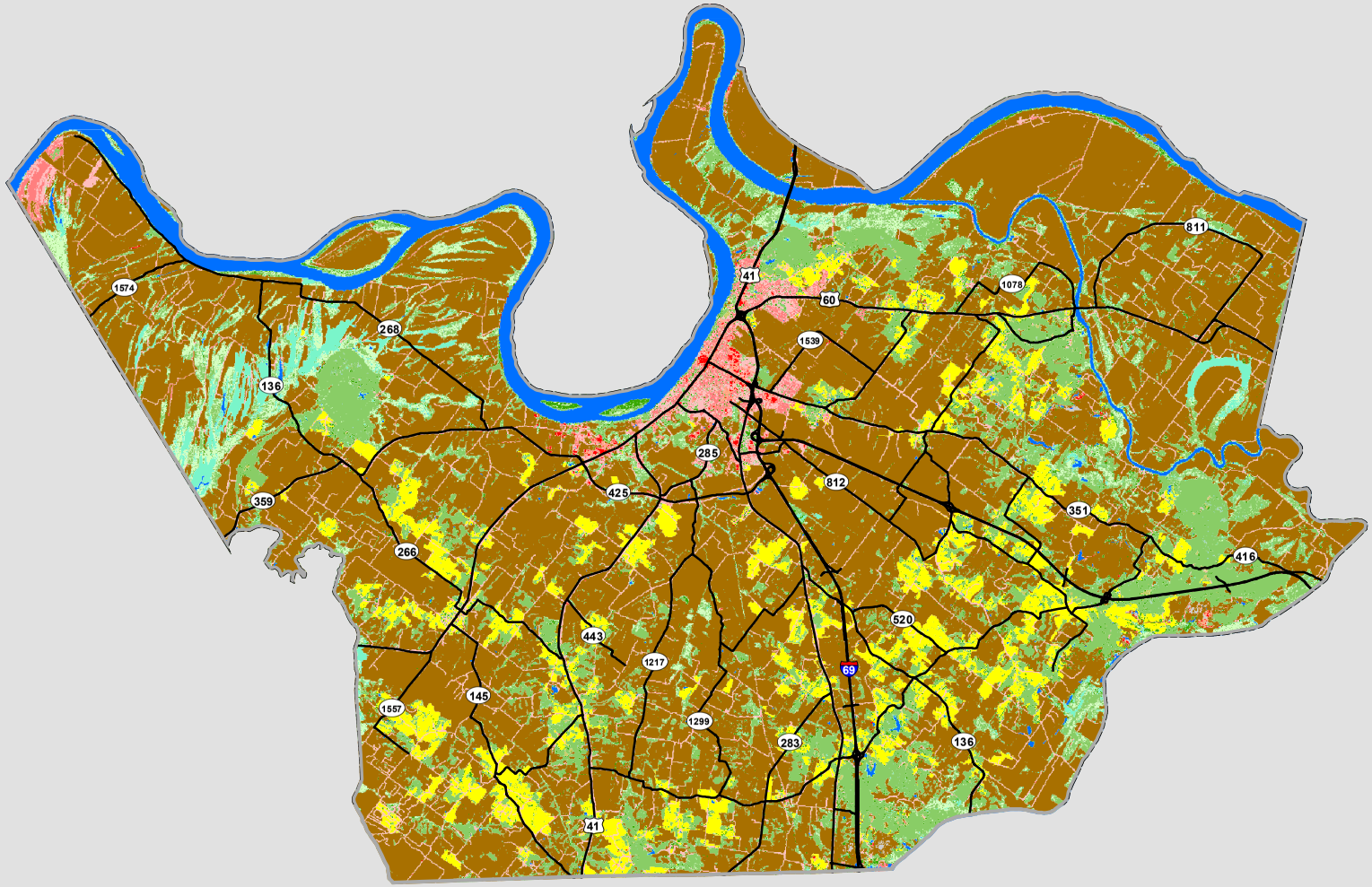
Henderson County

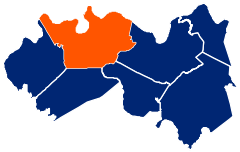




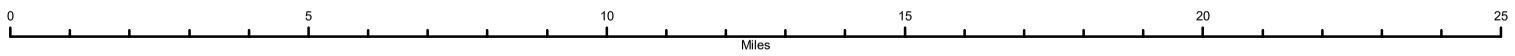
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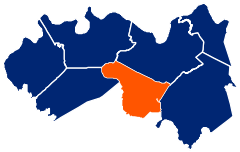
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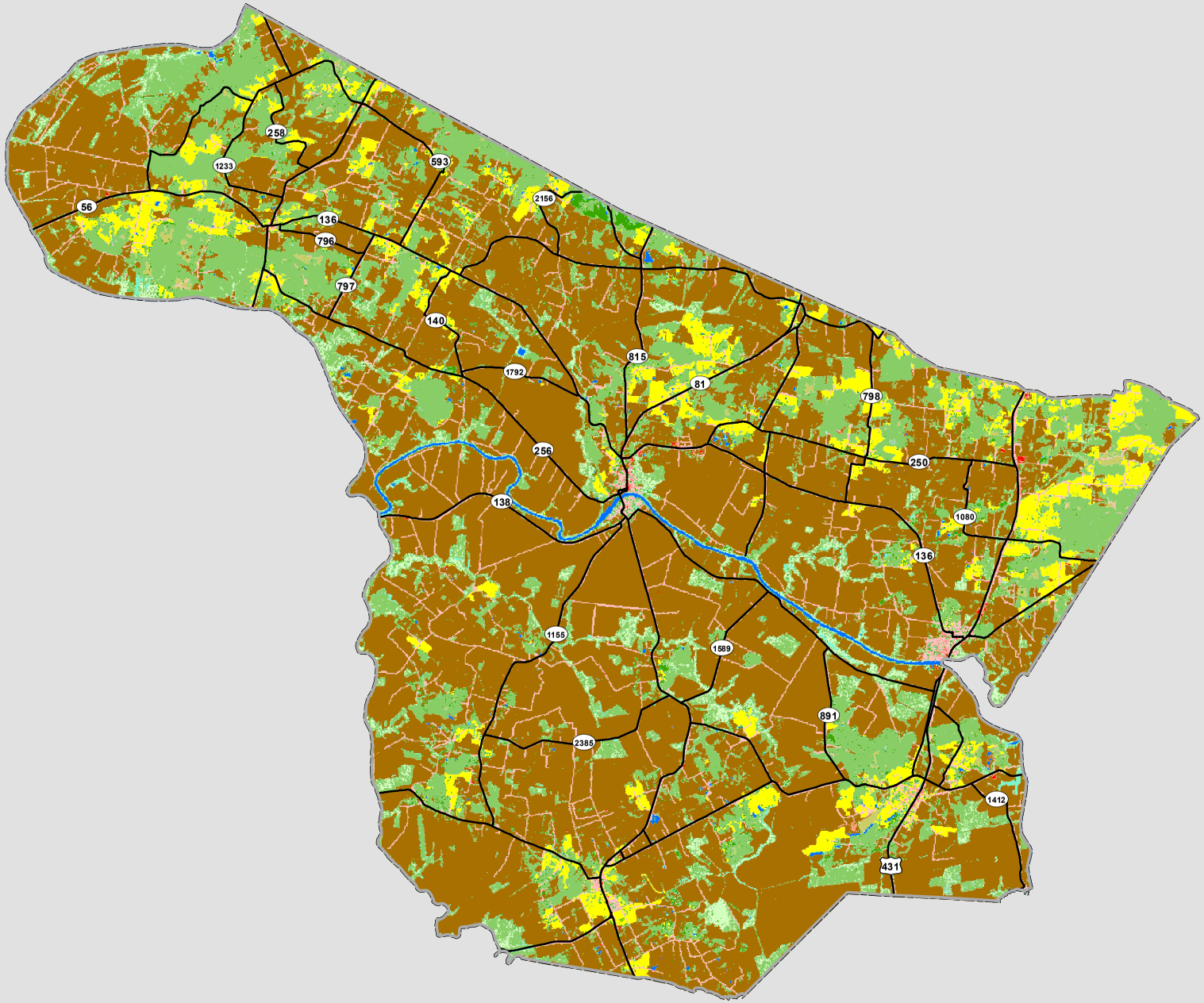




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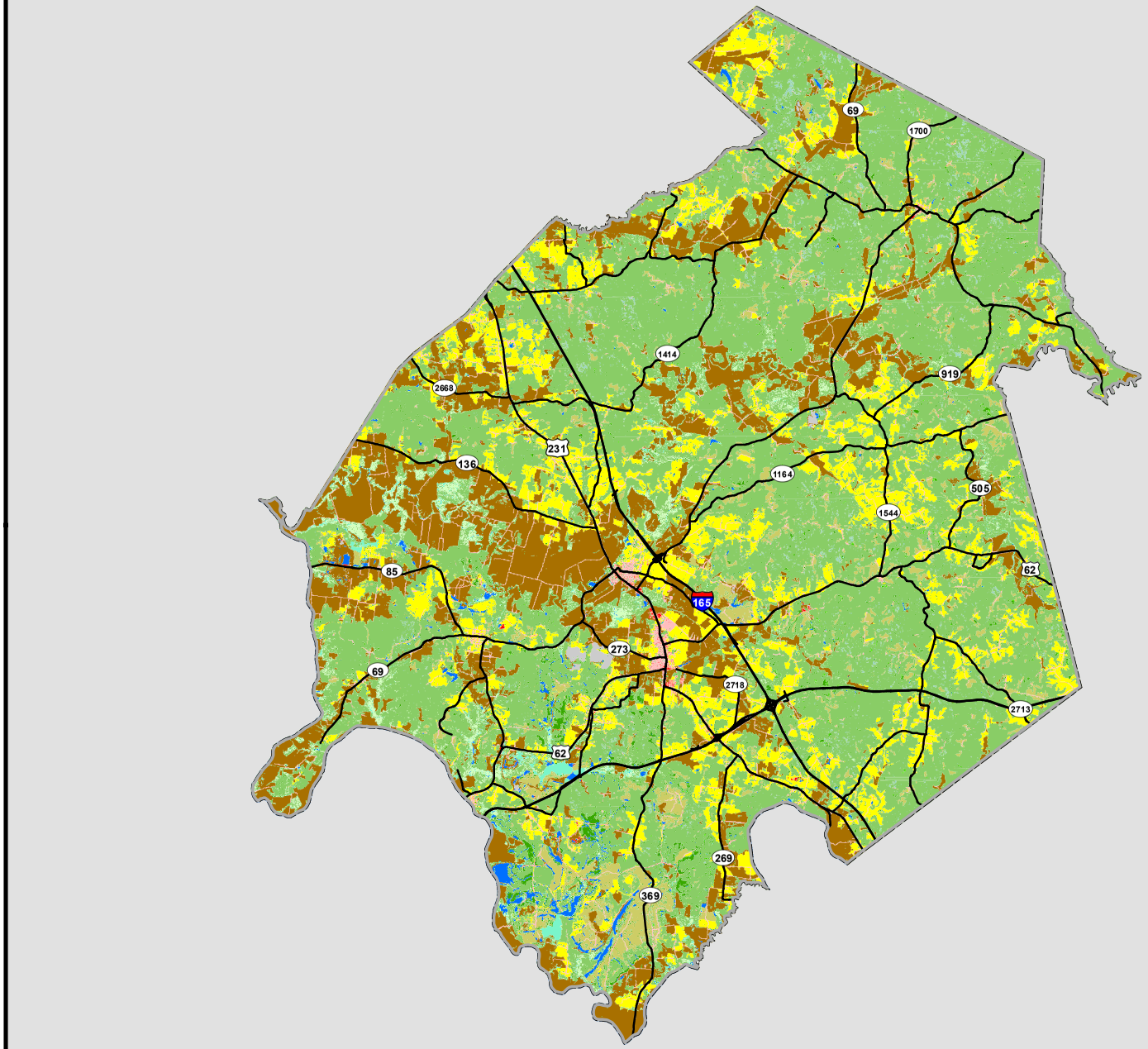
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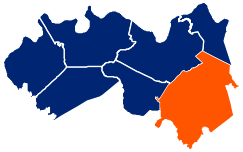
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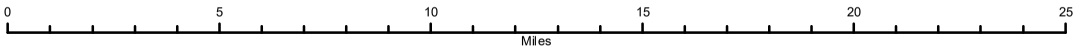
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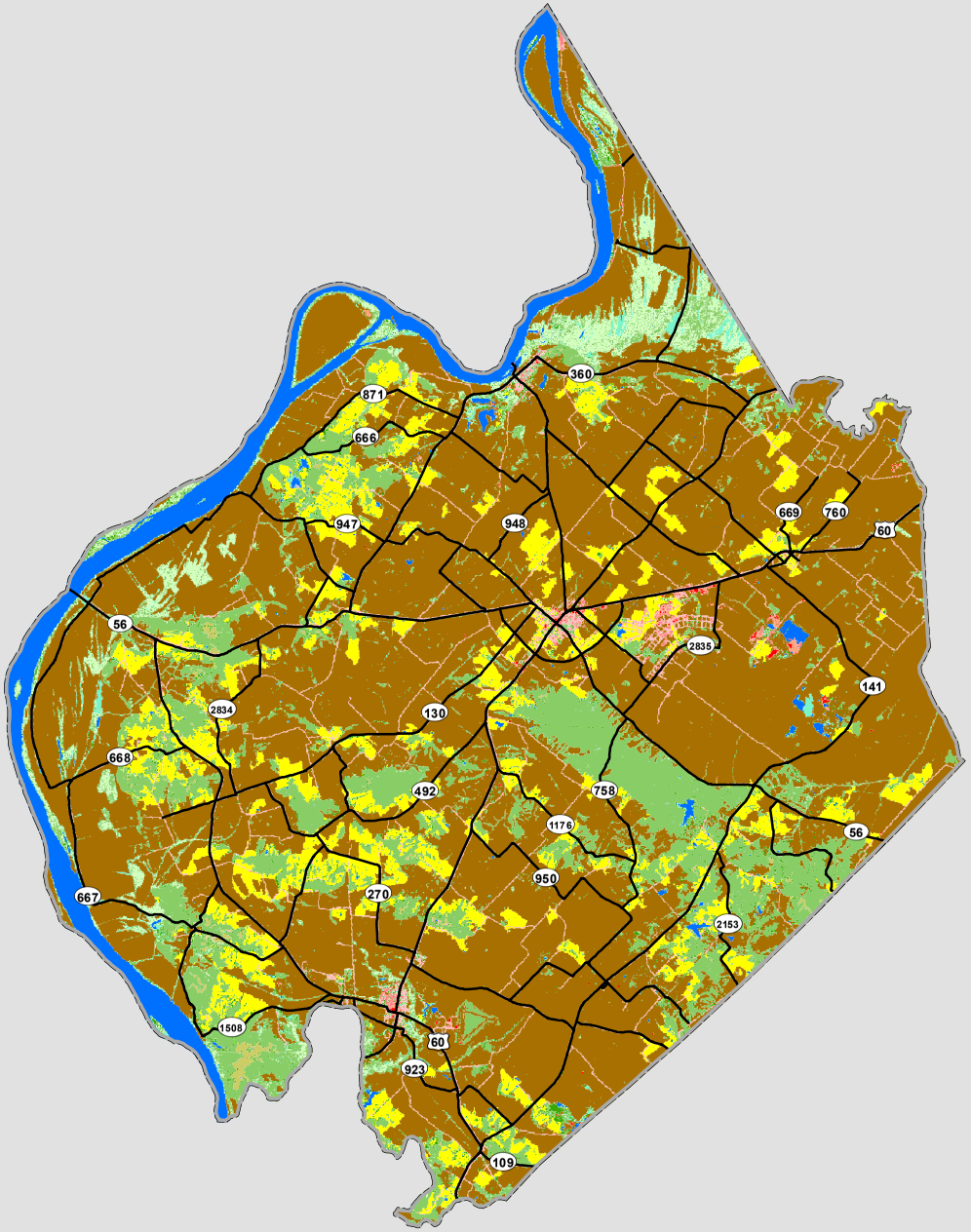
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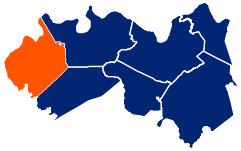




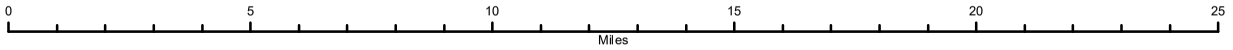
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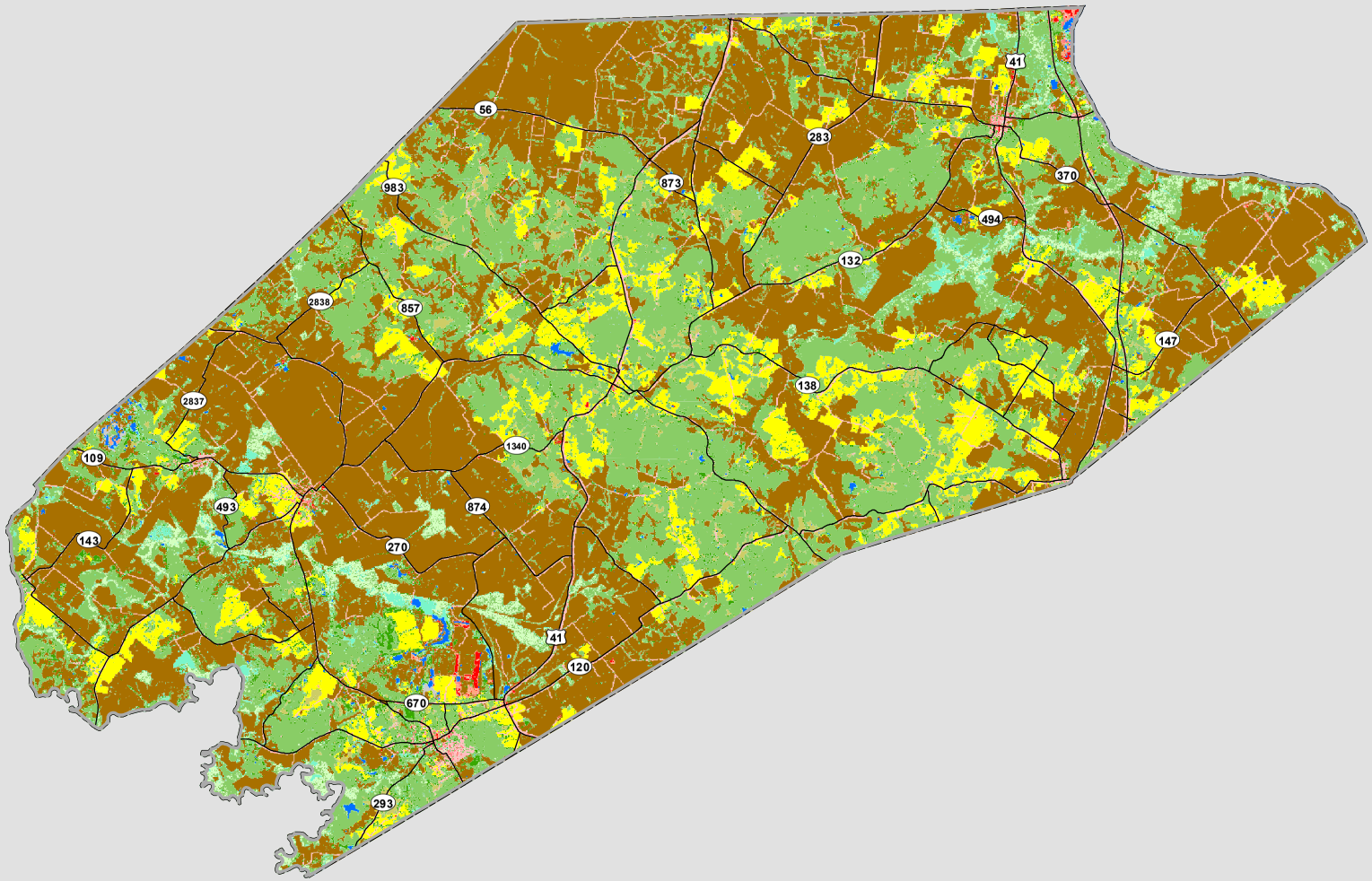
Webster County

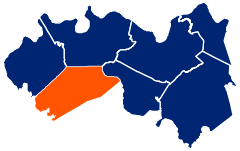




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Classification

Table 4.33 - Wildfire Types

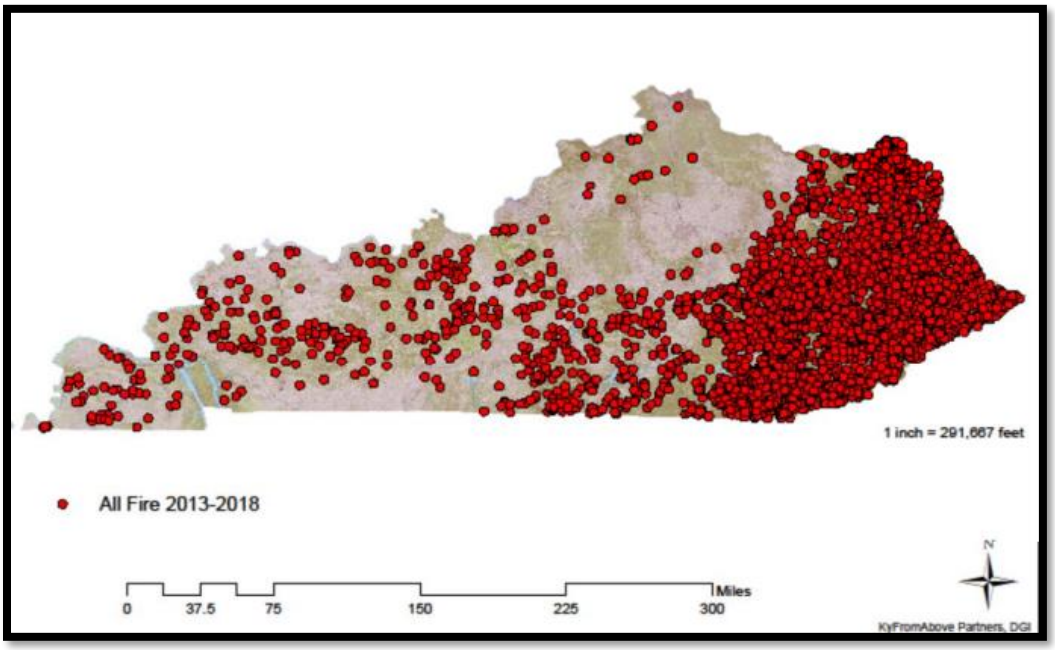
Type	Severity
Ground Fires	Low; slow-moving and relatively easy to control
Surface Fires	Moderate; easily sustained and rapidly spread
Crown Fires	High; difficult to control and cause the most damage in the shortest time frame

Source: Kentucky Enhanced Hazard Mitigation Plan, 2018

Frequency & Vulnerability

Over the past ten years, the Kentucky Division of Forestry has responded to an average of 1,094 wildland fires burning more than 33,737 acres annually. In 2018, KDF responded to 360 wildland fires burning more than 7,947 acres. The arson rate was 53% in 2018. Fire occurrence was dramatically lower in 2018 than 2017 due to increased precipitation during the fall and spring fire seasons. In 2001, nearly 179,000 acres burned throughout the state.

Figure 4.61 - Wildfire Events in Kentucky 2013 - 2018



Source: DGI, KYFROMABOVE, 2018

Table 4.34 - GRADD Wildfire Occurrences 2013-2020

County	Year	# of Fires	# Acres Burned	# Acres Vulnerable
Daviess	2013	1	3.5	46,880
	2014	1	4	
	2017	1	35	
Hancock	2013	2	15	34,130
	2014	1	8	
	2016	2	108	
	2019	1	0.5	
Henderson	2013	2	68.1	21,600
	2014	2	122	
	2015	1	25	
	2017	4	27	
McLean	2013	1	30	33,460
	2019	1	10	
Ohio	2014	4	122.4	139,270
	2015	1	65	
	2016	1	5	
	2017	3	9.5	
	2020	3	7.5	
Union	2013	1	9	21,340
	2015	1	3	
	2017	2	24	
	2019	1	8	
Webster	2013	2	29	43,290
	2014	1	25	
	2015	1	20	
	2016	2	2.1	
	2019	1	7	

Source: Kentucky Enhanced Plan, 2018, KYEM, 2021

Table 4.35 - Fire Summary Cause 2010-2019

Cause	Number	Percent
Lightning	40	0.4
Campfire	72	0.7
Debris Burning	46	0.4
Smoking	2291	22.3
Arson	6,672	64.9
Equipment Use	249	2.4
Railroad	20	0.2
Children	35	0.3
Miscellaneous	855	8.3
Totals	10,280	100

Source: Kentucky Division of Forestry, 2019

From the Kentucky Enhanced Hazard Mitigation Plan, the following impacts are recorded. From January 1, 2013 to August 13, 2018, the Commonwealth of Kentucky suffered 5,491 wildfire events. From these 5,491 wildfire events, 185,853 acres were burned. The following impacts were suffered as a result of these 5,491 wildfire events:

- Total Suppression Cost: $4,766,014
- Average Cost Per Fire: $867.97
- Average Cost Per Acre: $25.64
- Number of Saved Structures: 1,349
- Value of Saved Structures: $24,176,600
- Number of Lost Structures: 58
- Value of Lost Structures: $370,150
- Improvements Saved: $2,346,085
- Improvements Lost: $291,950
- Number of Saved Houses: 2,211
- Value of Saved Houses: $138,939,099
- Number of Lost Houses: 8
- Value of Lost Houses: $303,000

Mitigation Efforts

The USDA produces some simple steps every citizen can take to help protect and mitigate the effects of fire on his/her home:

- Emphasize the use of low-growing herbaceous (non-woody) plants that are kept green during the fire season. Herbaceous plants include lawn, clover, a variety of ground covers, bedding plants, bulbs and perennial flowers.

- Deciduous ornamental trees and shrubs are acceptable if they are kept green, free of dead plant material, ladder fuels are removed, and individual plants or groups of plants are arranged in a way adjacent wildland vegetation cannot convey a fire through them to the structure.
- Where permitted, wildland shrubs and trees should be removed from this zone and replaced with more nonwoody plants such as flowers. Individual specimens or small groups of wildland shrubs and trees can be retained so long as they are kept healthy, free of dead wood and pruned to reduce the amount of fuel and height, and ladder fuels are removed.
- For some areas, substantial removal of wildland vegetation may not be allowed. In these instances, wildland vegetation should conform to the recommended separation distances, should be kept free of dead plant materials, pruned to remove ladder fuels and reduce fuel load and arranged so it cannot readily convey a fire from the wildlands to the house. Become familiar with local requirements before removal of wildland vegetation.
- Tree limbs within 15 feet of a chimney, encroaching on power lines, or touching the house should be removed.

Summary

Timber is a vital industry for the Commonwealth of Kentucky, evident by the 56,000 Kentuckians employed due to timber and the nearly $13.3 billion economic impact each year. Although the Division of Forestry is the lead agency in fighting wildfires on private lands, no one agency has the capability to fight all wildland fires in Kentucky. Often, wildfire suppression involves several different agencies as well as rural and city fire departments. On larger fires or during times of extreme fire activity, agencies work together under the Incident Command System to fight fires. Wildfire must be kept at the forefront of planning and coordination efforts. Wildfire can impact all levels of agencies and require coordinated and advance planning to combat these events.

Hazard Profile: Pandemic

As the nation has recently experienced, pandemics can have impacts on many aspects of daily life for extended periods of time. The bubonic plague, thought to have originated in Asia, spread across the continent to Europe and northern Africa by infected rats and fleas on trading ships in the 1340s. As this Black Death also infected livestock, this plague killed an estimated 20 million people in Europe. The 1918 influenza pandemic, the most severe pandemic in recent history, infected over 500 million individuals, or one-third of the global population. It caused 50 million deaths worldwide and 675,000 in the United States. The first American cases were identified in military personnel, but where this strain of flu originated was never determined. Overcrowding and global troop movement during World War I aided its spread. Since many American nurses went abroad to help in the war effort, the United States experienced a severe shortage of healthcare workers. Masks, social distancing and quarantine efforts were established. Another influenza pandemic occurred in 1957, leading to 1.1 million global deaths and 116,000 in the United States. In 1968, another strain of influenza caused one million deaths worldwide and 100,000 in the United States. This strain still circulates, now known as seasonal influenza A virus. In 2009, the H1N1 pandemic occurred. H1H1 was more unique because 80 % of virus-related deaths occurred in people younger than 65. Estimates vary, but about 12,000 people are estimated to have died in the U.S. and 575,000 worldwide. This influenza strain is also still circulating today.

Since the first confirmed American case of this newest pandemic, COVID-19, occurred in January 2020, this new health crisis has grown exponentially. The economic impacts, public health implications and general disruptions caused by the COVID-19 virus make it clear that pandemics should be considered in conjunction with other hazards.

Description

A pandemic is a global outbreak of a new virus. Pandemics happen when new (novel) viruses emerge which can infect people easily and spread from person to person in an efficient and sustained way (based on the CDC definition of pandemic influenza). Widespread viruses and diseases begin as epidemics. These are contained to large populations within a community, population, or region. An epidemic becomes a pandemic when that virus or disease spreads to additional countries or continents. The 2014 Ebola outbreak in West Africa was an

epidemic despite crossing national borders due to being widespread in one region on the African continent. COVID-19 is a pandemic because it spread from its origin across countries and continents. It is now endemic – or constant and widespread – across many geographic areas, qualifying it as a pandemic.

Covid-19

In 2020, COVID-19 was the third leading cause of death in the U.S., behind heart disease and cancer. It has forced businesses of all forms to alter operations. Schools had to quickly figure out how to educate students virtually, first temporarily and then longer-term. Many people lost jobs, resulting in lower household incomes leading to inability to pay rent, mortgage and utilities. Pandemics are a hazard that must be mitigated to prevent another experience like COVID-19.

Government Response

Governor Andy Beshear declared a State of Emergency for Kentucky on March 6, 2020. This declaration started the fight against the spread of COVID-19 in Kentucky. On March 9, a meeting was held with all 120 county Judge/Executives to provide updates and discuss emergency management networks.

An executive order was issued on May 8 that prohibited disconnections for non-payment and fees for late payments for utilities. The Coronavirus Relief Fund ($300 million) was announced on May 20, 2020 reimbursing local governments for expenses incurred in response to COVID-19.

Governor Beshear began public daily COVID-19 briefings on March 6. Each day, he gave updates on the state of COVID-19 in Kentucky, including infection rate, deaths and efforts taken to curb the virus.

Schools

Governor Beshear encouraged all school superintendents to cease in-person classes starting on March 16th. The rules of the National School Lunch and Breakfast programs still applied. Students continued receiving meals during Non-Traditional Instruction, allowing students to have reliable access to food. At the beginning of the pandemic in the spring of 2020, these meals could be served through community feeding program models. Schools gradually reopened to somewhat normal instructional methods at the delayed

start of the 20-21 school year. There was still a hybrid of online and in-person learning. During the new school year, meals were available for delivery or pickup for students doing all their learning virtually. For other students who did a combination of in-person and virtual, meals were often sent home with them for the days they would be home. Schools were required to provide meals for all students who wanted them, regardless of each student's free or reduced status. In Centertown, a school bus brought meals to drop-off locations around the district every day, providing food for all school-aged children.

As COVID-19 cases rose, much of the nation and Kentucky recorded record positive cases. School districts returned to fully virtual classes on November 23rd until end of winter break in January.

School shutdowns highlighted the importance of schools. Teachers are often the first to notice when children experience any kind of hardship. They know better than anyone which students do not get enough food at home. They can identify when a child has been a victim of abuse. When students are only seen through the computer screen, teachers have a much harder time identifying these issues. Helping those children becomes much more difficult during virtual learning. Online learning has also made infrastructure weaknesses mainstream issues. To attend virtual classes, students and teachers must have access to reliable broadband. Broadband has become a utility as necessary to everyday life as electricity, yet many households still lack access. Children have had to find ways to get to Wi-Fi hotspots set up sporadically across the region. To get to these hotspots involves adults providing transportation, which plays into yet another challenge intensified by COVID-19: childcare. When the living room or kitchen table becomes the classroom, children require supervision that normally teachers provide. With many daycares closed or operating at lower capacity, parents must stay home from their own jobs or find other childcare. This issue has impacted parents' ability to perform their own job duties. Childcare issues have negatively affected the careers of mothers more than fathers because often the childcare duties fall to the mother.

Colleges and universities also changed operations during the COVID-19 pandemic. At the beginning of the outbreak, most sent students' home for spring break for the rest of the semester. Professors, like K-12 teachers, had to immediately make their classes virtual. Finals were taken online. Many students returned to campus in the fall with university administrations encouraging

masks and social distancing. Large gatherings and parties were discouraged. Kentucky Wesleyan College encourages students, employees and visitors to fill out a daily health check form. The college's website has a campus COVID tracker of both active and cumulative cases.

Economy

On March 16th, an executive order closed all restaurants and bars to in-person services. Another executive order on March 24th closed all non-life sustaining businesses to in-person services. Reopening of the economy began with Phase 1 on April 27, 2020. Phase 2 was announced on May 7th, outlining the following stages: May 22nd – restaurants, with limited 33% capacity and outdoor seating; June 1st – movie theaters, fitness centers; June 11th – campgrounds, public and private; and June 15th – childcare, with reduced capacity, along with low-touch and outdoor youth sports.

Phase 3 began on July 1st. On July 9, a new executive order went into effect requiring Kentuckians to wear face coverings for the next 30 days, during which time the order was evaluated to determine extra steps. This order was extended for an additional 30 days on August 6th and again on September 4th. Schools were encouraged to push their starting dates to September 28th.

In response to rising cases in the Commonwealth in October and November, restaurants and bars were encouraged to close in-person services and return to carry out and drive-thru services on November 20th once again. The $40 million Food and Beverage Relief Fund was established so local restaurants and bars could apply for relief from the impacts of the most recent closures.

For the first few months after the state of emergency announcement, PPE and other sanitation supply shortages plagued Kentucky as well as other states. Local businesses and manufacturing companies began donating masks to local governments and other organizations. Local distilleries developed a process to produce hand sanitizer amidst the sanitation products shortages.

Owensboro is the only metropolitan area in the United States where unemployment decreased from June 2019 to June 2020. The unemployment rate was 4.4% in 2019 and lowered to 4.2% in 2020.

Section 4: Risk Assessment

Many think Owensboro fared so well with employment numbers due to the diverse economy of the metro area. With several large employers, no single sector is responsible for most of the jobs. The entities that employ large amounts of people have all been deemed essential during the pandemic. The largest of these employers, Owensboro Health Regional Hospital, managed to keep all its employees employed. Many other people in Owensboro are employed at Mizkan American Inc, where they make Ragu spaghetti sauce. US Bank has one of its largest mortgage processing centers in the city. A large demand for housing and low interest rates during the pandemic has kept the mortgage industry busy. Kimberly-Clark works to keep up with the demand for toilet paper, diapers and other essential products. Uni First, maker of workplace uniforms, makes PPE and the uniforms that other essential workers wear every day. With the spirits industry deemed essential, O.Z. Tyler and Glenmore Distillery have also kept up their production, even expanding to make hand sanitizer. The agriculture industry is another a large employer in the area. This variety of employers kept Owensboro in business during an economically challenging time.

Small businesses and restaurants suffered. Many had to create an online presence overnight if they had any hope of surviving the pandemic. Restaurants had to shift to only delivery and curbside pickup when indoor dining was prohibited during virus surges. Some got creative with outdoor dining, but colder weather threatened that opportunity. Many retail businesses were deemed non-essential and had to cease in-person shopping. They had to quickly create online spaces to sell products. This switch shed light on the lack of reliable broadband in the region. Selling and shopping online, even for basic needs, was suddenly the only option to do business.

ROMP Festival, hosted by the Bluegrass Music Hall of Fame and Museum, usually brings about 25,000 people to Daviess County each year and $1.6 million and $2.2 million to the local economy. This event is 15 % of the museum's annual operating budget. ROMP is one of many events that had to be cancelled due to the COVID-19 pandemic. The 26th Reenactment of the Battle of Sacramento was also cancelled, along with fundraisers leading up to the event, which brings about $22,000 to the local economy in McLean County. Because of this cancellation, organizers are unsure if the event will ever be able to happen again.

Healthcare

On November 23rd, the UK Hospital in Lexington, KY announced it would be closing five of its operating rooms to free up resources and staff to handle coronavirus patients, due to an expected influx following Thanksgiving.

By Executive Order beginning in May 2020, pharmacists were able to dispense emergency refills of up to a 30-day supply of non-scheduled medication for Commonwealth residents. This order was renewed upon expiration of the initial order in November.

For the GRADD region, Owensboro Health has been taking in patients from other hospitals and are prepared to handle more as needed. They have converted all the rooms on the COVID floor into negative pressure rooms to keep the air in those rooms and prevent transmission out into the hallways.

Nationally, personal protective equipment (PPE) was in short supply at healthcare facilities during the initial virus outbreak. The public was encouraged not to wear medical grade masks to preserve the short supply for healthcare workers. Doctors and nurses had no choice but to re-wear used masks. As the public shifted to wearing cloth masks and production of medical masks ramped up, this problem became less of an issue. However, many PPE supply levels are low.

Owensboro Health Regional Hospital, the largest employer in the region with about 5,000 employees, did not have to lay off or furlough a single employee. While many non-emergency medical services were postponed, employees working in those departments were reassigned to other departments still providing services. Despite the 65 % revenue cut the pandemic brought to Owensboro Health, every employee remained employed. In between surges of the virus when more non-emergency services were able to resume, much of that revenue loss was recovered.

Early in the pandemic, Methodist Health Hospitals in Henderson and Union Counties announced they were being acquired by Deaconess, along with outpatient clinics and facilities on July 1. This merger was scheduled, as Methodist had been struggling financially and lost $8 million in the fiscal year before the Deaconess acquisition. Patients at the former Methodist hospitals

kept their physicians. It is coincidence this move occurred in the middle of the COVID-19 pandemic.

Elective procedures were postponed to limit traffic in hospitals and to free up healthcare workers to treat COVID patients. Some people chose to not see their doctors for regular appointments or non-emergency health issues for fear of being exposed to the virus. When people did go in for appointments, no matter the severity of their condition, no more than one guest was allowed inside with them. At times, no guests were allowed. This adjustment made going to the doctor even more stressful than usual. COVID patients were not allowed any visitors. Their only human interaction was with healthcare workers dressed in head-to-toe PPE. Studies have shown that COVID patients who spend time in intensive care come home with mental health issues, with some showing evidence of post-traumatic stress disorder.

Many doctors began conducting telehealth appointments to provide healthcare while reducing the potential for exposure to COVID. Before the pandemic, telehealth was not widely used. In the last week of March 2020, there was a 154% increase in telehealth visits compared with the same week in 2019 (https://www.cdc.gov/mmwr/volumes/69/wr/mm6943a3.htm). While telehealth appointments can be conducted over the phone, internet access is often preferred so a doctor can see the patient. This arrangement poses a problem in some areas of the GRADD region where broadband is not available. For telehealth to be beneficial, receiving care while avoiding going to a hospital and therefore reducing chances of exposure to COVID, broadband is essential. Those who cannot participate in it due to lack of broadband must risk exposure to see a doctor or forego care.

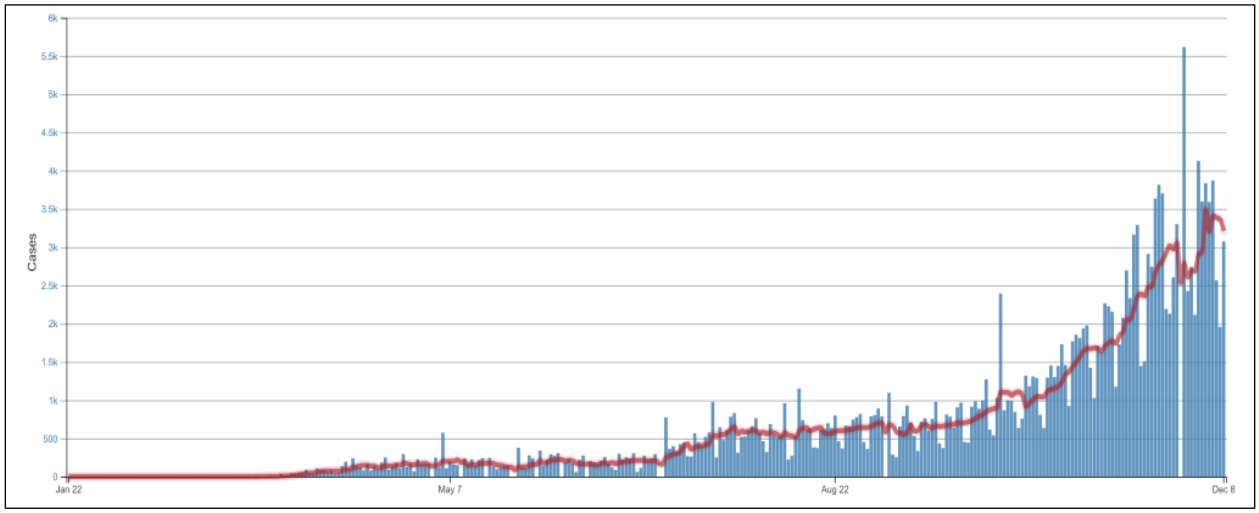
Testing & Case Numbers

The first coronavirus case in Kentucky was recorded on March 6, 2020. On March 14th, a guarantee was made that COVID-19 testing would be free to all Kentuckians, even if uninsured. On April 13th, the state's first drive-through testing site opened, providing the tests free of charge. The Kentucky National Guard assisted in testing. December 10th had the highest number of new cases to date in one day for the Commonwealth, 4,324 new cases reported. Prior to this date, Kentucky had reached a peak on September 4th, which was not surpassed until near the end of October and continued to climb, reaching state records in December. Measures were taken by government officials to limit the spread even further in November as the

numbers rose at alarming rates. The total confirmed cases as of December 14th for Kentucky was 223,104 individuals, with 2,207 deaths.

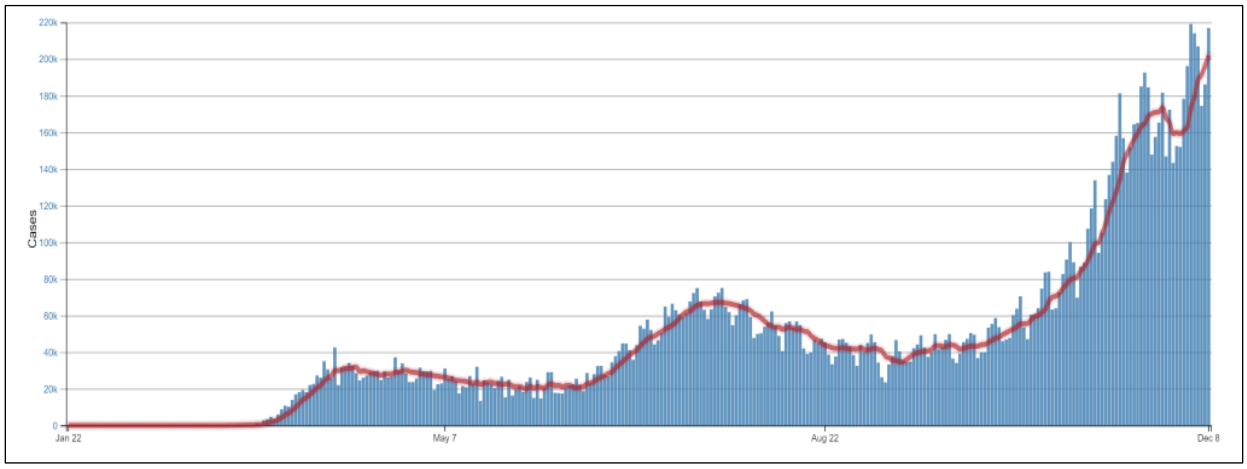
As evidenced in Figures 4.65 and 4.66, there have been several surges of positive cases since the virus first appeared in Kentucky, with increases beginning around September and October 2020. Figure 4.65 shows Kentucky's positive cases while Figure 4.66 shows nationwide cases for comparison. Kentucky has been consistent with national trends, but with a more steady, gradual curve.

Figure 4.62 – Reported Cases Daily Trend in Kentucky



Source: CDC COVID Tracker: https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases, 2020

Figure 4.63 – Reported Cases Daily Trend in United States



Source: CDC COVID Tracker: https://covid.cdc.gov/covid-data-tracker/#trends_dailytrendscases, 2020

Table 4.36 - Covid Statistics for the GRADD Region to Date: December 14, 2020

County	Confirmed Cases	Recovered Cases	Current Hospitalizations	Ever Hospitalized	Deaths
Daviess	4,419	3,235	14	204	71
Hancock	343	266	3	19	12
Henderson	2,425	1,857	9	150	47
McLean	465	354	4	37	21
Ohio	1,303	922	12	83	24
Union	792	664	2	40	10
Webster	620	485	4	37	10
GRADD	10,367	7,783	47	570	195

Source: Green River District Health Department

Vaccine

Of the 12,675 vials of vaccine received in Kentucky's first shipment, on December 14, 2020, the first to receive it were frontline healthcare workers at University of Louisville Hospital. Healthcare workers and residents of long-term care facilities have been identified as the priority for the first round of vaccines. The Medical Center at Bowling Green was the closest hospital to the GRADD region to receive doses. Baptist Health in Lexington was the third recipient in this first shipment of the vaccine to Kentucky. These three hospitals received 975 doses each. The remaining went to more regional hospitals, along with Walgreens and CVS who were set to distribute vaccines to care facilities.

Vulnerability

Rural communities sometimes lack access to healthcare available in more urban areas. Depending on the size of the community, no ICU beds may be available. Rural communities also tend to be older, and often more vulnerable to all kinds of illness. Lack of access to broadband, which is particularly a problem in the rural counties of our region, can cause issues concerning telehealth, remote work capacity and virtual classes.

Frequency

Due to increased global travel, urbanization, land use changes, and more exploitation of the natural environment, the likelihood of pandemics has increased in the last century. This likelihood will only intensify as those trends persist. Pandemics have no pattern of occurrence,

and some pandemics cause more damage than others. Current generations may experience another pandemic in their lifetime, but it is not necessarily inevitable.

The GRADD region is susceptible to subsequent pandemics. While influenza pandemics are not inevitable, the CDC searches for signs of a new strain that could resist current vaccines and reach epidemic or pandemic levels. Flu or otherwise, with global connectedness, there will always be a risk of a new pandemic.

Mitigation

To prevent and mitigate effects of future pandemics, a variety of steps should be taken. Securing reliable broadband for every household in the region should be a top priority. Large and small businesses should create pandemic preparedness plans just as they would create fire, earthquake, or other natural disaster plans. The workforce needs to be quickly adaptive, and businesses must be willing and able to do business differently without much notice. Similar to having backup generators ready to go in case of an emergency, PPE emergency stockpiles should be created. Communication between health officials, government entities and the public must be streamlined to prevent confusion. Prevention and mitigation can be difficult if inaccurate information spreads. The public needs to be more willing to follow public health orders to shorten a new pandemic and expose less people to disease.

Summary

Securing funding for broadband infrastructure throughout the region should be a priority. This focus will require buy-in from many partners if all rural areas in the GRADD region are to have access. Businesses, schools and governments should be encouraged to have a pandemic plan. New cleaning protocols that have been established from this pandemic should be sustained indefinitely. Access to cleaning and sanitizing products should be prioritized.

Pandemics can cause disruption like a natural disaster such as fire or earthquake. While damage to physical infrastructure does not happen with a pandemic, damage to income, economy, education, health, supply chain and other aspects of life can be just as destructive. To lessen the negative impacts of any future pandemics, planners should consider this hazard with other natural disasters.

Vulnerability Assessment

After profiling the hazards that can affect the GRADD region, the second step in assessing risk is determining the vulnerability of the area to those hazards. This assessment is accomplished through a profile examination of the region, study of each community's facilities and critical infrastructure, services provided and vulnerable population centers.



Figure 4.64 *The City of Uniontown is protected from the Ohio River by an earthen levee. Photo courtesy of Kentucky Geological Survey*

GRADD Profile

An in-depth profile of the GRADD region was incorporated into the Executive Summary section of the Hazard Mitigation Plan. The following section includes a summation of information included in that profile to better understand the vulnerabilities of the GRADD region.

Hazard Mitigation, resilience and recovery planning would be incomplete without analysis of the region's poverty rate, which is directly related to a community's vulnerability. In 2019, the poverty rate in Kentucky was 16.3%, while the poverty rate for the GRADD region averaged 15.6%. While the overall poverty rate has declined since 2010, four of the seven counties in the GRADD region were above the average for the Commonwealth.

Table 4.37 - Population Vulnerability

	County	Median Household Income	Per Capita Income	Total Poverty Rate	Poverty Rate (under 18)	Poverty Rate (Children 5 to 17 living in families)
1989	Daviess	$25,230	N/A	12.7%	16.4%	14.8%
	Hancock	$27,376	N/A	12.5%	18.7%	16.6%
	Henderson	$25,106	N/A	12.5%	16.8%	15.0%
	McLean	$21,071	N/A	14.0%	18.6%	17.3%
	Ohio	$19,436	N/A	19.1%	24.1%	21.6%
	Union	$24,356	N/A	14.3%	17.3%	13.9%
	Webster	$22,634	N/A	14.5%	20.0%	17.9%
	GRADD	**$23,601**	N/A	**14.2%**	**18.8%**	**16.7%**
2000	Daviess	$38,067	N/A	11.2%	15.3%	12.9%
	Hancock	$40,005	N/A	10.2%	14.2%	13.2%
	Henderson	$36,902	N/A	11.9%	16.6%	14.5%
	McLean	$32,346	N/A	13.4%	18.3%	17.1%
	Ohio	$30,580	N/A	15.6%	21.4%	19.5%
	Union	$35,049	N/A	13.0%	18.1%	16.6%
	Webster	$33,346	N/A	13.6%	19.7%	18.4%
	GRADD	**$35,185**	N/A	**12.7%**	**17.7%**	**16.0%**
2010	Daviess	$41,878	$34,987	16.2%	24.6%	22.5%
	Hancock	$46,729	$40,442	14.2%	20.1%	17.8%
	Henderson	$41,309	$31,744	16.5%	22.4%	20.7%
	McLean	$38,580	$32,266	16.4%	24.1%	21.2%
	Ohio	$35,975	$27,689	20.4%	29.5%	26.9%
	Union	$41,209	$29,172	19.4%	27.0%	24.2%
	Webster	$41,516	$30,216	15.1%	21.6%	20.7%
	GRADD	**$41,028**	**$32,849**	**16.9%**	**24.2%**	**22.0%**
2018	Daviess	$51,441	$41,754	15.3%	19.2%	17.6%
	Hancock	$56,769	$36,929	12.0%	16.3%	14.8%
	Henderson	$51,161	$39,891	16.3%	21.6%	21.1%
	McLean	$48,080	$41,603	13.9%	19.0%	16.4%
	Ohio	$44,751	$33,262	17.2%	25.0%	23.1%
	Union	$47,067	$33,736	16.3%	21.9%	20.8%
	Webster	$47,132	$39,188	18.4%	22.0%	22.3%
	GRADD	**$49,486**	**$39,521**	**15.6%**	**20.7%**	**19.4%**

Source: U.S. Census Bureau, Kentucky State Data Center, 2018

Population Projections

As a planning mechanism, the Hazard Mitigation process accounts for future growth and development trends in the region. These trends allow local officials to assess where to allocate limited dollars to enhance resilience and ensure those vulnerable are included in those allocations. Population trends and projections ensure local officials can implement resources and initiatives to forestall negative growth as displayed in the projections for five GRADD counties. As shown below, while the GRADD region accounts for an overall two percent population growth, worrisome trends in several counties are present. Four of the five counties with negative population growth percentages are historically coal producing counties and the decline in coal production has had a significant impact.

Table 4.38 - Population Projections in the GRADD Region

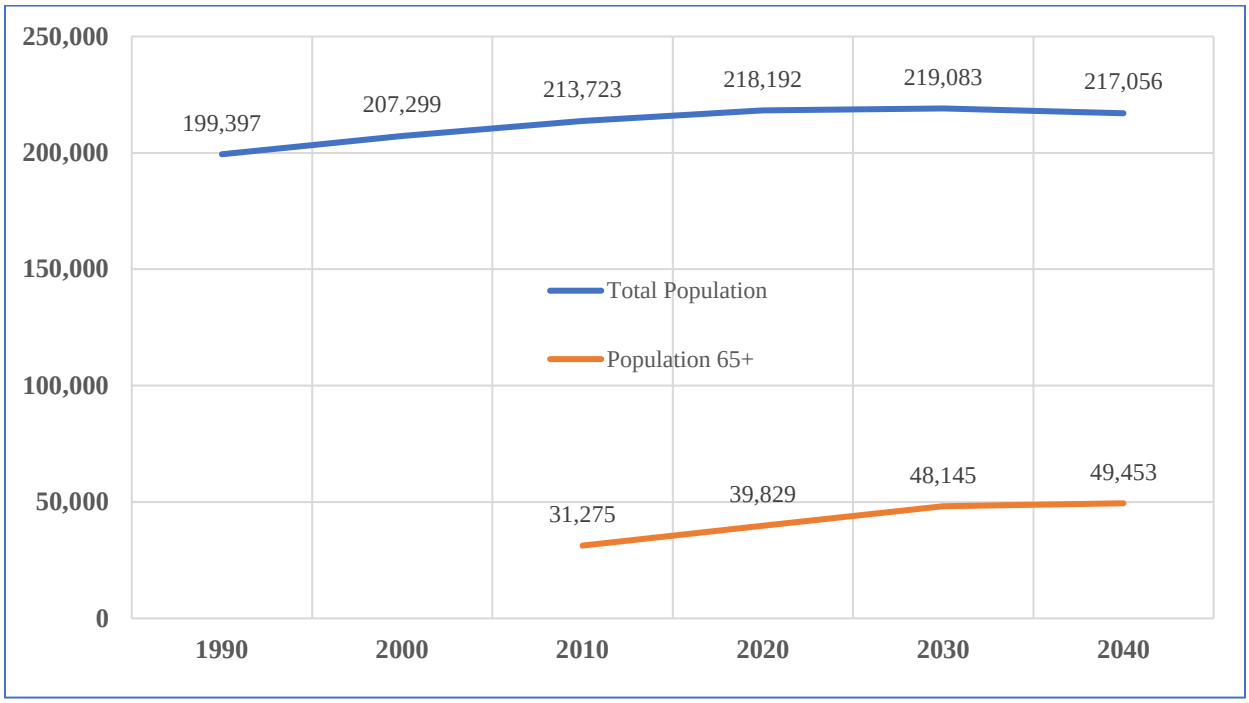
County	Population 2010	Population 2020	Population 2030	Population 2040	Growth Percentage 2010-2040
Daviess	96,656	102,033	106,676	110,129	14%
Hancock	8,565	8,786	8,839	8,629	1%
Henderson	46,250	46,358	45,516	43,987	-5%
McLean	9,531	9,274	8,642	7,942	-17%
Ohio	23,842	24,235	23,832	23,181	-3%
Union	15,007	14,906	14,290	13,278	-12%
Webster	13,621	12,600	11,288	9,910	-27%
GRADD	**213,472**	**218,192**	**219,083**	**217,056**	**2%**

Source: US Census Bureau, Kentucky State Data Center, 2020

The population projections for the region indicate a significant increase in individuals aged 65 or older—approximately 14% of the total population in 2010 to just under 23% of the total population in 2040. Some negative trends projected can be attributed to the aging population. The COVID-19 pandemic shed light on struggles faced by an aging population and the infrastructure and services built within the region must account for that segment of the

population. The chart below shows the total population vs the population projection for those aged 65 or older.

Figure 4.65 - GRADD Region Population Projection Vulnerability

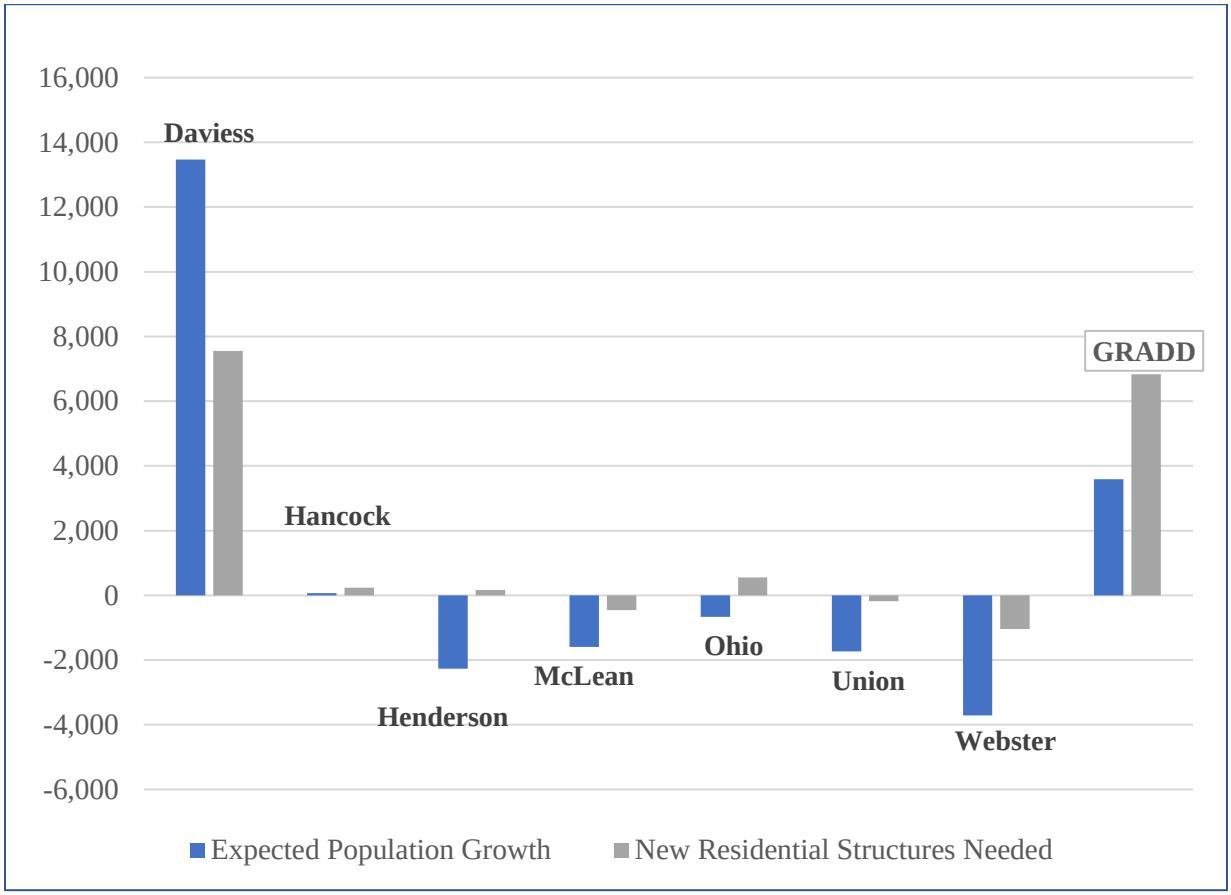


Source: US Census Bureau, Kentucky State Data Center, 2020

Housing Growth

While the population in five of the seven GRADD counties is projected to decline, smaller household size indicates a need for additional housing structures by 2040, as indicated in the chart to follow. The trend for potential new housing structures contrasts the overall population decline. New housing and developments remain of significant importance to the overall hazard mitigation plan as responsible planning equates to reduced costs of disaster, the goal of this plan. GRADD staff remains heavily involved in Comprehensive Planning and Land Use planning for all areas of the GRADD region, a crucial component of identifying vulnerable areas of development. The importance of this plan and all land planning lies within the ability of the plan to be a living document, capable of change and incorporation of new data as it becomes available.

Figure 4.66 - Potential Residential Structures Needed by 2040



Source: US Census Bureau, Kentucky State Data Center, 2020

Economic Trends

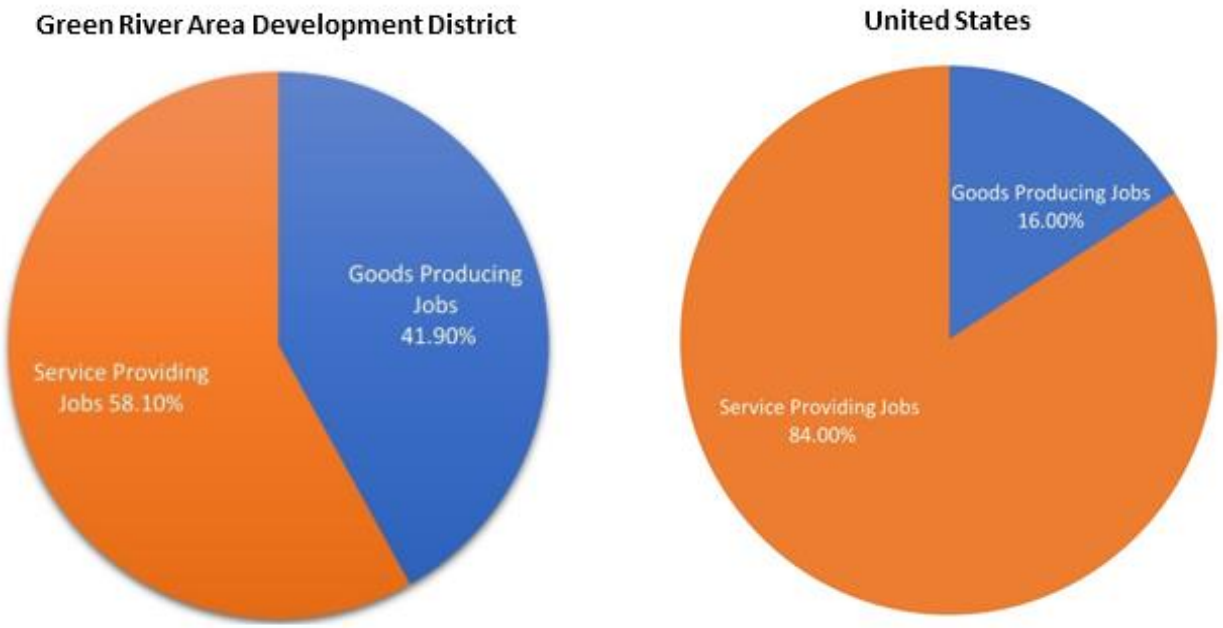
Examination of the economic profile of a city, county and region is an integral part of building the Hazard Mitigation Plan and assessing the resiliency of each community. Disasters disproportionately affect lower income communities, while correlating inversely with greater educational attainment and greater economic diversity. The 2008 economic downturn and housing crisis was a defining moment in this region, as well as the Commonwealth of Kentucky and the United States as a whole. Battling unemployment rates of nearly 10 %, severe wind damage from the remnants of Hurricane Ike in the fall of 2008 and fighting the 2009 Ice Storm, the economy, as well as individuals were affected.

Requirement §201.6(c)(2)(ii)(c)
Provide a general description of development trends within the community so that mitigation options can be considered in future land use decisions.

Since 2009, the region has undergone losses in jobs from coal mining, manufacturing and agriculture, yet the unemployment rate remains lower than it has been since 1990. The median household income for the GRADD region trends like the rest of the Commonwealth but fluctuates significantly across the seven counties. This fluctuation is derived from several factors; however, the larger cities in the region and the heaviest industrial centers tend to influence those levels the most.

Part of the resiliency of the region is shown in the diversity of the economy throughout the seven counties. While the goods-producing jobs in the United States make up 16% of the overall economy, in the GRADD region, goods-producing jobs represent almost 42% of the employment. This trend was especially representative during the Covid-19 Pandemic. This area was the only area in the United States where the unemployment rate declined during the Pandemic.

Figure 4.67 - Economic Diversity in the GRADD Region



Source: U.S. Bureau of Labor Statistics Quarterly Census of Employment & Wages, 2020

The Economy & Coal

The District lies in the Illinois Coal Basin and more specifically, the Western Kentucky Coal Field. This field covers 6,400 square miles in parts of 20 counties and has been estimated to hold 36 billion tons of coal, much of which cannot be mined economically using present technology and methods. According to the Kentucky Energy Cabinet, from 1790 (when records were first kept) until 2019, 3.1 billion tons of coal had been mined through surface mining or underground mining, with significant reductions in total production each year.

Since 2010, production of coal has decreased 25% and employment in the District's coal mining industry has declined 43%, accounting for 2.4% of the region's 90,000 people in the workforce. This demarcation of coal as a significant source of fuel in the production of the Nation's energy has impacted the GRADD region and attributed to some area's decline in population, but also negatively impacted the public funds supported by that coal tonnage. The cities and counties impacted, along with all entities in the region have made efforts to halt those losses and reassess, evaluate and prioritize fiduciary responsibilities to account for the change in revenues.



Figure 4.68 *The last coal train from Dotiki Mine in Webster County.*

The loss in those revenues has made the Hazard Mitigation plan essential to serve as a living document to help officials pinpoint vulnerabilities to resiliency and direct time, talent and funding towards the mitigation activities that will fill those gaps. Incorporation in the Comprehensive Economic Development Strategy (CEDS) plan to demonstrate the current resiliency of the region as well as future protection is vital to ensure the GRADD region remain viable and prosper.

Economic Development Strategy

In the GRADD Comprehensive Economic Development Strategy 2020 update, benchmarks were established for the region's status that tie directly into the demographic trends studied previously in this section.

There are definite strengths to the region, but there are definite markers that must be improved to maintain and increase resiliency. The decline of coal has increased strain on fiscal budgets and the economy in the GRADD counties; therefore, new ideas and strategies to combat those losses must be constantly evolving.

The region is geographically situated on major transportation networks with the recently upgraded I-165 designation of the Natcher Parkway and the continued efforts to complete the Western Kentucky leg of I-69. These transportation upgrades will be key to expansion and diversification of the economy in the GRADD region.

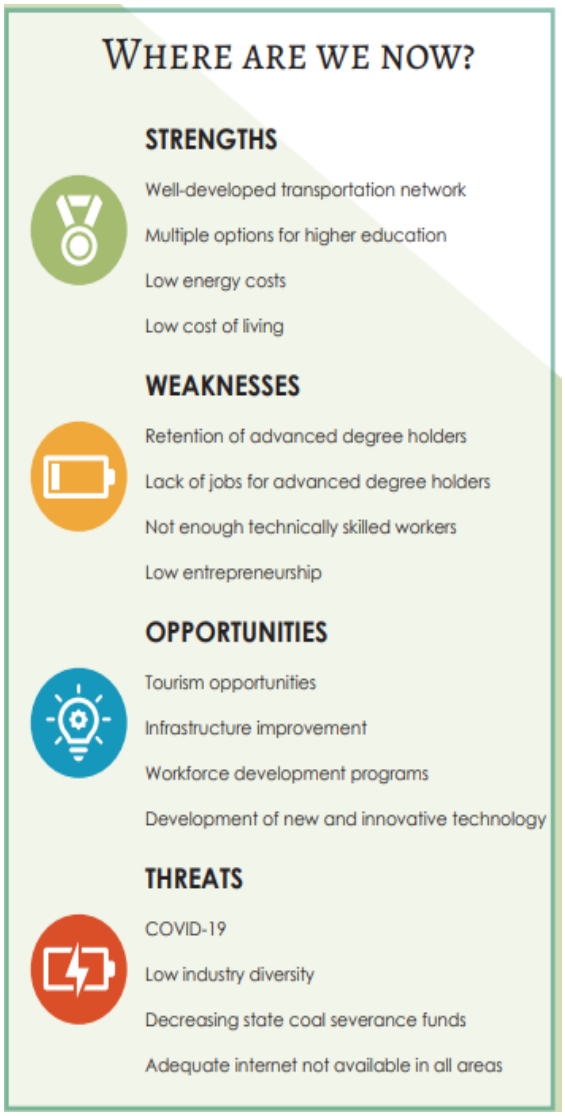


Figure 4.69 *Courtesy of GRADD Comprehensive Development Strategy 2020 Update*

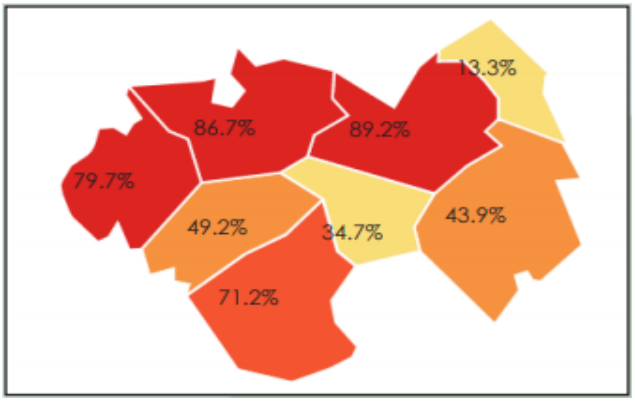


Figure 4.70 *Source: Federal Communications Commission, Mapping Broadband Health in America, Broadband Gaps in America*

Broadband availability and affordability have been accentuated by the Covid-19 Pandemic and become an essential component in the future of the region's economy. The graphic in Figure 4.73 shows the percentage by county of households with access to at least 25/3 MBP/S broadband internet.

Initiatives are currently underway to improve the future of broadband access and affordability for the region. Delta Regional Authority invested in improving the wireless internet service for Henderson County; ConnectGRADD is investing in the upgrades of wireless service throughout the region. The low cost of living in the area is attractive to businesses and individuals looking to locate in the area, but the infrastructure, including broadband, must be existent.



Figure 4.71 *Courtesy of GRADD Comprehensive Development Strategy 2020 Update*

The economic development strategy for the region has highlighted goals to help achieve the resilience and prosperity available to those living here. One of those goals is reducing the costs and effects from disaster. Improved infrastructure and communication, partnerships and collaboration improve resiliency inherently and allow for that resiliency to be achievable.

As Hazard Mitigation Planners move forward with the strategy developed through this process, how to reduce the cost of disaster and protect those most vulnerable remain top priorities. The goals addressed with the economy will help that process progress. The Hazard Mitigation Plan is unsuccessful without the CEDS and investment from stakeholders, local officials and the public. Utilizing these two planning mechanisms allows planners to communicate needs and the justification behind those needs to stakeholders and the public.

Assessing Vulnerability – Identifying Assets

Critical to the vulnerability assessment and mitigation efforts are the identification and valuation of assets. This data is indispensable in performing Benefit Cost Analysis for potential projects, prioritizing allocation of resources and planning for future growth and development. In this section, the structures and their vulnerability are explored.

REQUIREMENT §201.6(c)(2)(ii)(A)

The plan should describe vulnerability in terms of the types and numbers of existing and future buildings, infrastructure, and critical facilities located in the identified hazard areas.

Table 4.39 - Vulnerable Structures by Hazard

Hazard Type	Structures Impacted	Type of Impact
Earthquakes	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	Earthquakes can impact widespread areas and all types of structures can experience damages. Structures in areas closer to fault lines have an increased vulnerability. Areas with certain soil types, especially along the Ohio River, exhibit a greater vulnerability.
Drought	Agricultural, Infrastructure	Droughts have an immense impact on the agricultural sector, often leading to crop damages. Prolonged drought can hinder the functioning of certain infrastructure, such as water mains.
Extreme Temperatures	Agricultural	Extreme temperatures can impact widespread areas, but generally, these hazards do not directly affect structures. Both extreme heat and extreme cold, however, can have a negative effect on crops.
Floods	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	Floods impact widespread areas; however, the most intense impact occurs in floodplains and/or special flood hazard areas. Structures located in these areas experience high risk. Severe Repetitive Loss properties exist in the region.
Severe Thunderstorms	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	Severe thunderstorms impact widespread areas, and although the approach of severe thunderstorm conditions can be predicted, science cannot yet pinpoint specific areas that will experience the greatest impacts from severe thunderstorm events. All structures face a certain amount of risk, although older structures have a higher vulnerability.
Land Subsidence	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	All structure types built in an area with a history of land subsidence are vulnerable. In the GRADD region, there are several known areas that are undermined, and some have experienced structural damages related to land subsidence. All undermined areas may not have been documented, so all development within known undermined areas need to follow proper mitigation measures to eliminate/limit future damages.

Hazard Type	Structures Impacted	Type of Impact
Severe Winter Storms	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	Severe winter storms impact widespread areas and can damage and/or limit the functionality of all structure types. Although the threat of winter storm conditions can be predicted, the extent of impact can vary with each event. An increase in winter storm events within the region could justify the need for communities to pursue mitigation strategies and equipment purchases to limit and/or eliminate impacts upon structures in the future.
Tornadoes	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	Under certain conditions, tornadoes can impact any area of the region, yet all structure types are vulnerable. The threat of tornadoes can be predicted, but predicting an actual touchdown is not possible. Older structures that do not meet current building codes have an increased vulnerability.
Dam/Levee Failures	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	All structure types in the vicinity of a dam/levee are vulnerable. Structures near "high risk" dams have a greater level of vulnerability, as the projected damages resulting from the failure of high-risk dams could reach catastrophic levels. Though it might be impossible to restrict development in areas surrounding dams/levees, certain measures can be pursued to limit damages.
Landslides	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	All structure types near known landslide-prone areas are vulnerable. In the GRADD region, infrastructure, such as roads, is highly vulnerable, based on known landslide events. Not all landslide-prone areas have been documented, so precautions and mitigation measures in known areas are essential.
Wildfires	Residential, Commercial/ Industrial, Infrastructure, Critical/Essential Facilities, Agricultural, Public Facilities	All structure types located near heavily forested areas are vulnerable to wildfires. Depending on the type of fuel located in wildfire-prone areas, such events can spread rapidly and can quickly engulf nearby structures. Building codes can address such threats.

Valuation

For the 2021 plan update, GRADD staff and partners at the county PVA offices developed a template for calculating replacement costs and projected costs of structures within each county if a disaster event occurred. Table 4.42 is a compilation of that data. Additional data from each county can be found in the appendix.

REQUIREMENT §201.6(c)(2)(ii)(B)
An estimate of the potential dollar losses to vulnerable structures and a description of the methodology used to prepare the estimate.

Table 4.40 - Assets/Potential Loss/Replacement Value

(*Totals in Thousands)

	Daviess	Hancock	Henderson	McLean	Ohio	Union	Webster	GRADD
Commercial	1,849,657	168,296	593,091	66,459	124,413	108,461	60,473	2,970,850
Farm	466,442	86,532	288,782	159,247	237,027	162,702	172,082	1,572,814
Residential	4,030,059	176,215	1,419,101	202,024	492,640	286,939	230,589	6,837,568
Taxable Value	6,346,158	431,043	2,300,965	427,735	753,021	558,102	463,145	11,280,169
Exempt Properties	1,684,994	74,547	542,030	62,012		124,354	95,898	2,583,835
Homestead Exemption	352,054	35,980	158,473	31,068	75,761	46,587	48,860	748,782
Disability Exemption	37,460	4,532	15,016	10,005	25,576	6,966	6,893	106,448
Agriculture Deferred	1,066,491		879,354	464,300		741,365	586,506	3,738,016
Fair Cash Value	9,487,157	546,102	3,872,115	692,360	743,497	1,477,375	1,201,301	18,019,906
Economic Obsolescence	1,423,074	81,915	580,817	103,854	111,525	221,606	180,195	2,702,986
Depreciated Value	10,910,231	628,017	4,452,932	796,214	855,021	1,698,981	1,381,496	20,722,892
Typical Depreciation	5,455,116	314,008	2,226,466	398,107	427,511	849,490	690,748	10,361,446
Replacement Cost New	16,365,347	942,025	6,679,398	1,194,320	1,282,532	2,548,471	2,072,244	31,084,337
Costs & Overruns	4,091,337	235,506	1,669,849	298,580	320,633	637,118	518,061	7,771,084
Projected Total	20,456,683	1,177,532	8,349,247	1,492,901	1,603,165	3,185,589	2,590,305	38,855,422

Source: GRADD County Property Value Administrators

Critical Facilities

During the planning process for the 2021 Update, of particular importance to the Hazard Mitigation Council, EM Directors and GRADD staff was the wider inclusion of critical facilities from the region. The planning process included two rounds of community meetings with each jurisdiction in the region. The first round focused on the risk and vulnerability assessment of the area. This assessment included heavy emphasis on critical facility identification.

REQUIREMENT §201.6(c)(2)(iii)
For multijurisdictional plans, the risk assessment section must assess each jurisdiction's risks where they vary from the risks facing the entire planning area.

The definition of critical or vulnerable facility was expanded during this iteration of the plan to include centers of vulnerable populations: churches, senior centers, nursing homes, parks, childcare facilities, as well as significant population centers and critical businesses. GRADD GIS staff took the information gathered at the Phase I community meetings and created the inventory of critical facilities to update the shapefiles in our mapping system and shared this inventory with planners at the state level. During the Phase II community meetings, this updated inventory of critical facilities was examined and finalized based on the subject matter experts presented.

Emphasis on the wider inclusion of critical facilities allows planners to better prepare for disaster through identification of possible shelter locations or critical infrastructure and to prioritize needs and recovery efforts. The updated inventory of critical assets will aid planning and mitigation efforts for future funding opportunities. In the Hazard Profile portion of this Risk Assessment Section, the critical facilities were mapped according to the vulnerability to hazards. In this iteration of the Hazard Mitigation Plan, critical facilities are shown on the following maps along with a table of the included structures for each of the seven counties and twenty-seven cities.

Daviess County

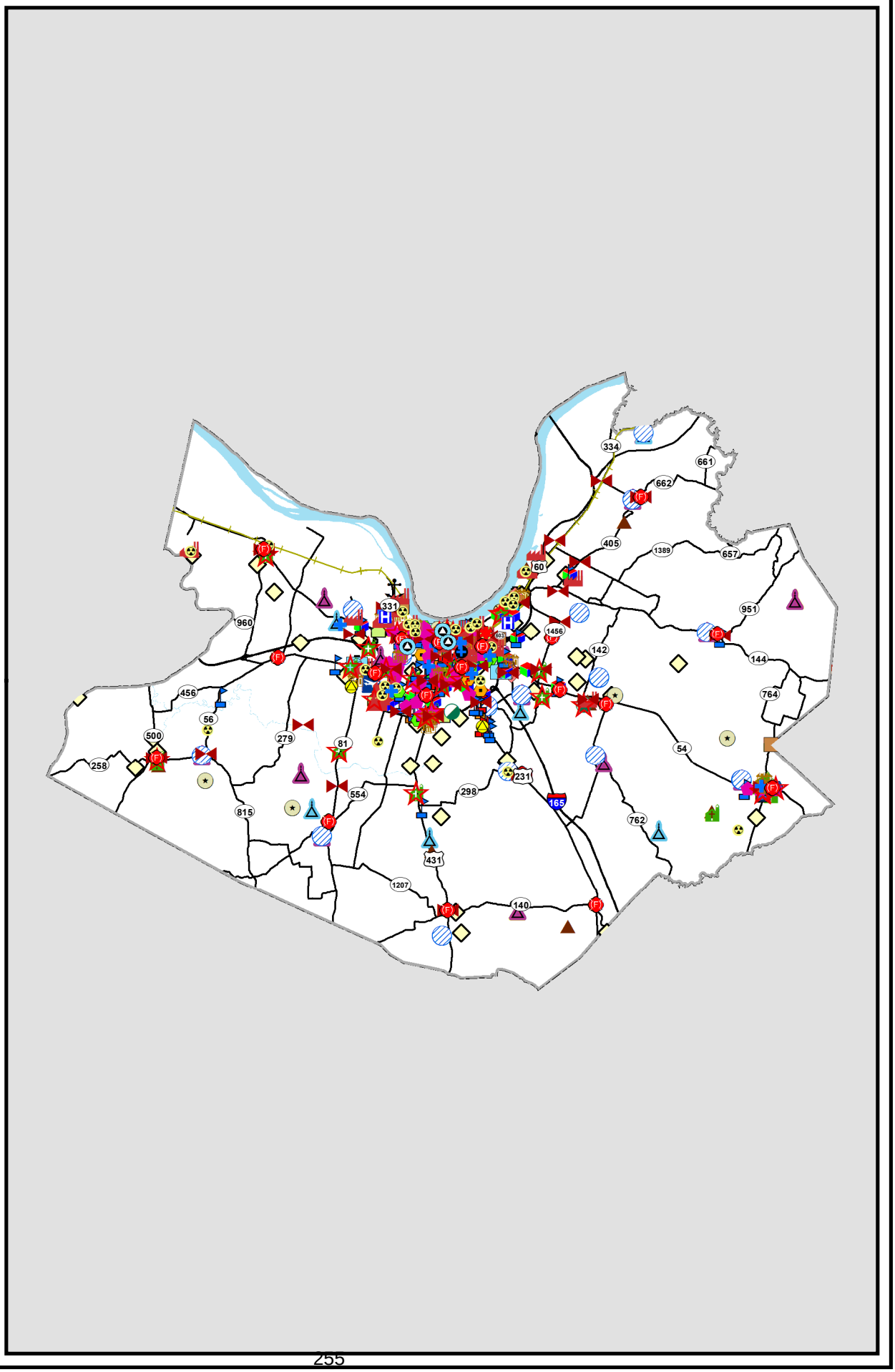
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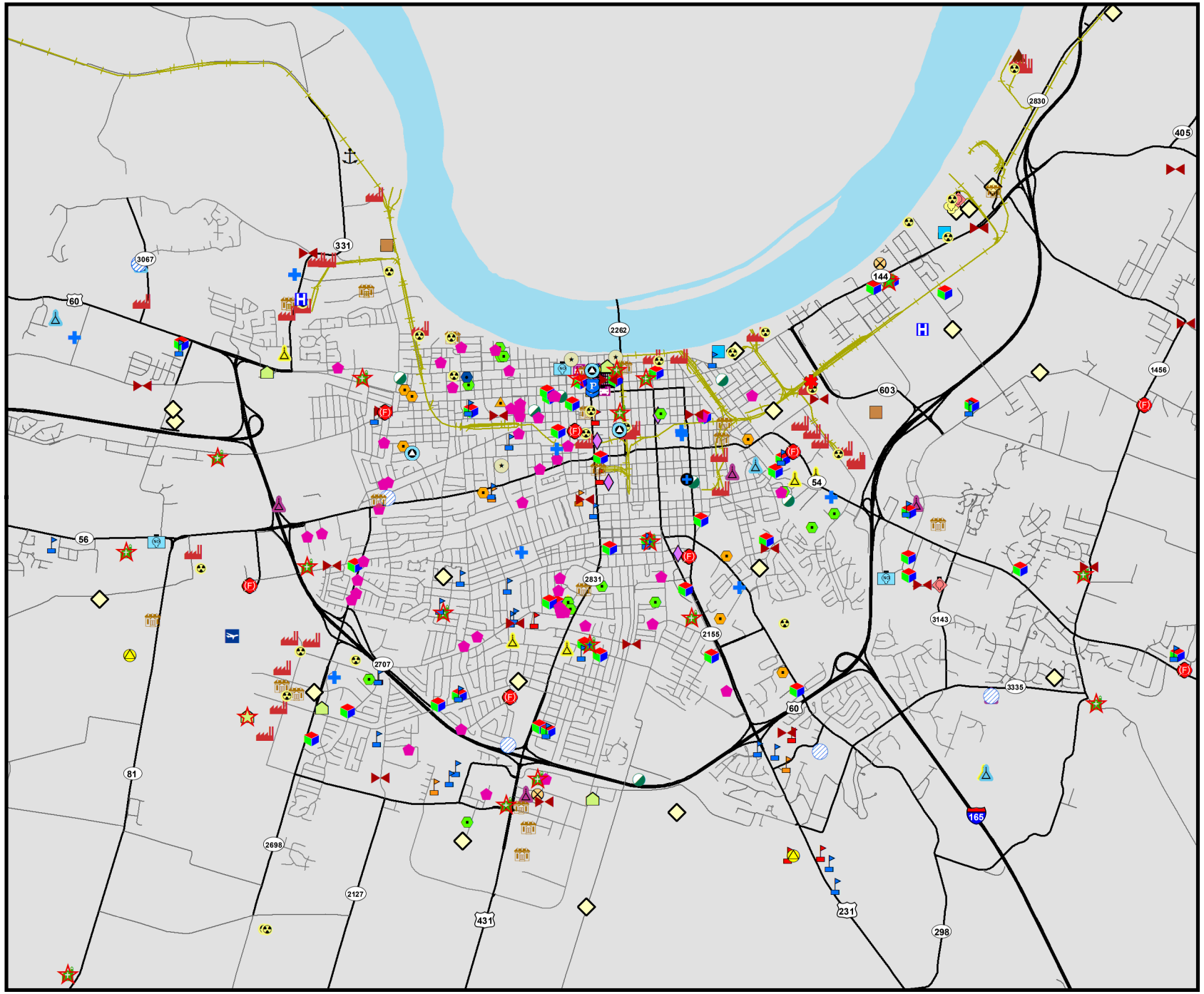
Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Owensboro



Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Government Bldg
- Correctional

Transportation

- Riverport
- Airport
- Public Transit
- Railroad

City of Whitesville



Critical Facilities

Emergency Facilities
- Fire Department
- Health Clinic
- Warning Siren
- Emergency Shelters

Economic
- Business

Utilities
- WaterTank

Communications
- ConnectGRADD Tower

Vulnerable Population Centers
- Apartments
- Senior Center
- School
- Religious

Civic Facilities
- City Hall
- Public Works

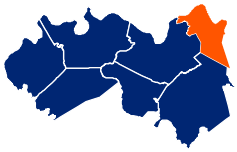
Hancock County

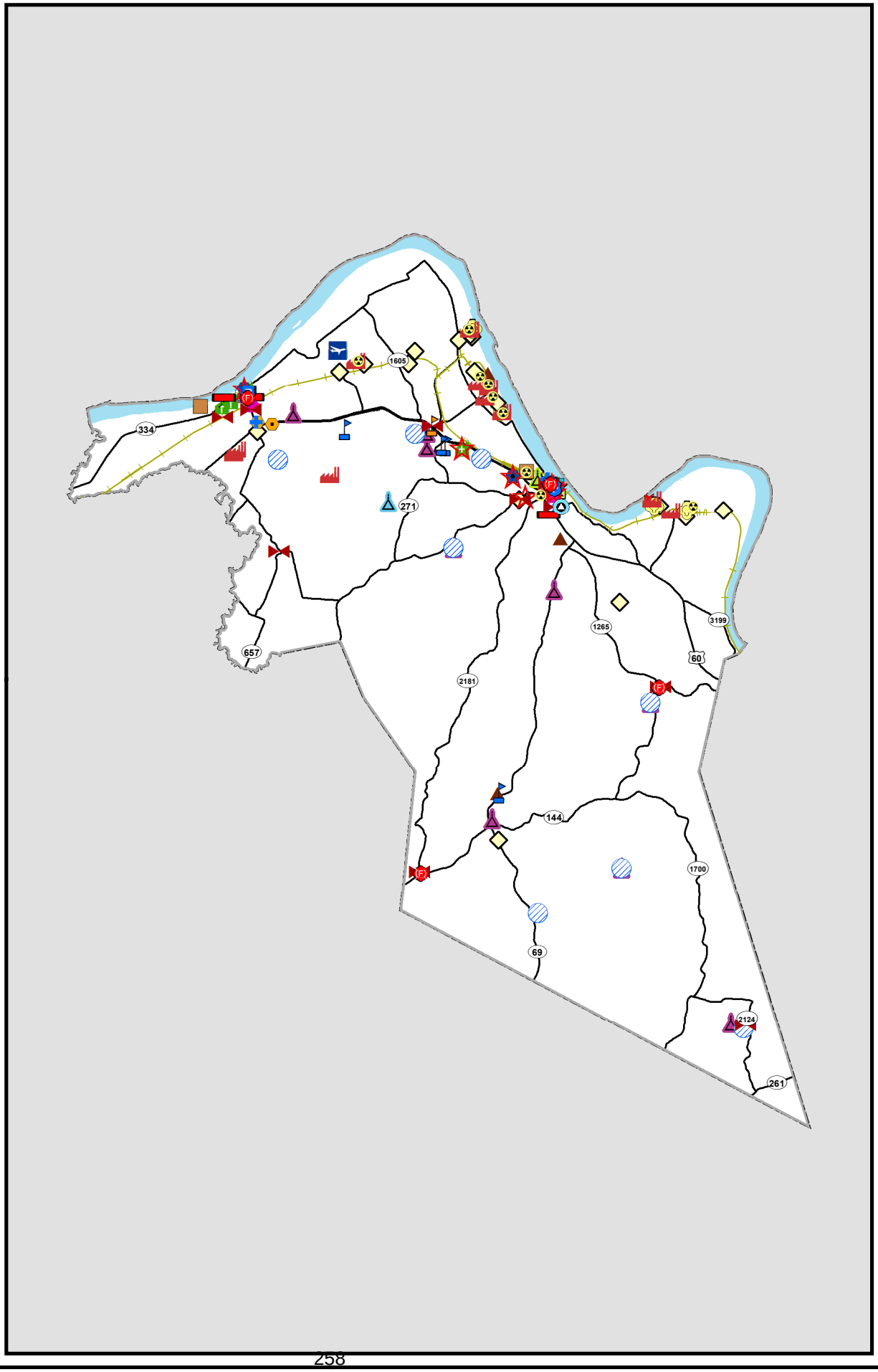
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Miles

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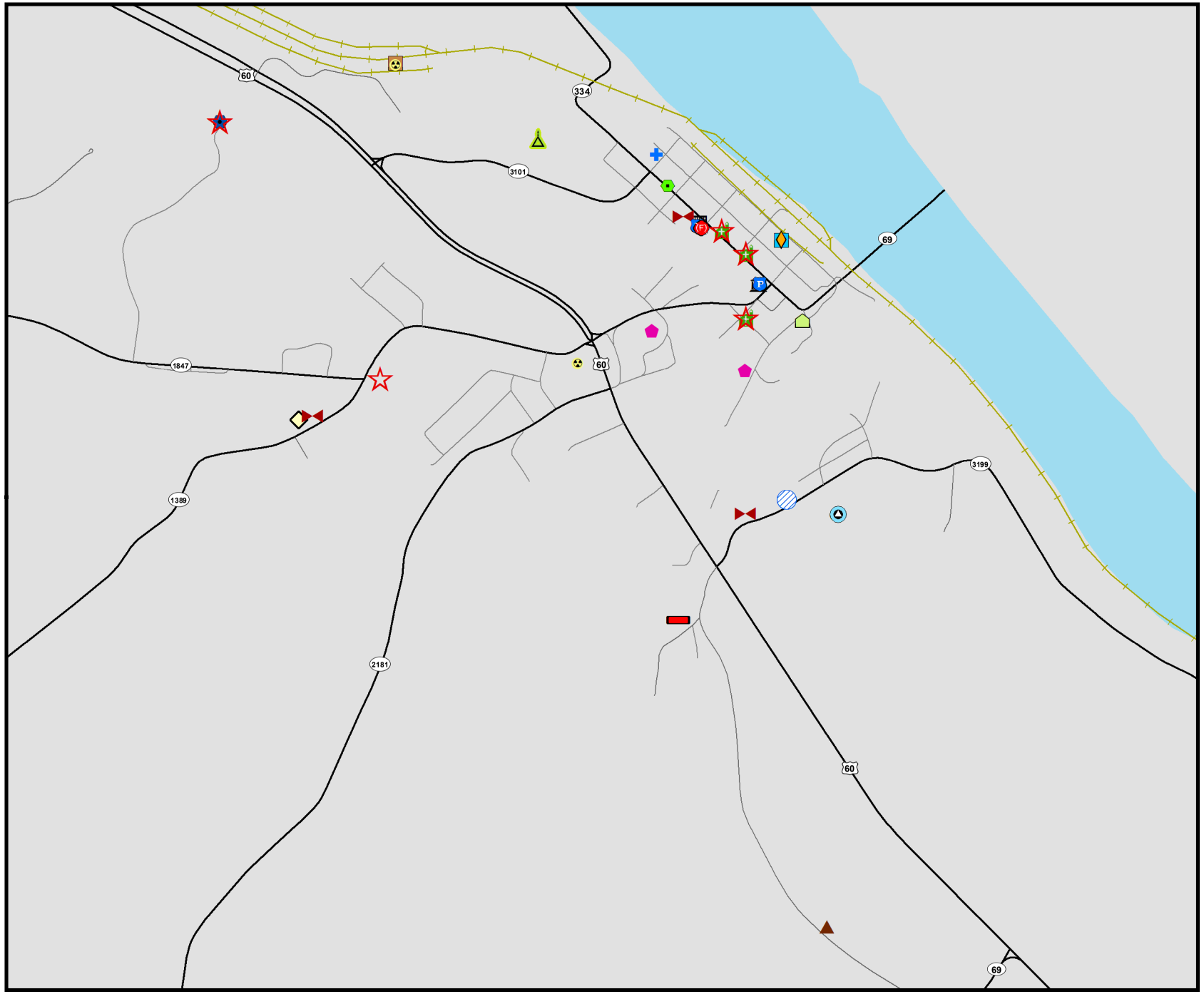
Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Hawesville



Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation

Communications

- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Religious

Civic Facilities

- City Hall
- Courthouse
- Road Department
- Government Building

Transportation

- Railroad

City of Lewisport

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Feet



Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Health Clinic
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic
- Industry

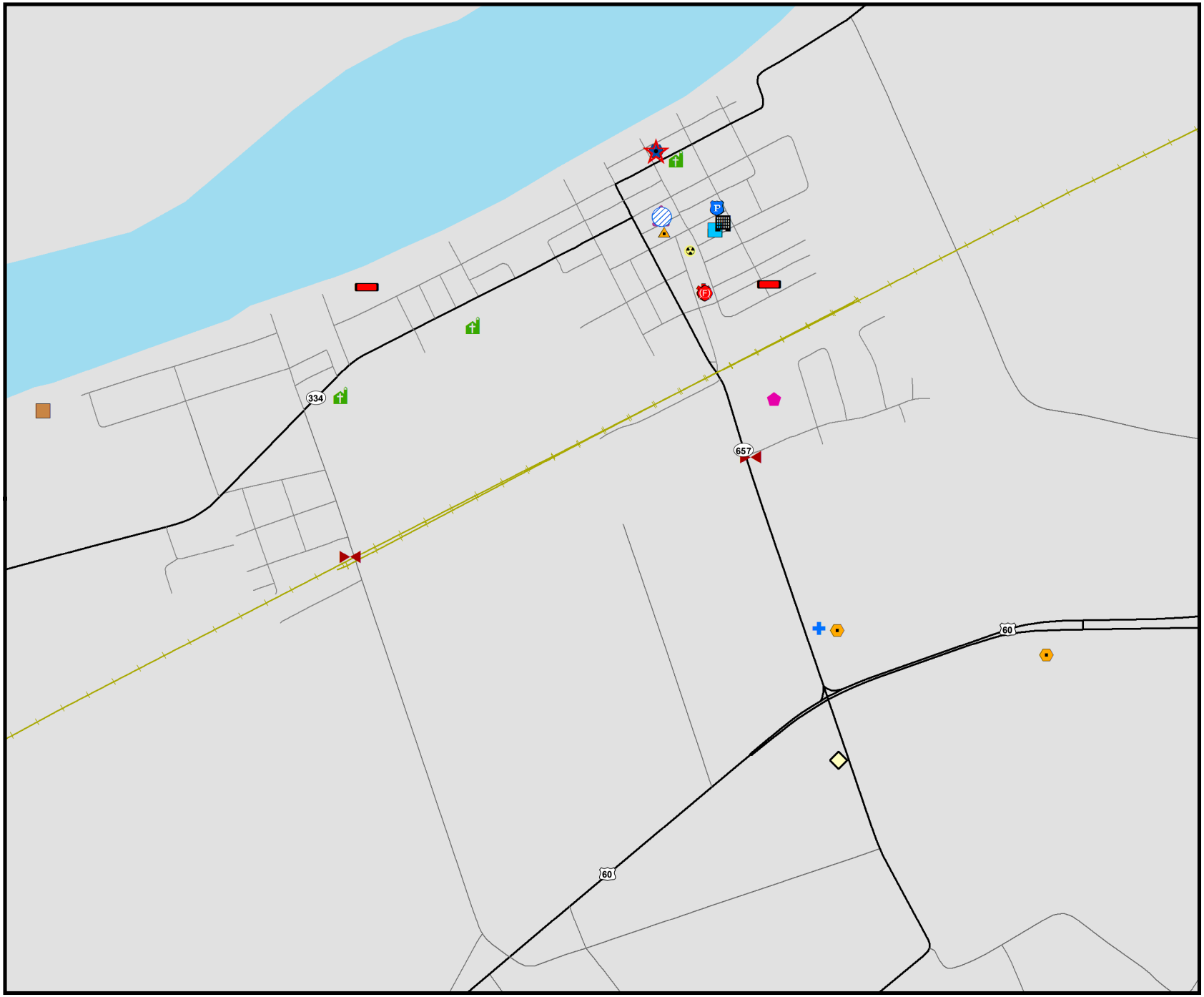
Utilities
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications
- Cellular Tower
- ConnectGRADD Tower

Vulnerable Population Centers
- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- Religious

Civic Facilities
- City Hall
- Public Works

Transportation
- Railroad



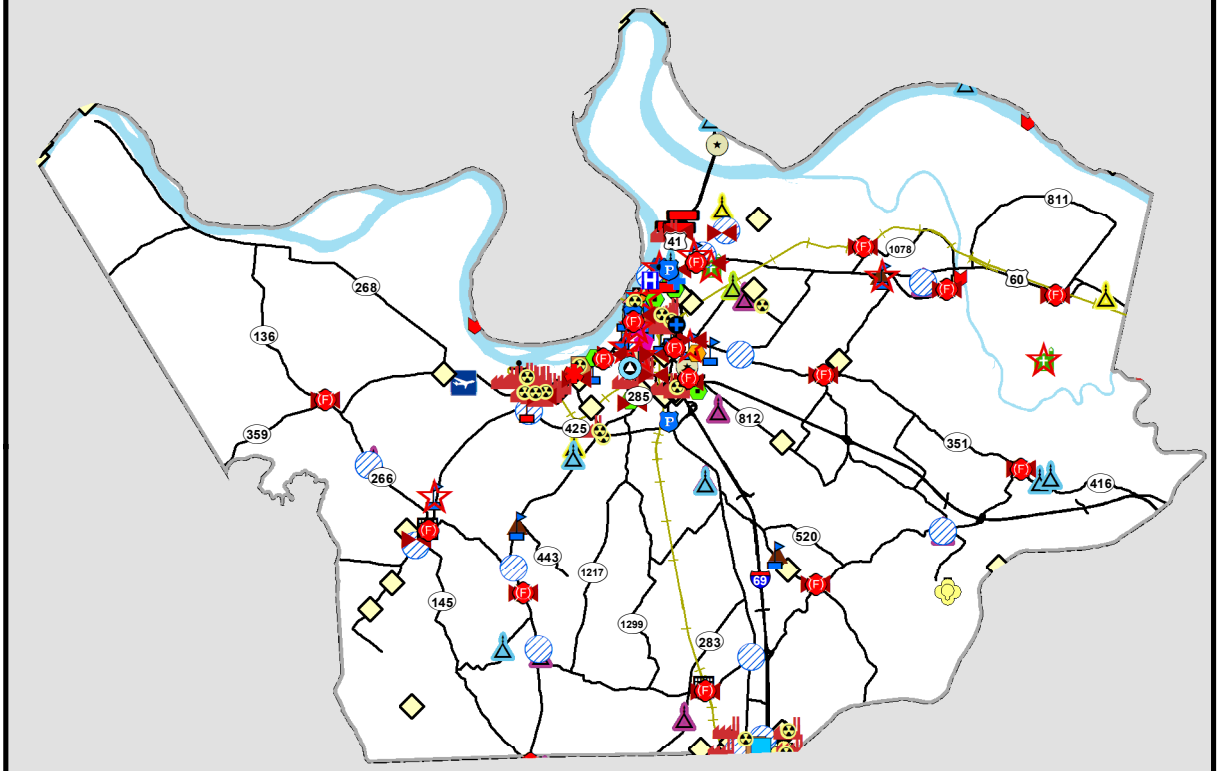
Henderson County

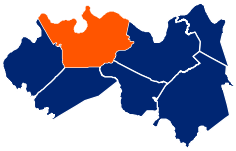
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Critical Facilities

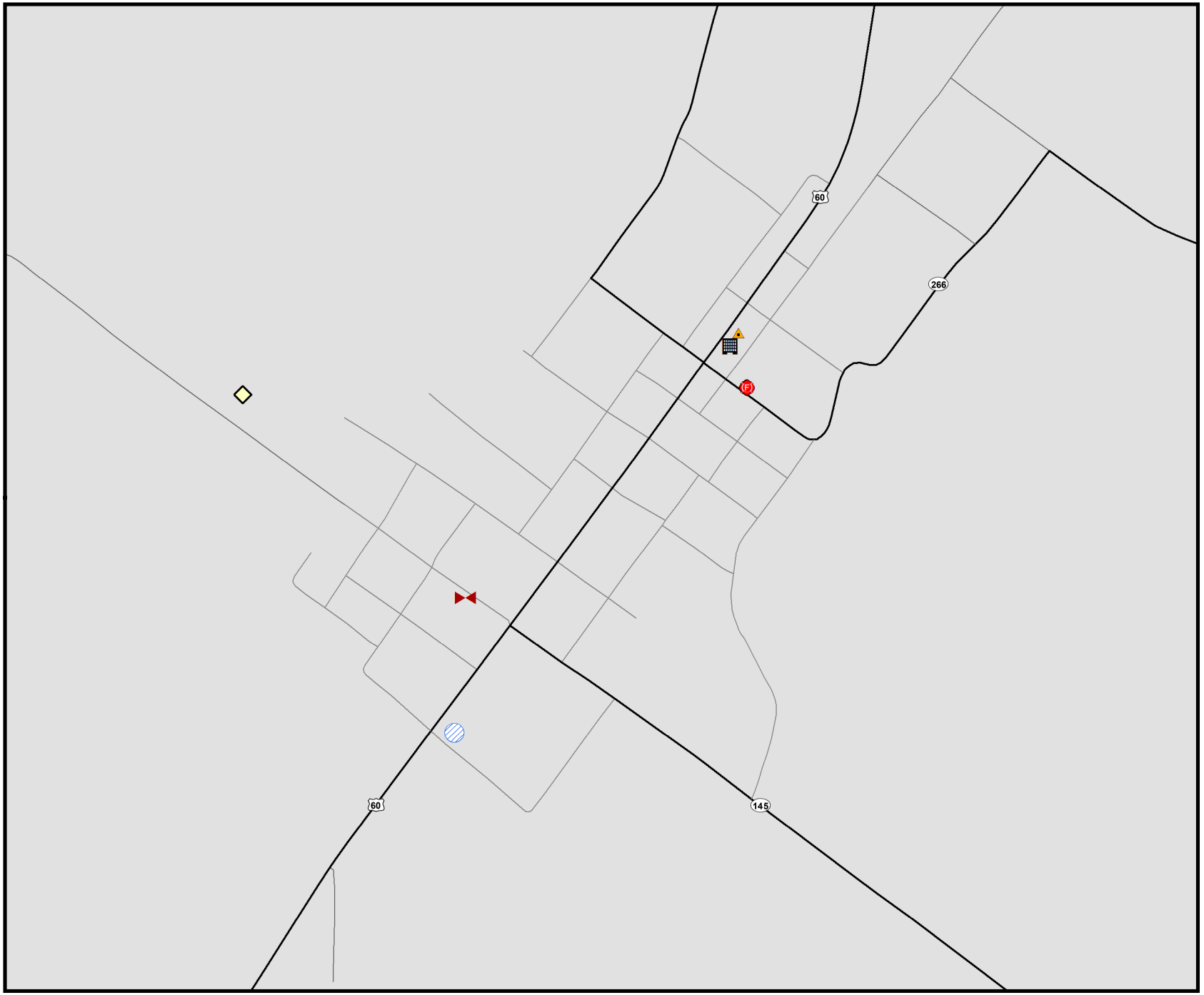
- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Corydon





Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

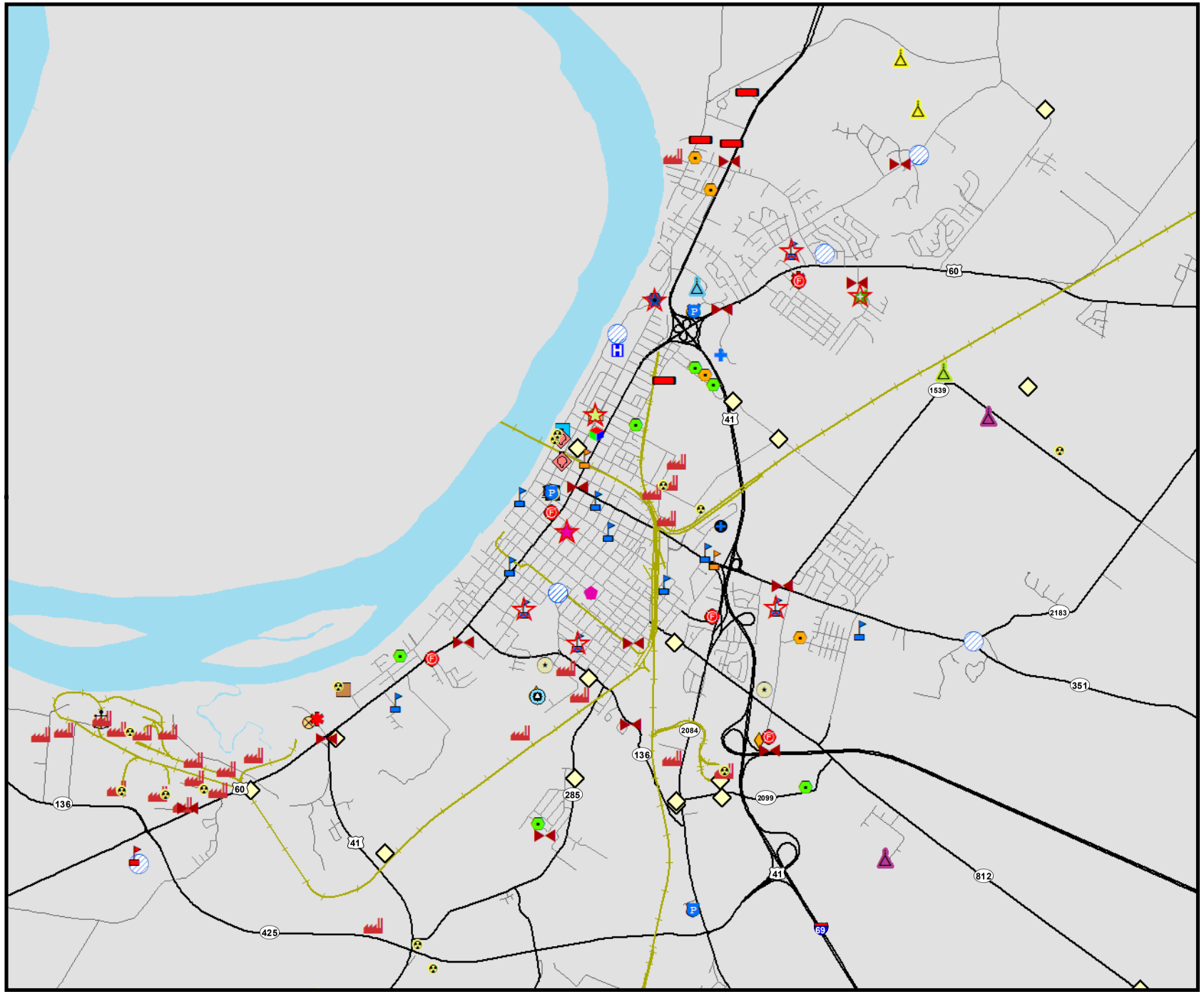
Utilities

- WaterTank
- Substation

Civic Facilities

- City Hall
- Public Works

City of Henderson



Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry

Utilities

- Electric Utility
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Religious
- Child Care/Preschool
- Entertainment

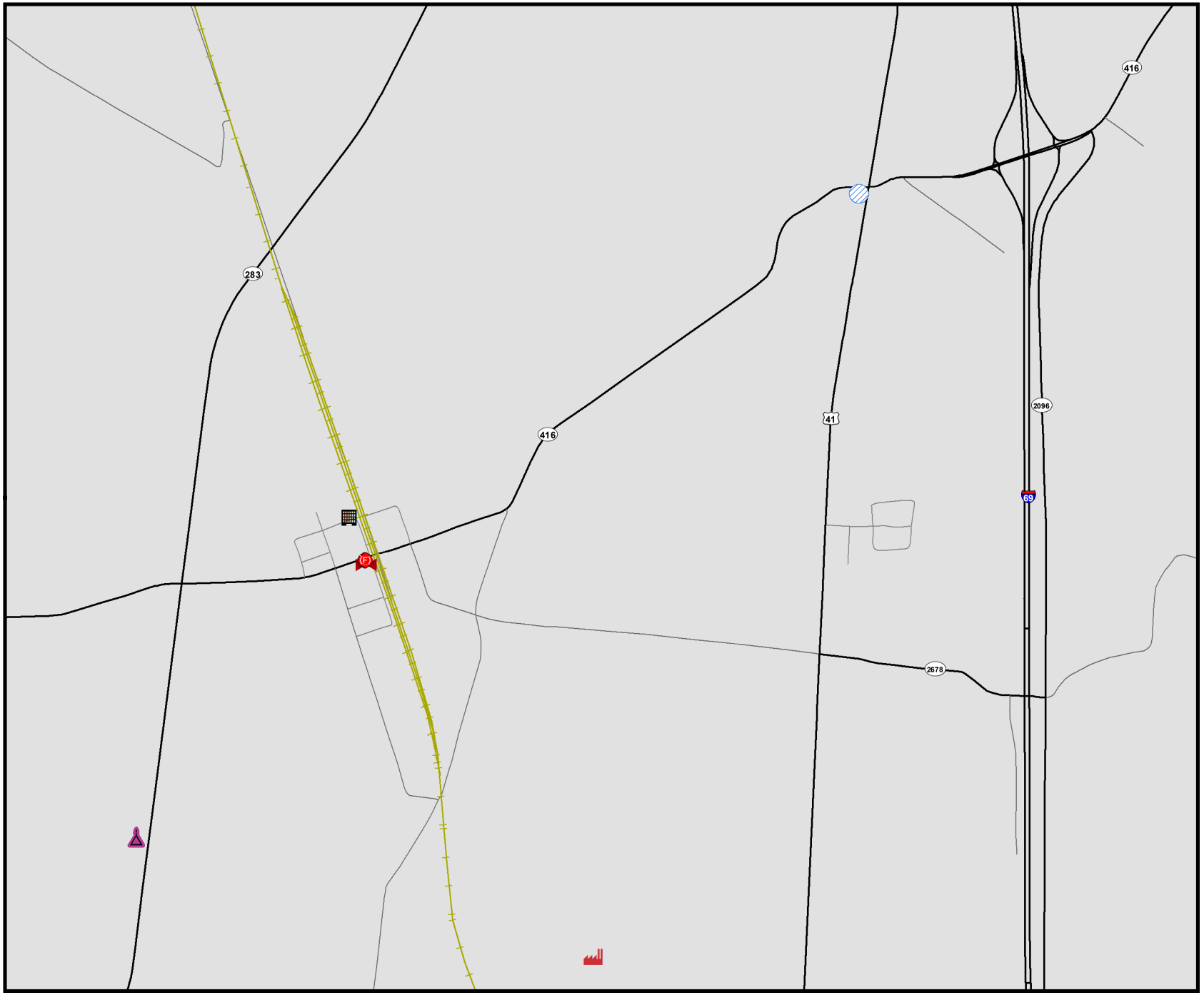
Civic Facilities

- City Hall
- Courthouse
- Road Department
- Government Building
- Correctional

Transportation

- Riverport
- Railroad

City of Robards



Critical Facilities

Emergency Facilities
- Fire Department
- Hazardous Materials
- Warning Siren

Economic
- Industry

Utilities
- WaterTank
- Substation

Communications
- ConnectGRADD Tower

Civic Facilities
- City Hall

Transportation
- Railroad

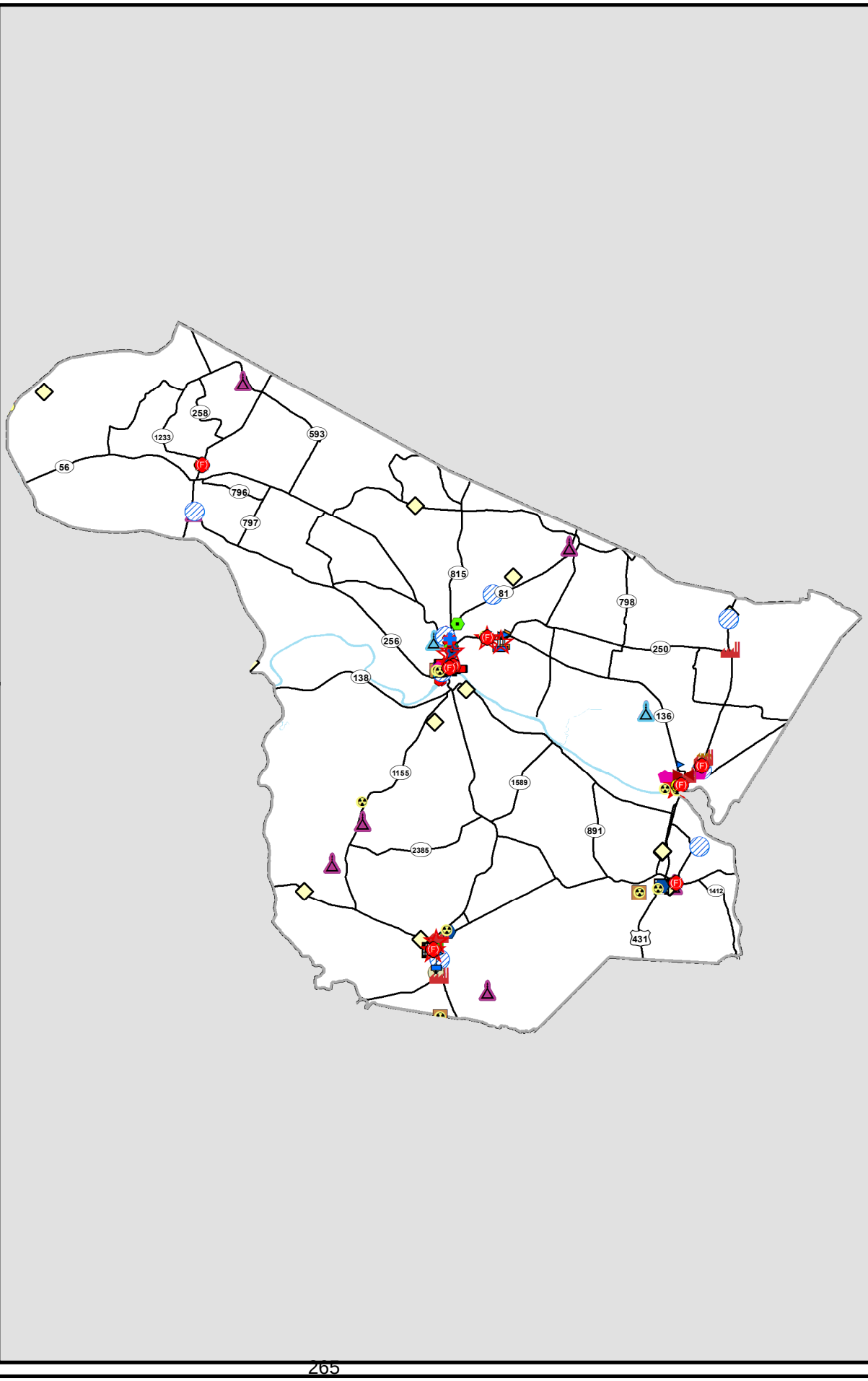
McLean County

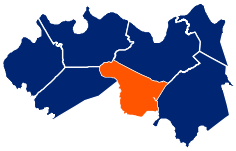




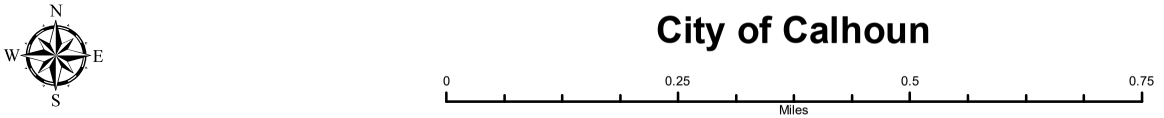
Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Calhoun





Critical Facilities

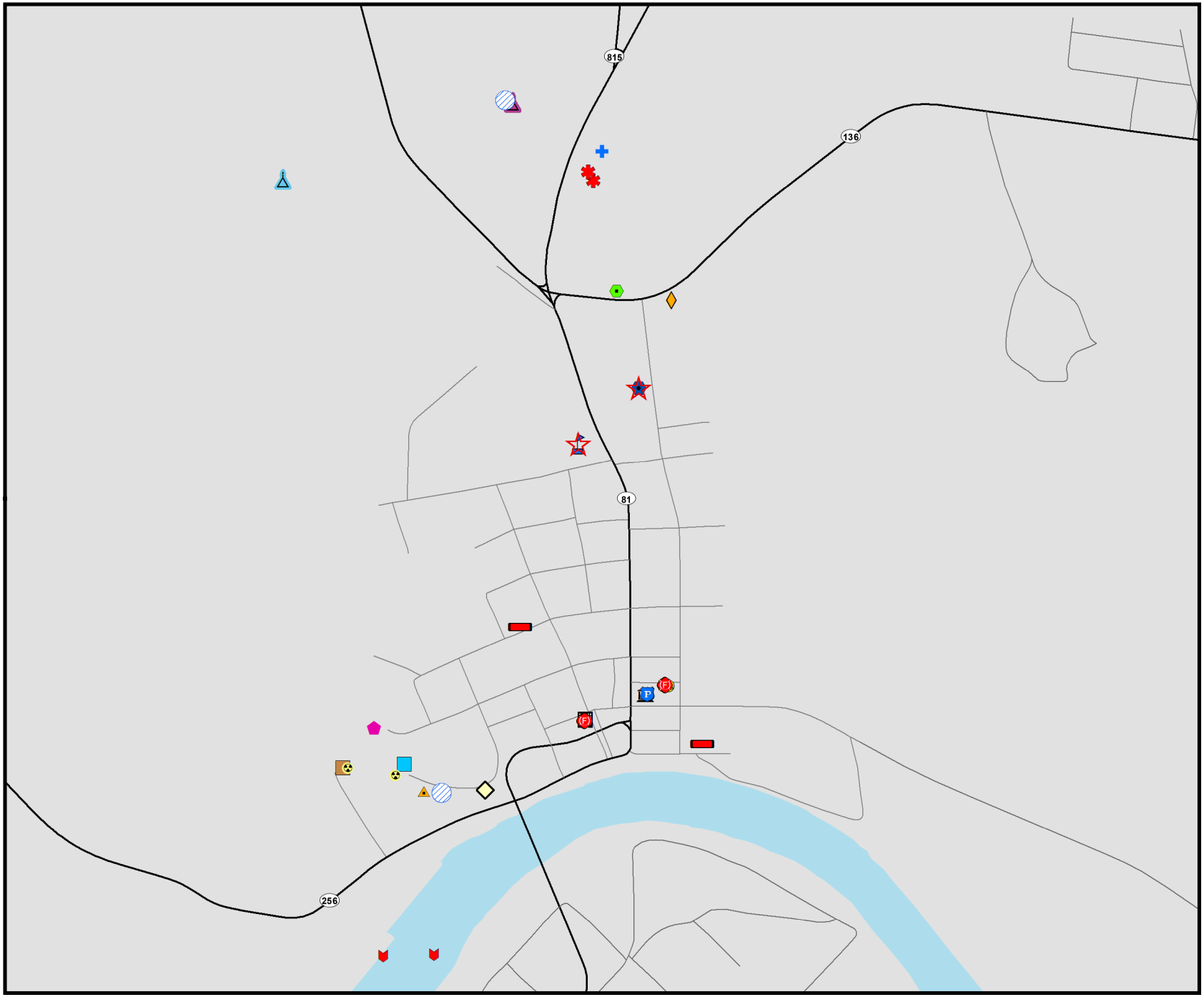
Emergency Facilities
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- EMS
- Hazardous Materials
- Emergency Shelters

Utilities
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation
- Dam

Communications
- Cellular Tower
- ConnectGRADD Tower

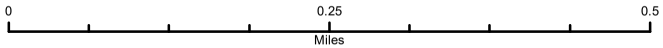
Vulnerable Population Centers
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- School

Civic Facilities
- City Hall
- Courthouse
- Public Works
- Road Department
- Dam



City of Island







Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials

Utilities

- SewageTreatmentPlant
- Substation

Communications

- ConnectGRADD Tower

Vulnerable Population Centers

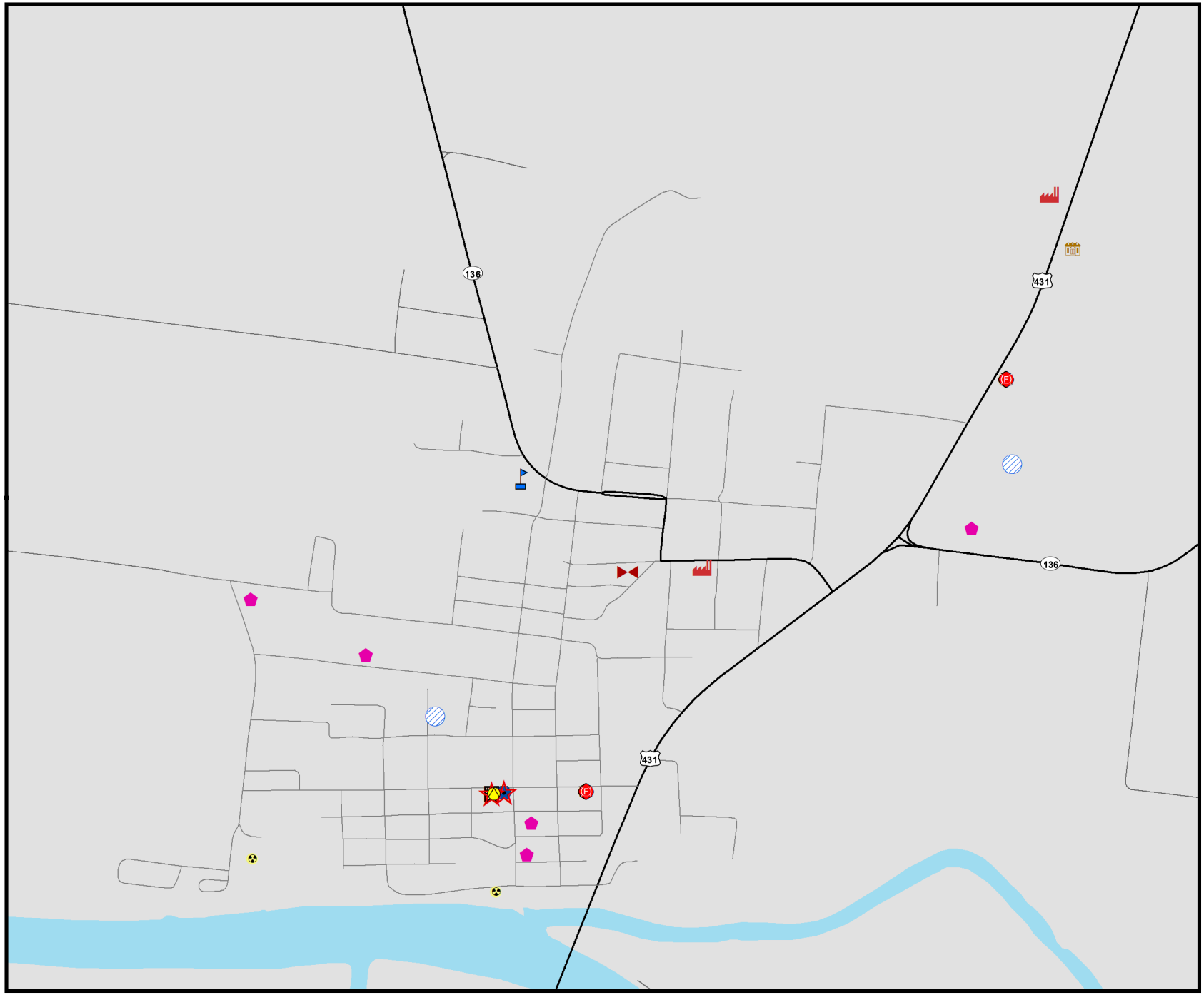
- Senior Center

Civic Facilities

- City Hall



City of Livermore



Critical Facilities

Emergency Facilities

- Fire Department
- Emergency Operations Center
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTank

Communications

- Cellular Tower

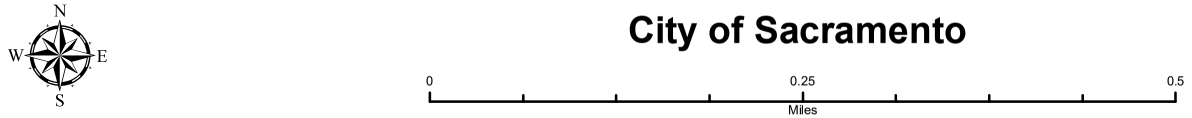
Vulnerable Population Centers

- Apartments
- Senior Center
- School

Civic Facilities

- City Hall

City of Sacramento





Critical Facilities

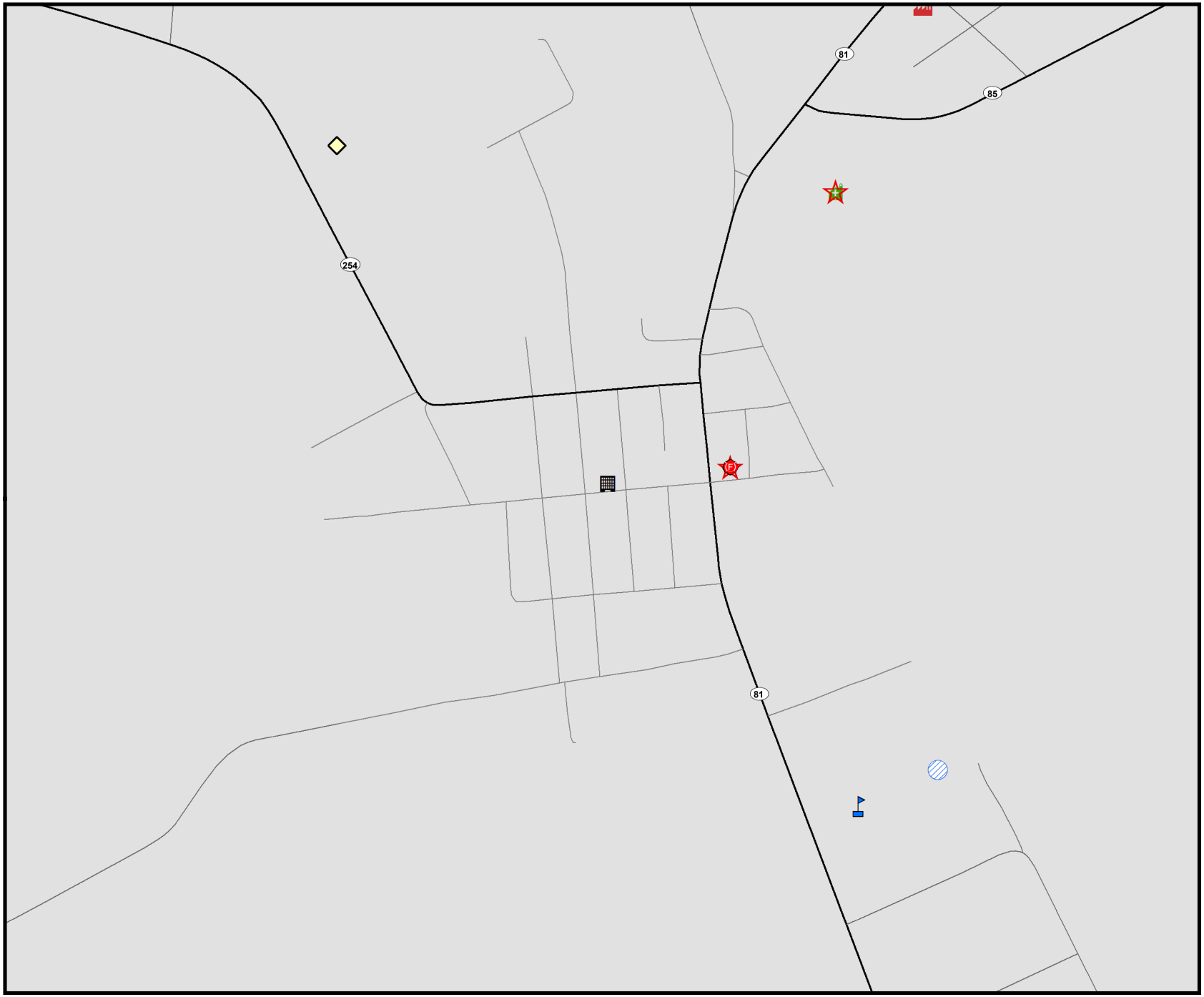
Emergency Facilities
- Fire Department
- Hazardous Materials
- Emergency Shelters

Economic
- Industry

Utilities
- WaterTank
- Substation

Vulnerable Population Centers
- Senior Center
- School
- Religious
- Entertainment

Civic Facilities
- City Hall



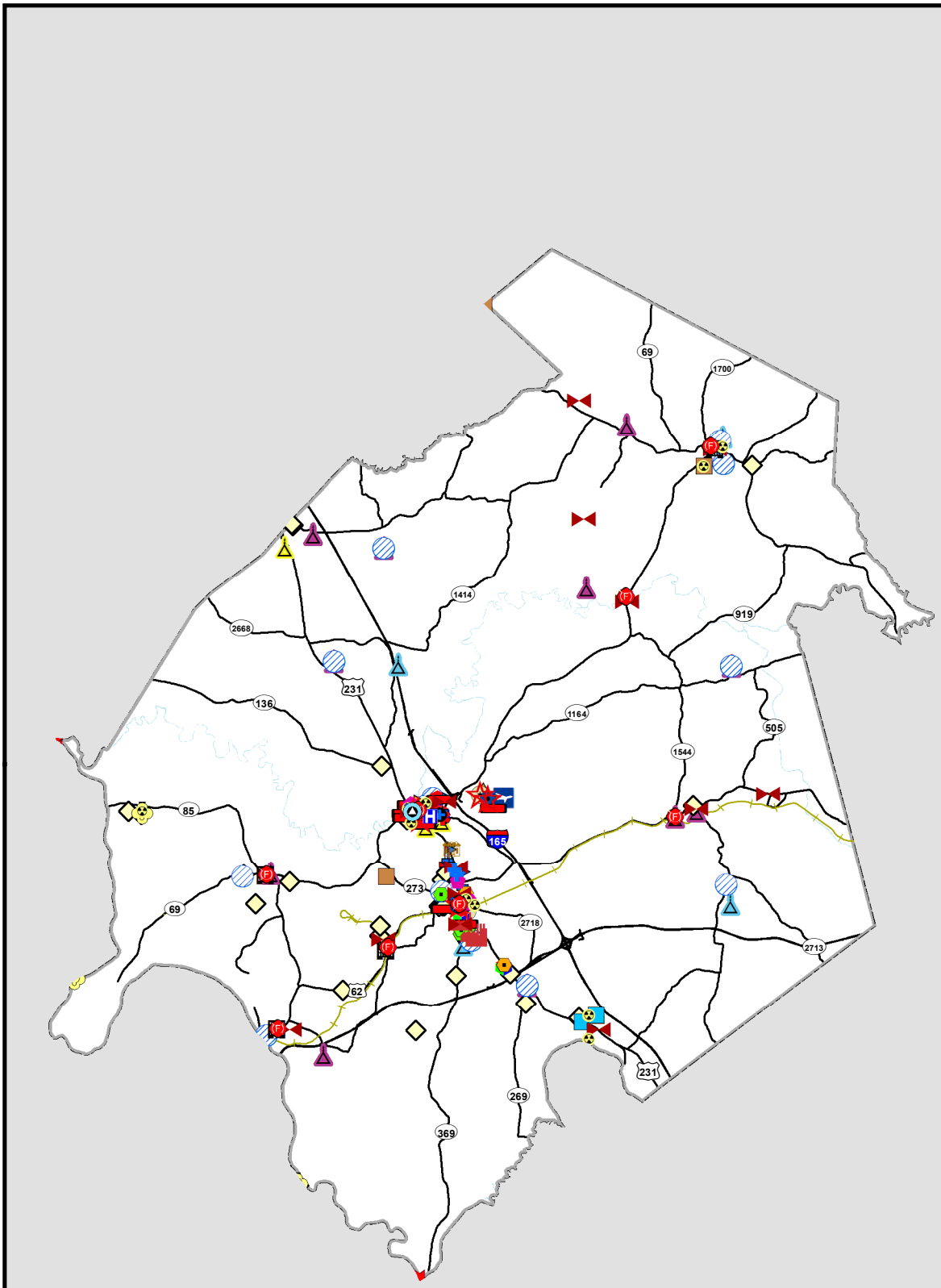
Ohio County

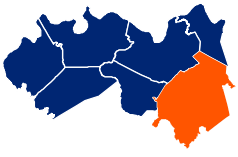
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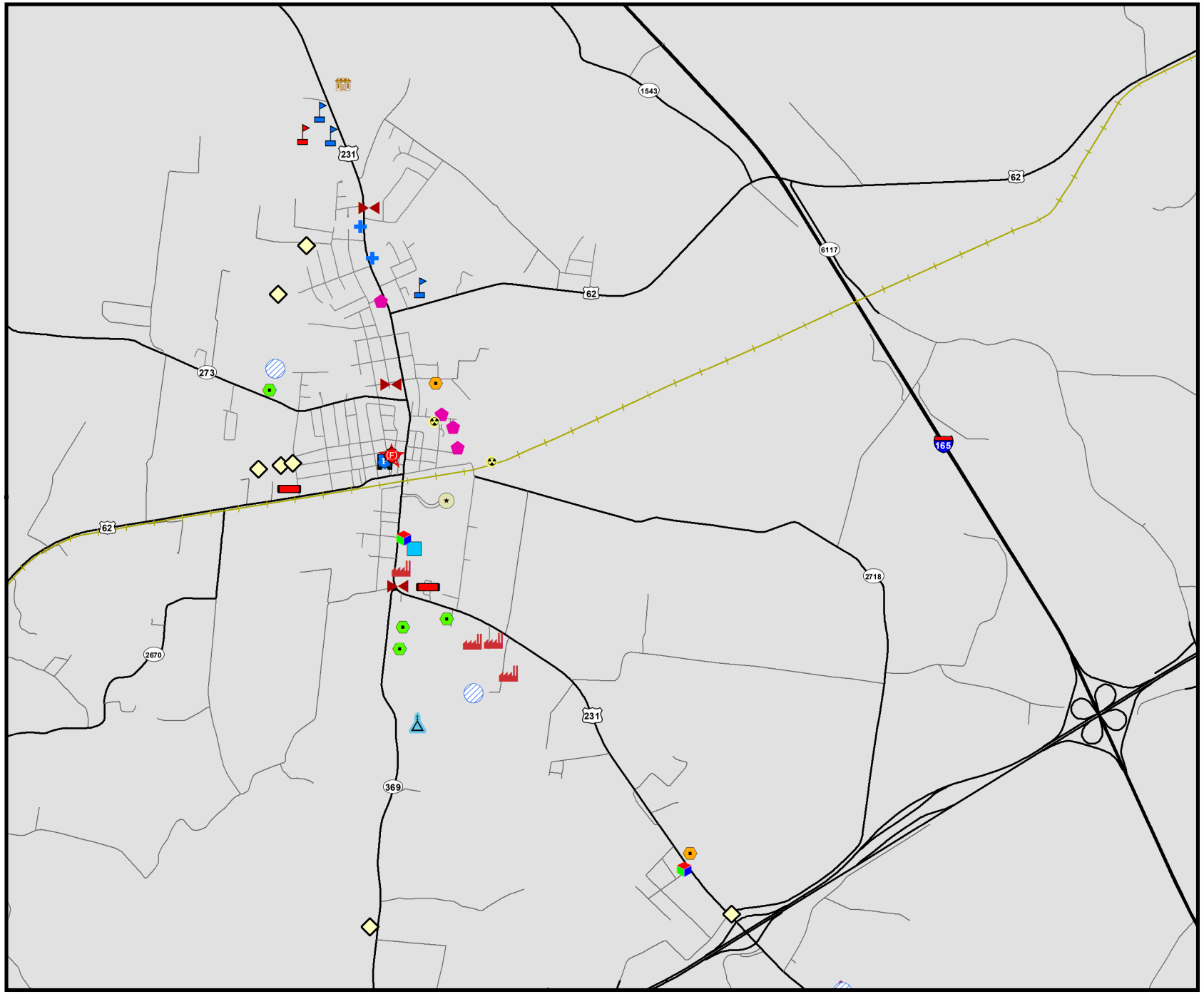
Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Beaver Dam



Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic
- Industry
- Business

Utilities
- WaterTreatmentPlant
- WaterTank
- Substation

Communications
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers
- Apartments
- Trailer Park
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- Child Care/Preschool
- Entertainment

Civic Facilities
- City Hall

Transportation
- Railroad

City of Centertown







Critical Facilities

Emergency Facilities

Fire Department

Utilities

Substation

Communications

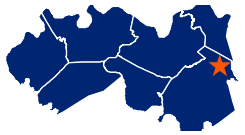
ConnectGRADD Tower

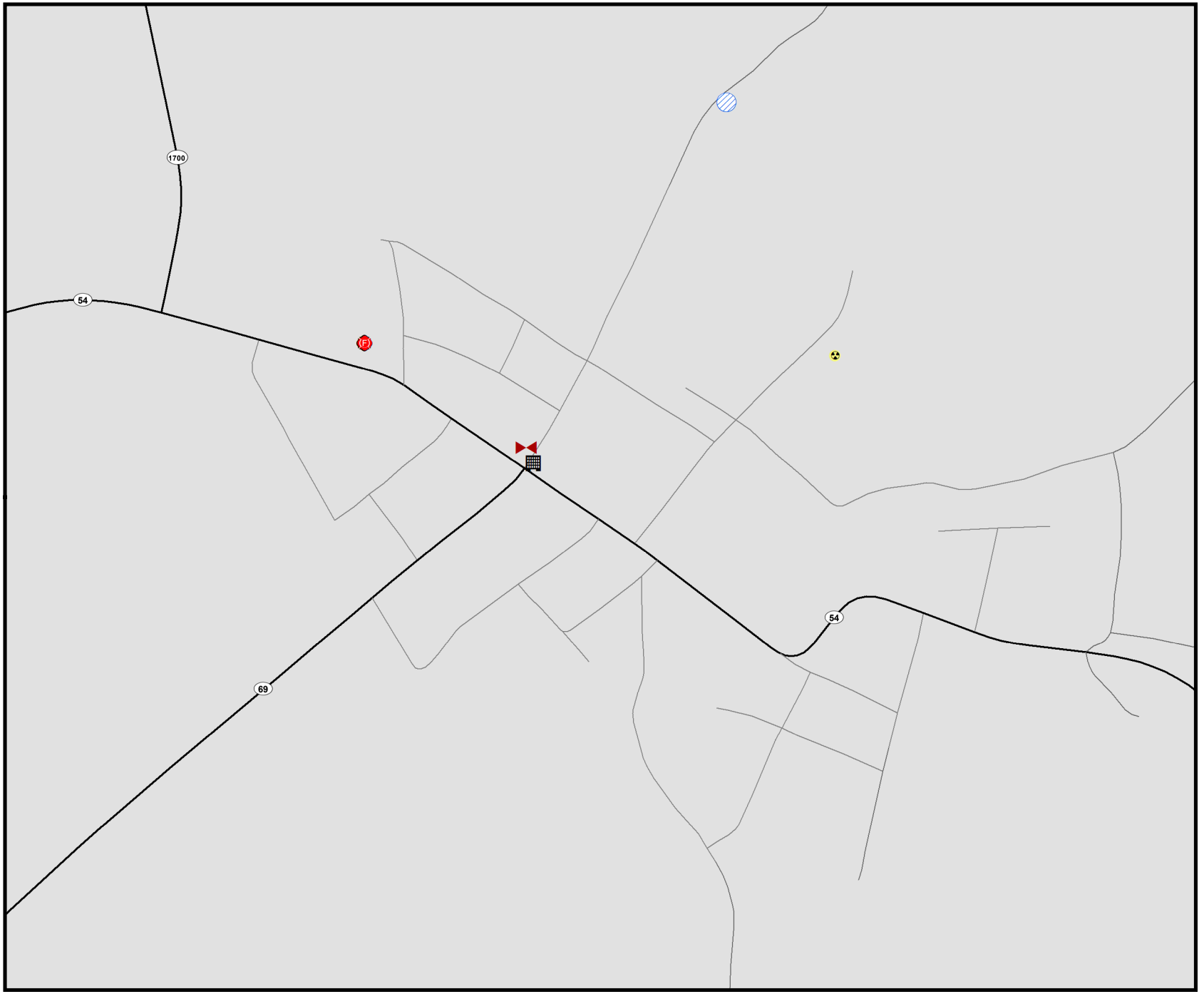
Civic Facilities

City Hall



City of Fordsville





Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren

Utilities

- SewageTreatmentPlant
- WaterTank
- Substation

Communications

- Cellular Tower

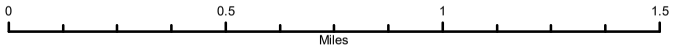
Civic Facilities

- City Hall

City of Hartford







Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTreatmentPlant
- WaterTank
- Substation

Communications

- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

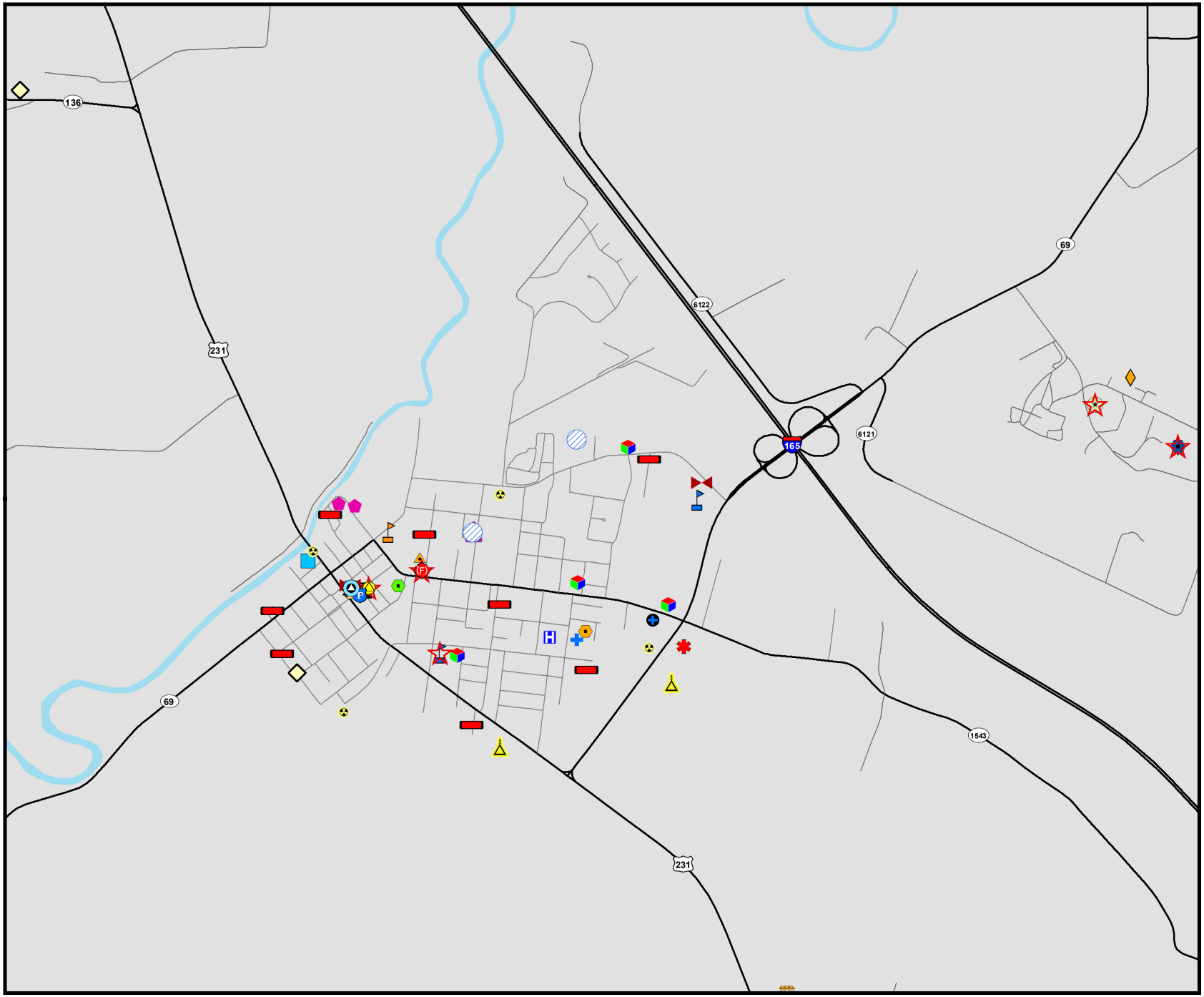
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Child Care/Preschool
- Special Needs
- Entertainment

Civic Facilities

- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional

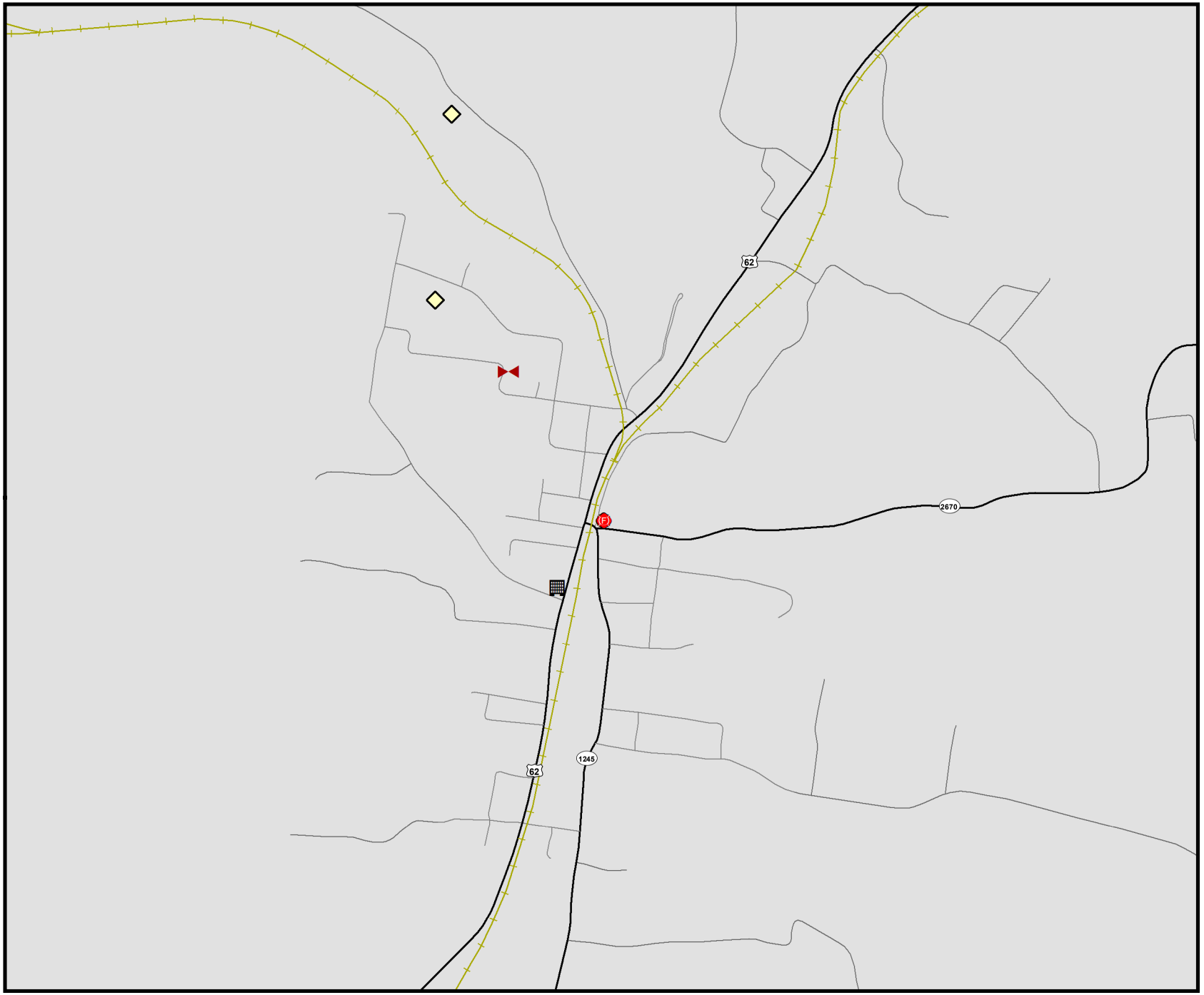
Transportation

- Railroad



City of McHenry





Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

- Substation

Civic Facilities

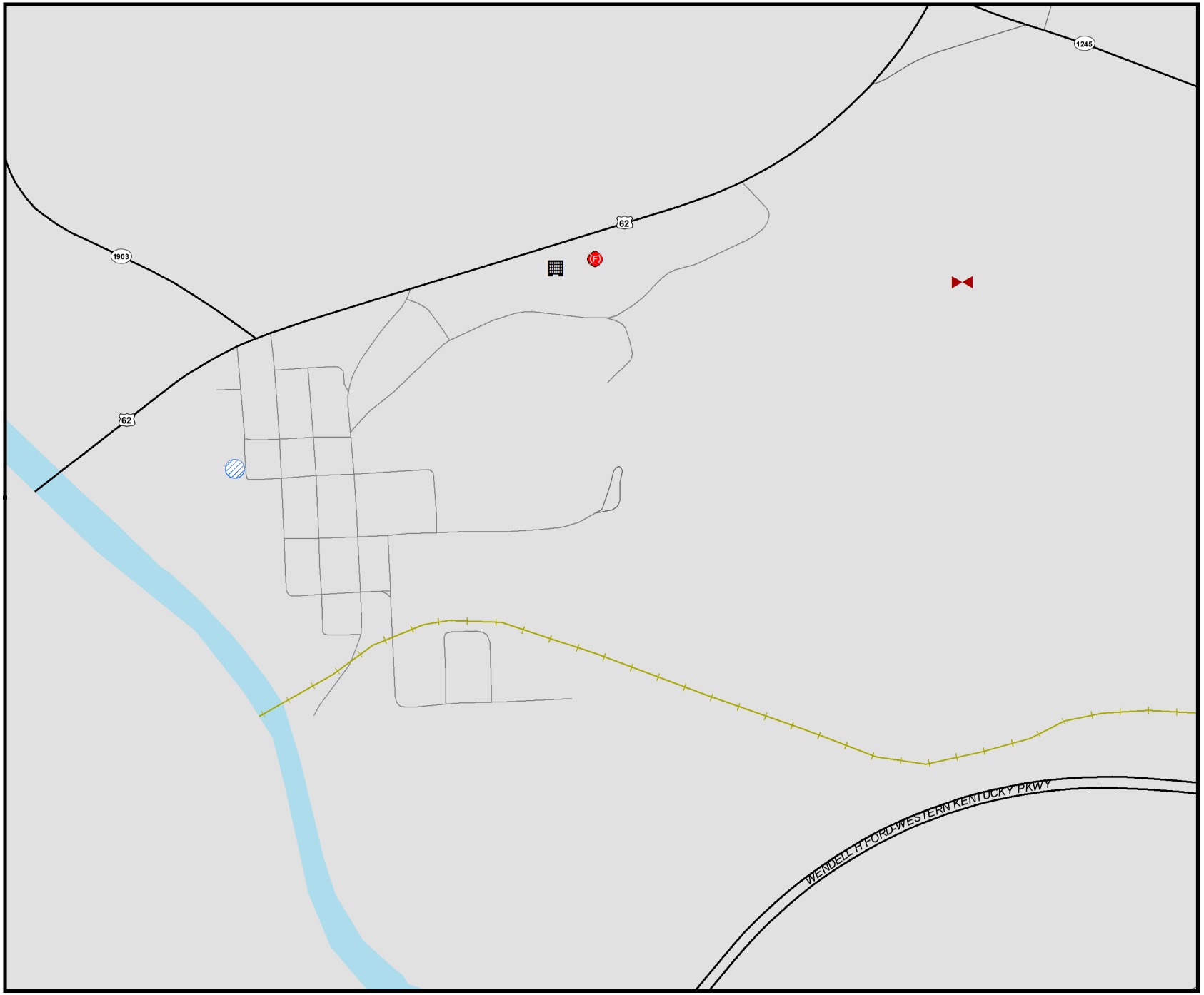
- City Hall

Transportation

- Railroad

City of Rockport





Critical Facilities

Emergency Facilities

- Fire Department
- Warning Siren

Utilities

- WaterTank

Civic Facilities

- City Hall

Transportation

- Railroad

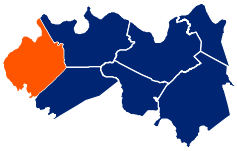
Union County

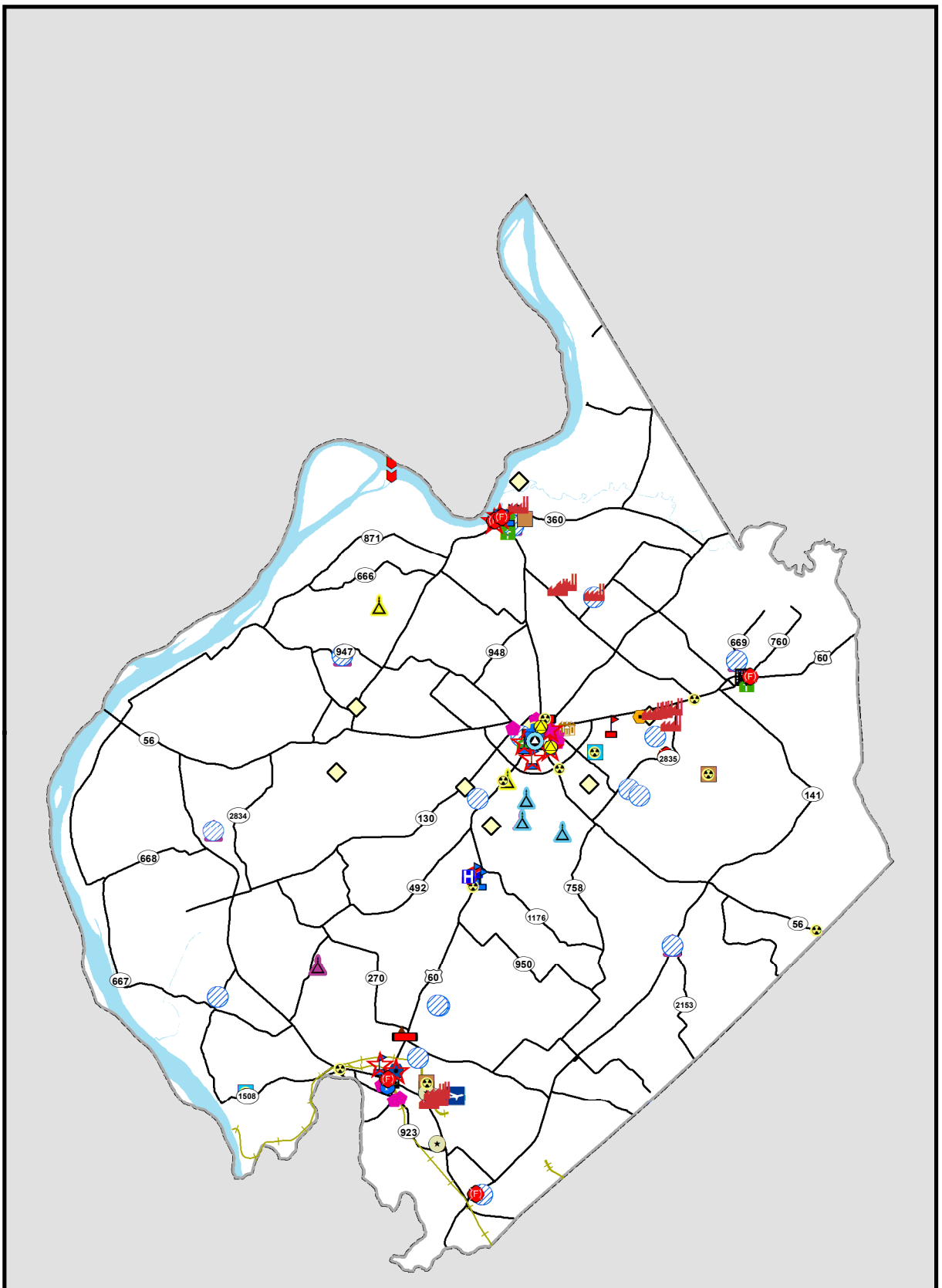
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Miles

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W E
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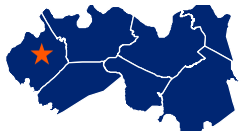
Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
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- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Morganfield



Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- Hazardous Materials
- Emergency Shelters

Economic

- Industry
- Business

Utilities

- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications

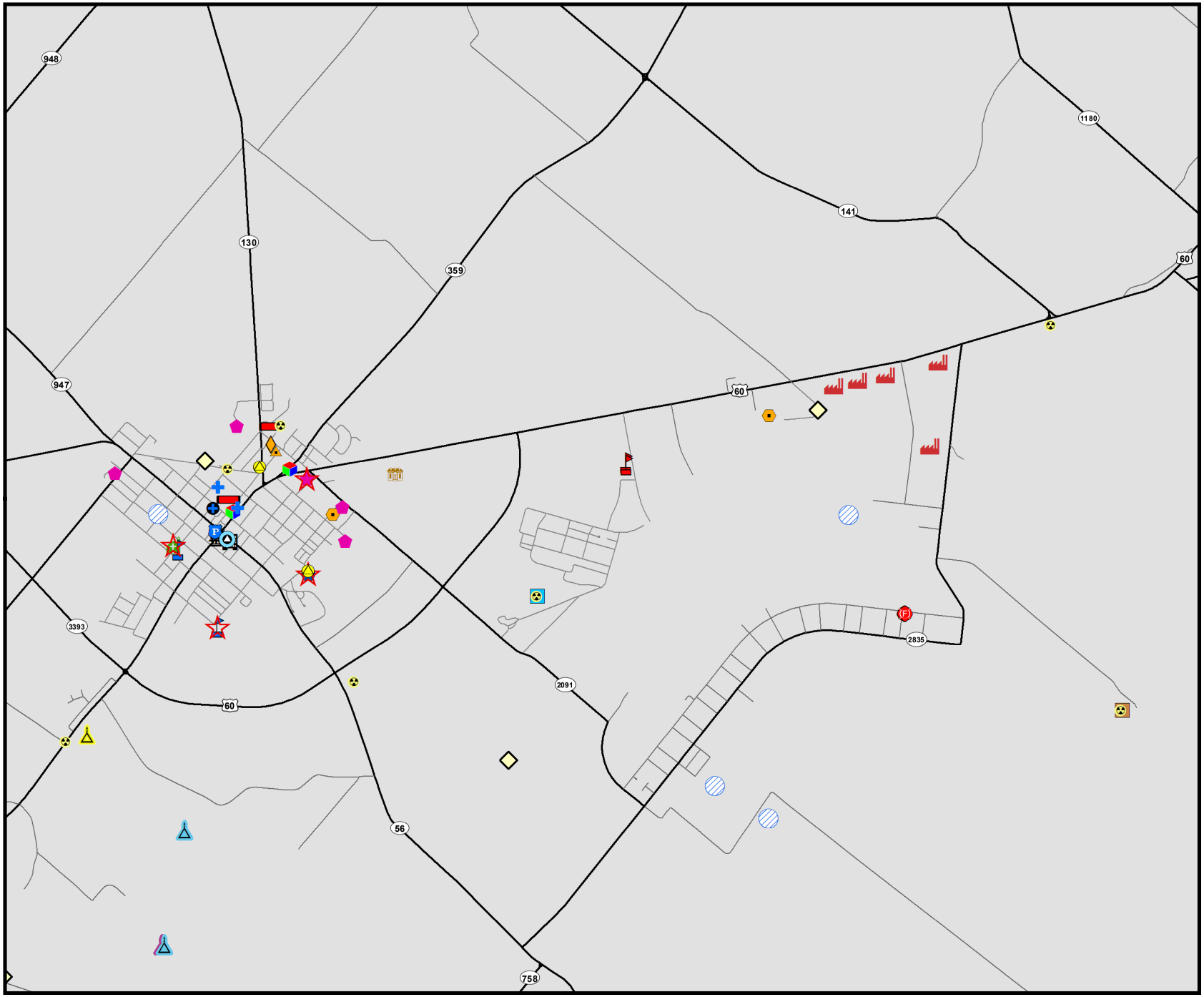
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna

Vulnerable Population Centers

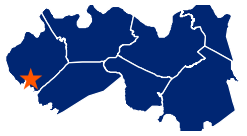
- Apartments
- Trailer Park
- Senior Center
- Nursing Home
- School
- Post Secondary School
- Religious
- Child Care/Preschool

Civic Facilities

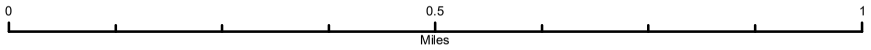
- City Hall
- Courthouse
- Public Works
- Road Department
- Correctional



City of Sturgis







Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Hazardous Materials
- Emergency Shelters

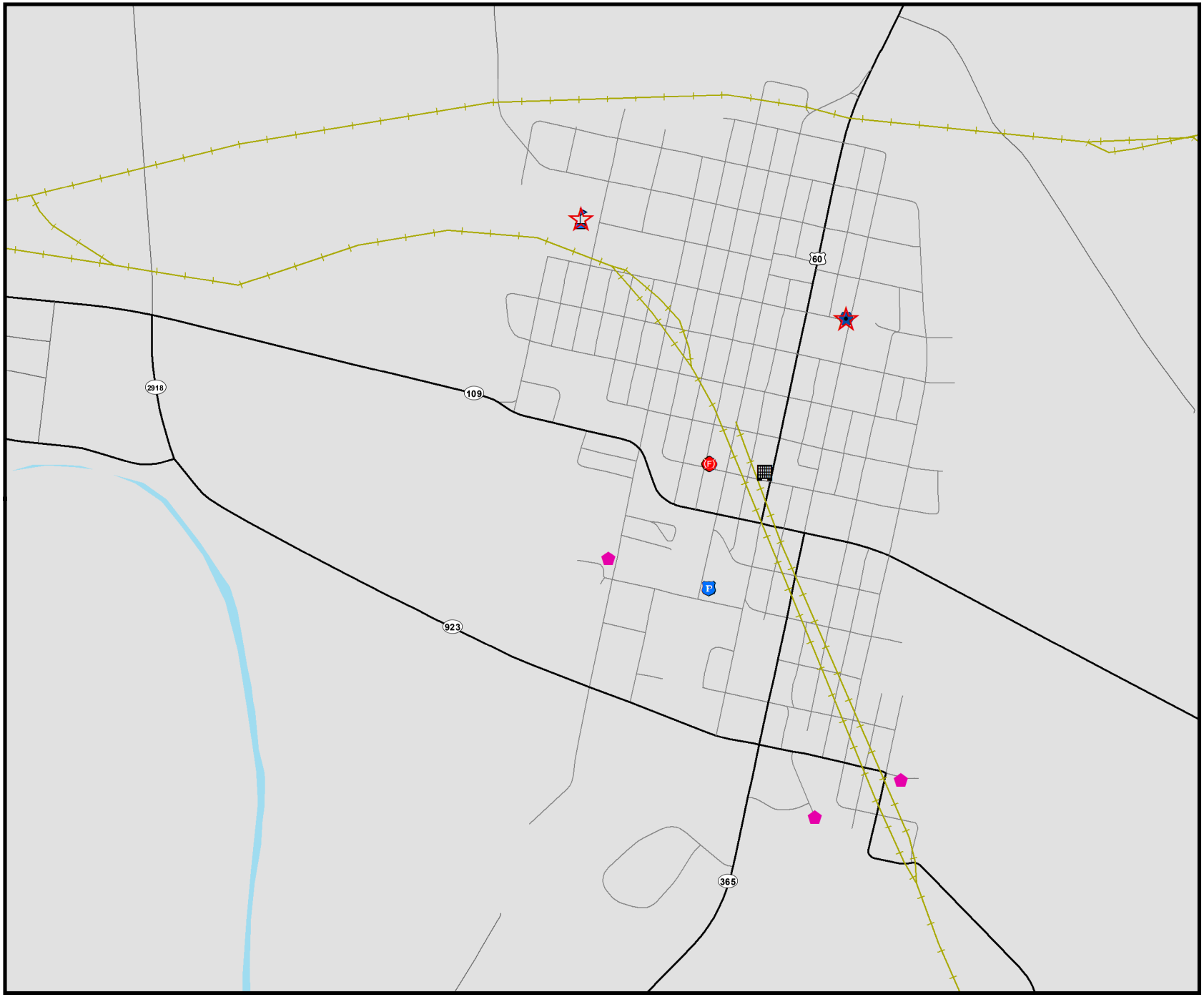
Economic
- Industry

Utilities
- WaterTank

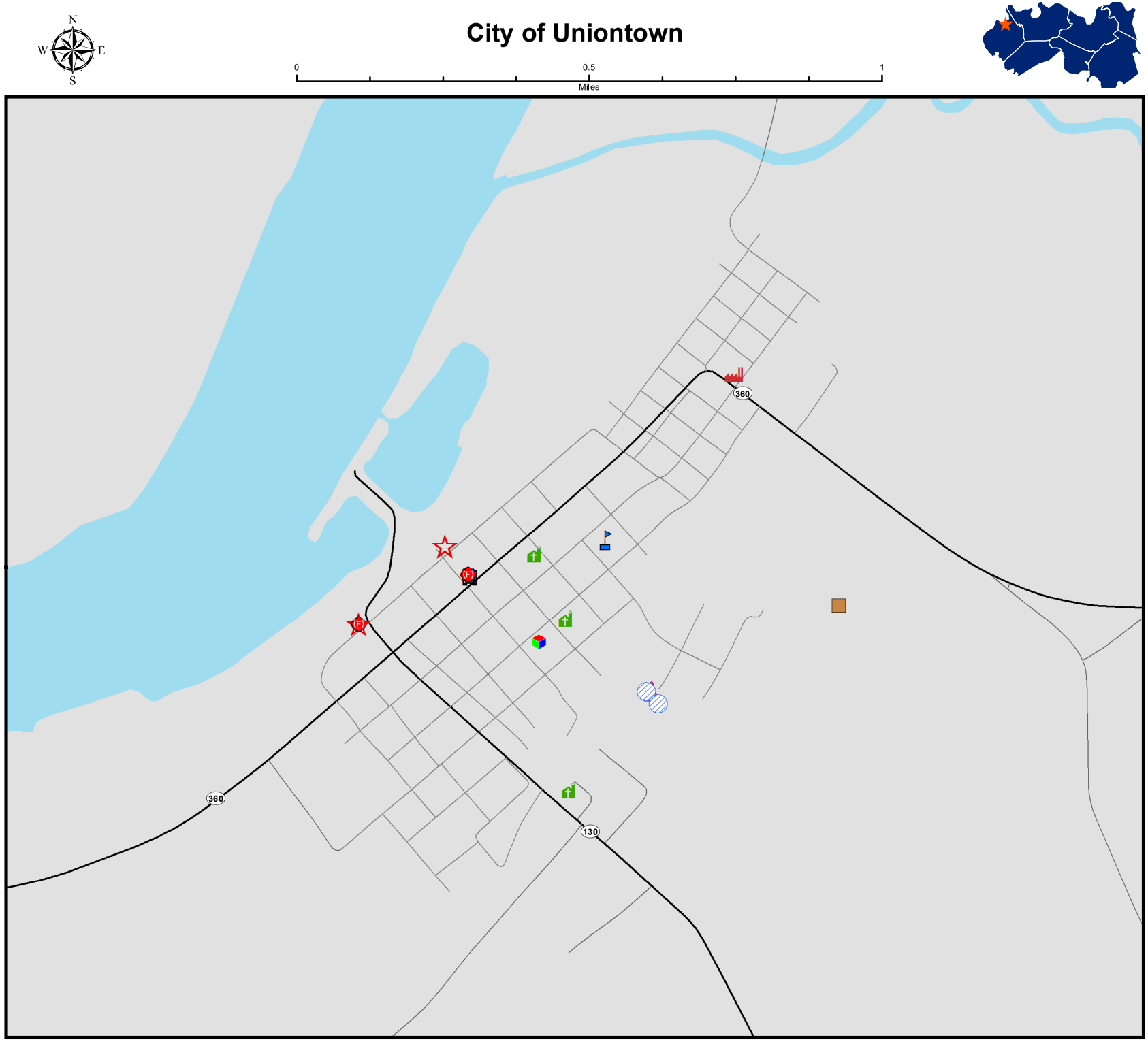
Vulnerable Population Centers
- Apartments
- Senior Center
- School
- Entertainment

Civic Facilities
- City Hall
- Public Works

Transportation
- Railroad



City of Uniontown



Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Emergency Shelters

Economic
- Industry

Utilities
- SewageTreatmentPlant
- WaterTank
- Substation

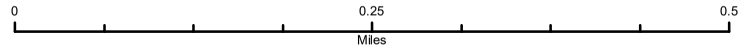
Communications
- ConnectGRADD Tower
- FM Radio Antenna

Vulnerable Population Centers
- School
- Religious
- Child Care/Preschool

Civic Facilities
- City Hall

City of Waverly







Critical Facilities

Emergency Facilities

Fire Department

Utilities

WaterTank

Communications

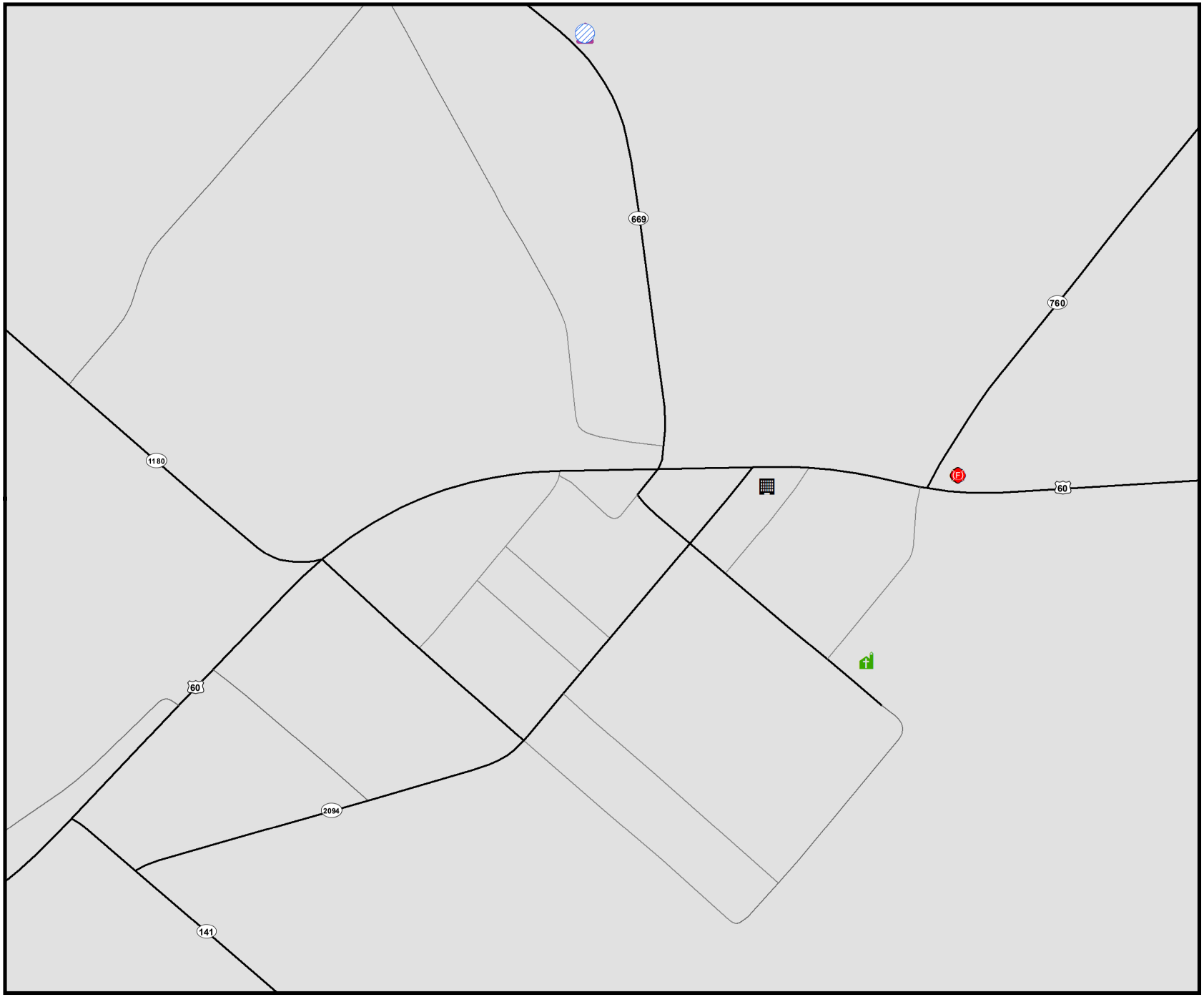
ConnectGRADD Tower

Vulnerable Population Centers

Religious

Civic Facilities

City Hall



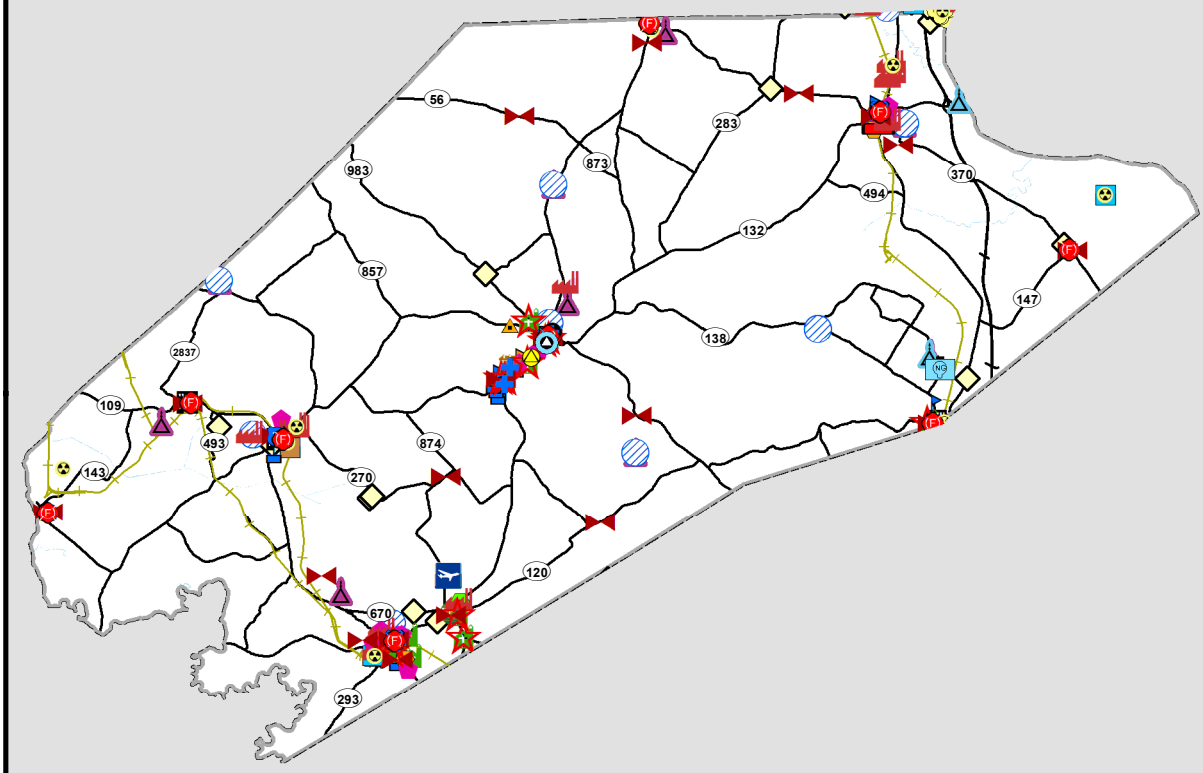
Webster County

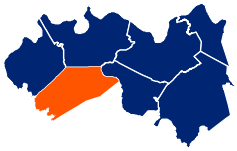
0 5 10 15 20 25
Miles

N
W E
S

Critical Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- EOC
- Hospital
- Health Clinic
- Health Department
- EMS
- Hazardous Materials
- Warning Siren
- Emergency Shelters
- Industry
- Business
- Apartments
- Trailer Park
- Senior Center
- Elderly Housing
- Nursing Home
- School
- Post Secondary School
- School Administration
- Community Services
- Religious
- Child Care/Preschool
- Special Needs
- Entertainment
- City Hall
- Courthouse
- Public Works
- Road Department
- Government Building
- Correctional
- Natural Gas Utility
- Electric Utility
- Power Plant
- WaterTreatmentPlant
- SewageTreatmentPlant
- PackageTreatmentPlant
- WaterTank
- Substation
- Dam
- Cellular Tower
- ConnectGRADD Tower
- FM Radio Antenna
- AM Radio Antenna
- Riverport
- Airport
- Public Transit
- Railroad





City of Clay





0 0.25 0.5
Miles

Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

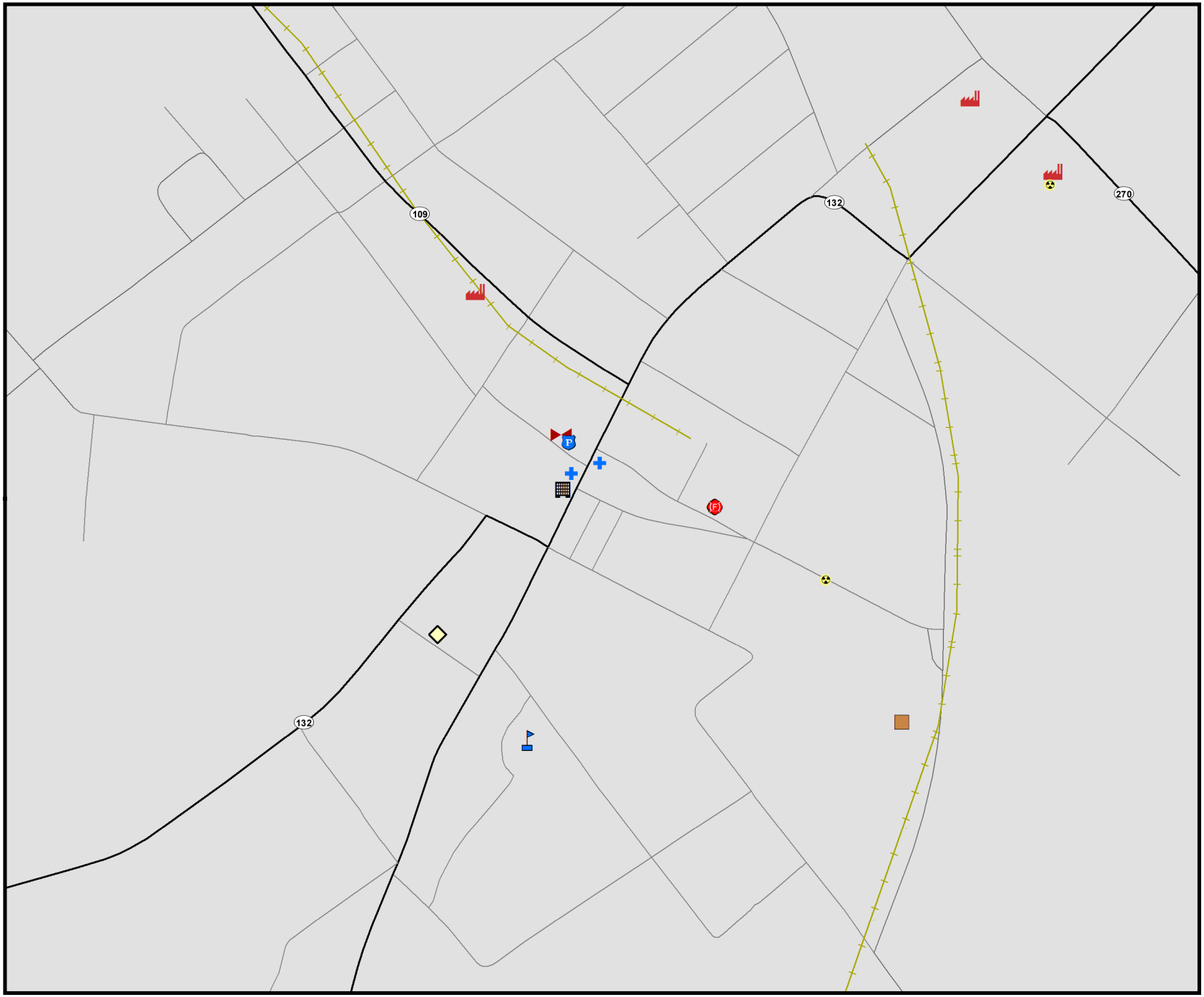
Economic
- Industry

Utilities
- SewageTreatmentPlant
- WaterTank
- Substation

Vulnerable Population Centers
- Apartments
- School

Civic Facilities
- City Hall

Transportation
- Railroad



City of Dixon







Critical Facilities

Emergency Facilities

- 911 Dispatch
- Fire Department
- Law Enforcement
- Emergency Operations Center
- Health Clinic
- Health Department
- EMS
- Warning Siren
- Emergency Shelters

Economic

- Business

Utilities

- WaterTank

Communications

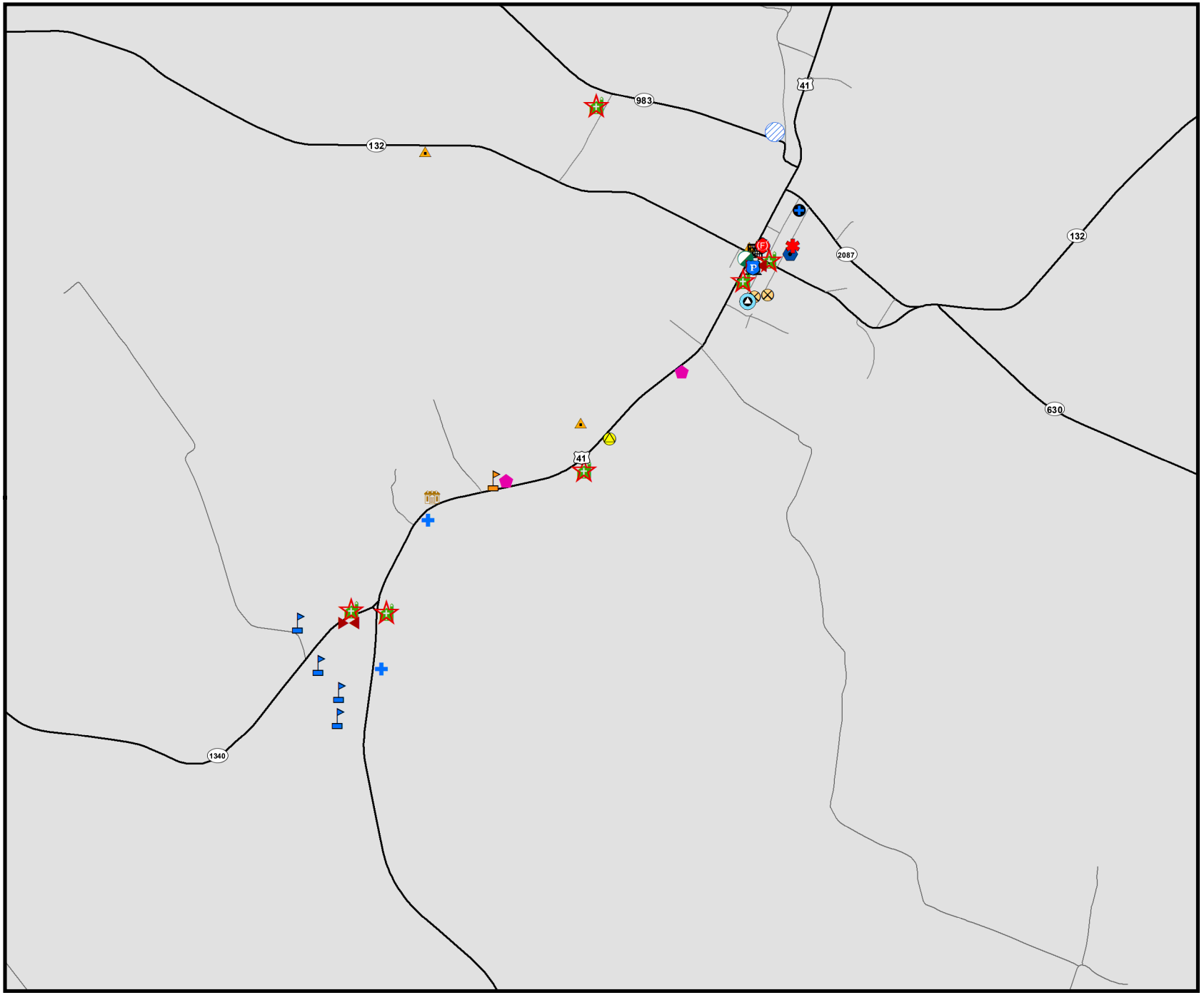
- ConnectGRADD Tower

Vulnerable Population Centers

- Apartments
- Senior Center
- School
- School Administration
- Community Services
- Religious

Civic Facilities

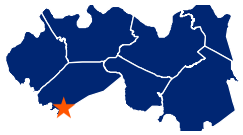
- City Hall
- Courthouse
- Public Works
- Correctional



City of Providence







Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Economic
- Industry
- Business

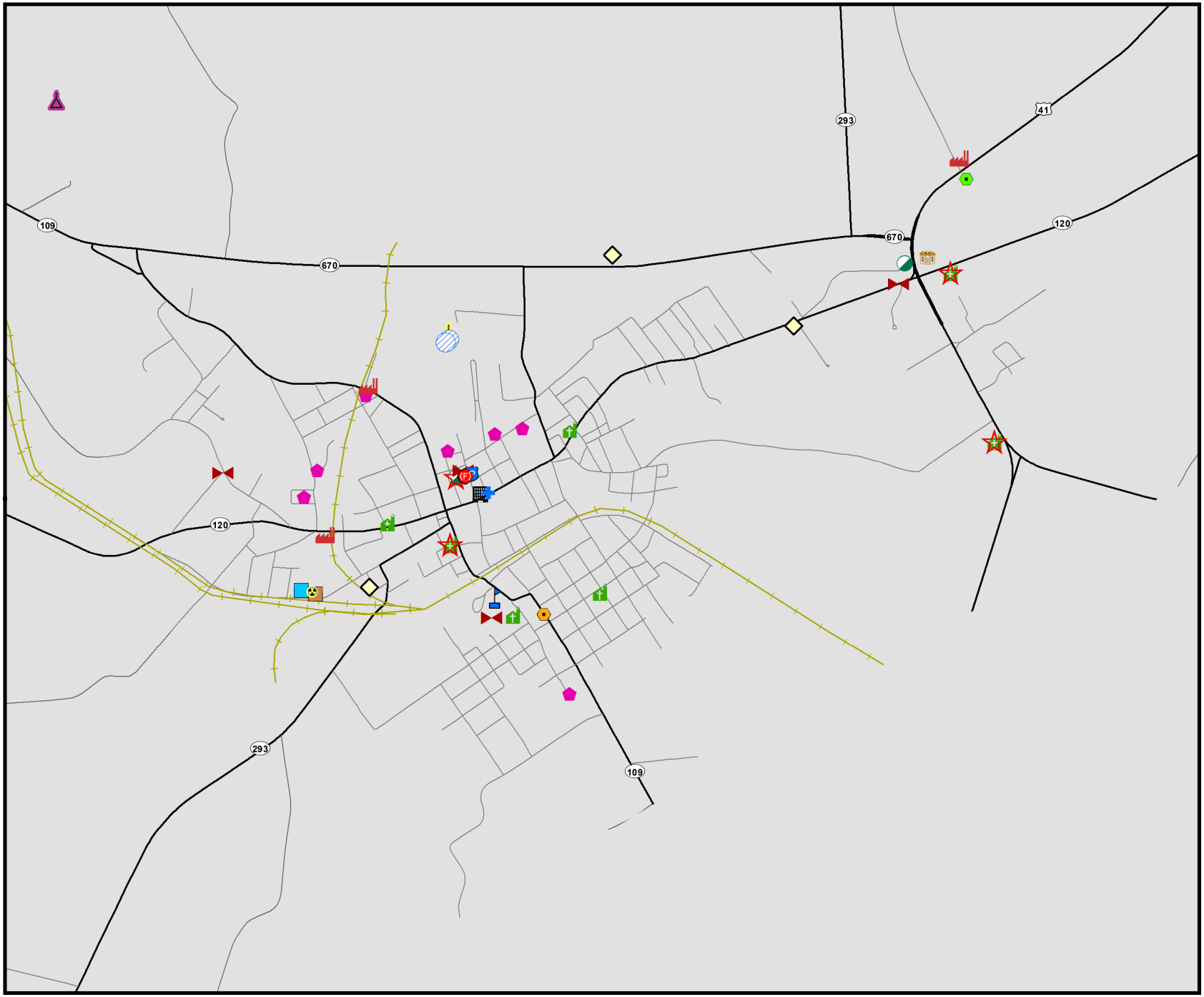
Utilities
- WaterTreatmentPlant
- SewageTreatmentPlant
- WaterTank
- Substation

Communications
- ConnectGRADD Tower
- FM Radio Antenna

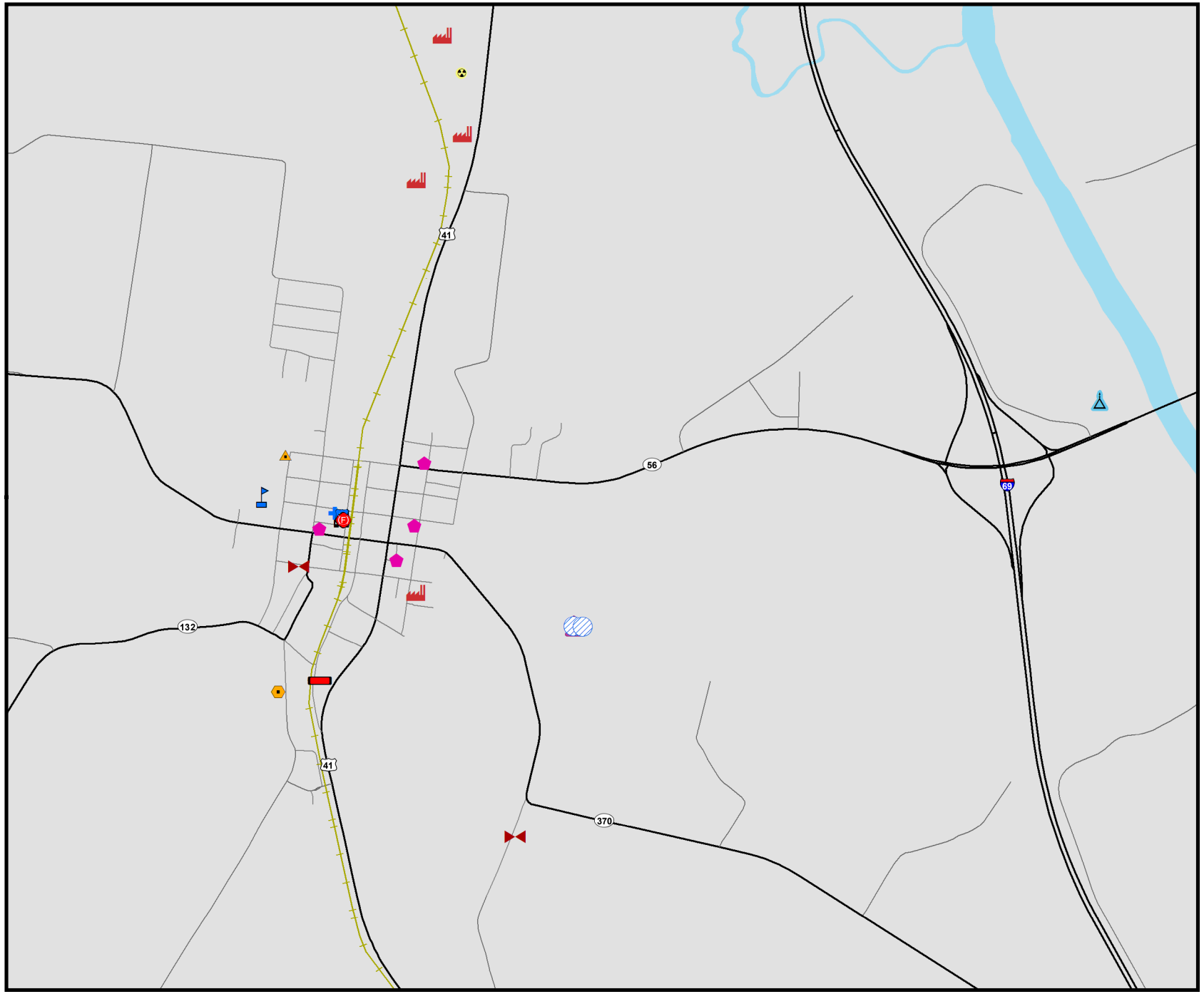
Vulnerable Population Centers
- Apartments
- Elderly Housing
- Nursing Home
- School
- Community Services
- Religious

Civic Facilities
- City Hall

Transportation
- Airport
- Railroad



City of Sebree



Critical Facilities

Emergency Facilities
- Fire Department
- Law Enforcement
- Health Clinic
- Hazardous Materials
- Warning Siren

Economic
- Industry

Utilities
- WaterTank

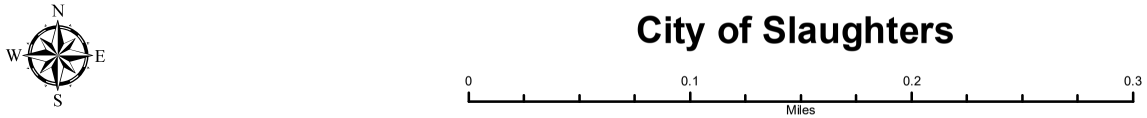
Communications
- Cellular Tower
- ConnectGRADD Tower

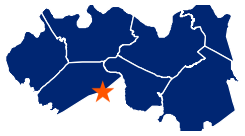
Vulnerable Population Centers
- Apartments
- Trailer Park
- Nursing Home
- School

Civic Facilities
- City Hall
- Public Works

Transportation
- Railroad

City of Slaughters





Critical Facilities

Emergency Facilities

- Fire Department
- Hazardous Materials
- Warning Siren
- Emergency Shelters

Communications

- Cellular Tower

Vulnerable Population Centers

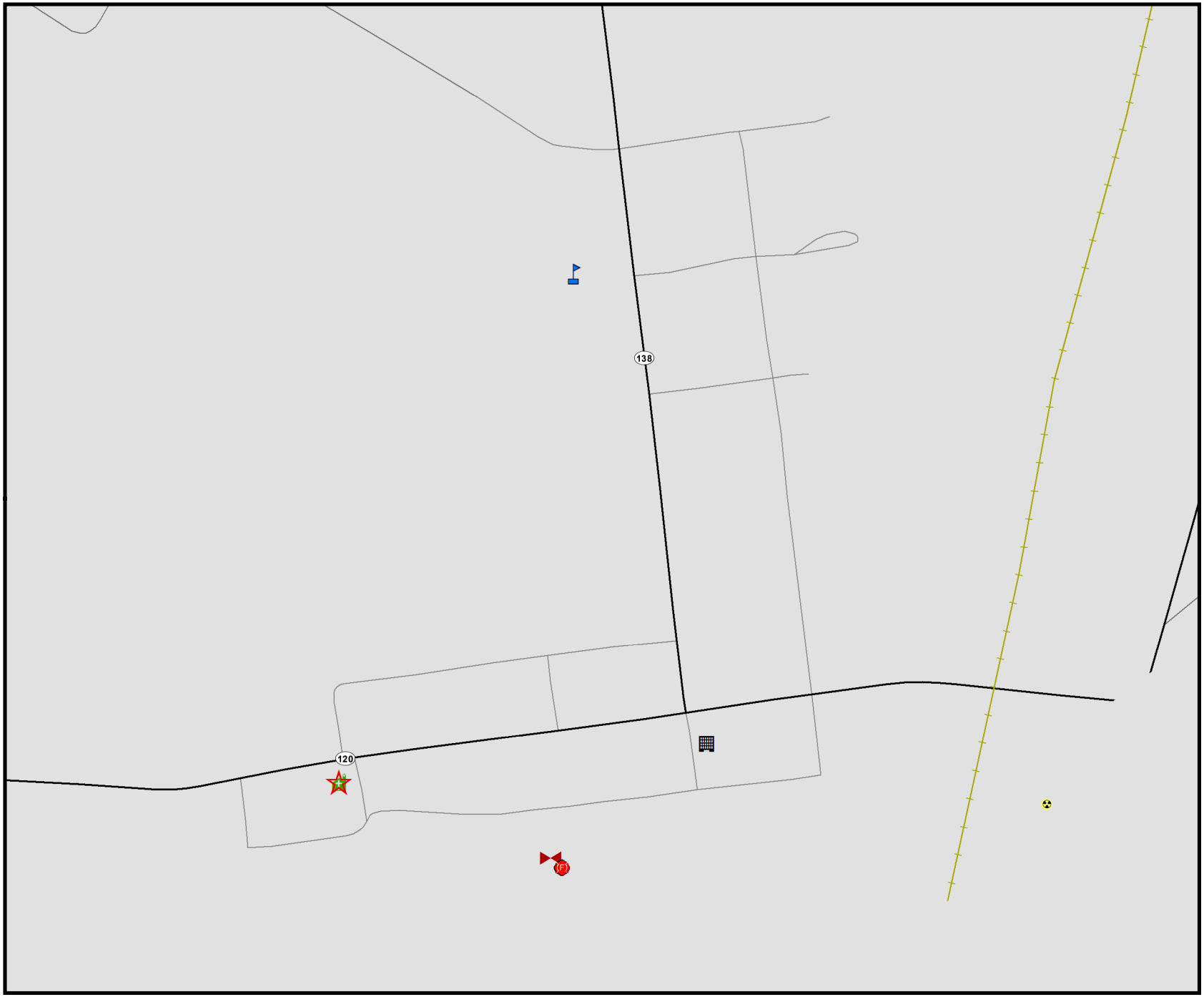
- School
- Religious

Civic Facilities

- City Hall

Transportation

- Railroad



City of Wheatcroft



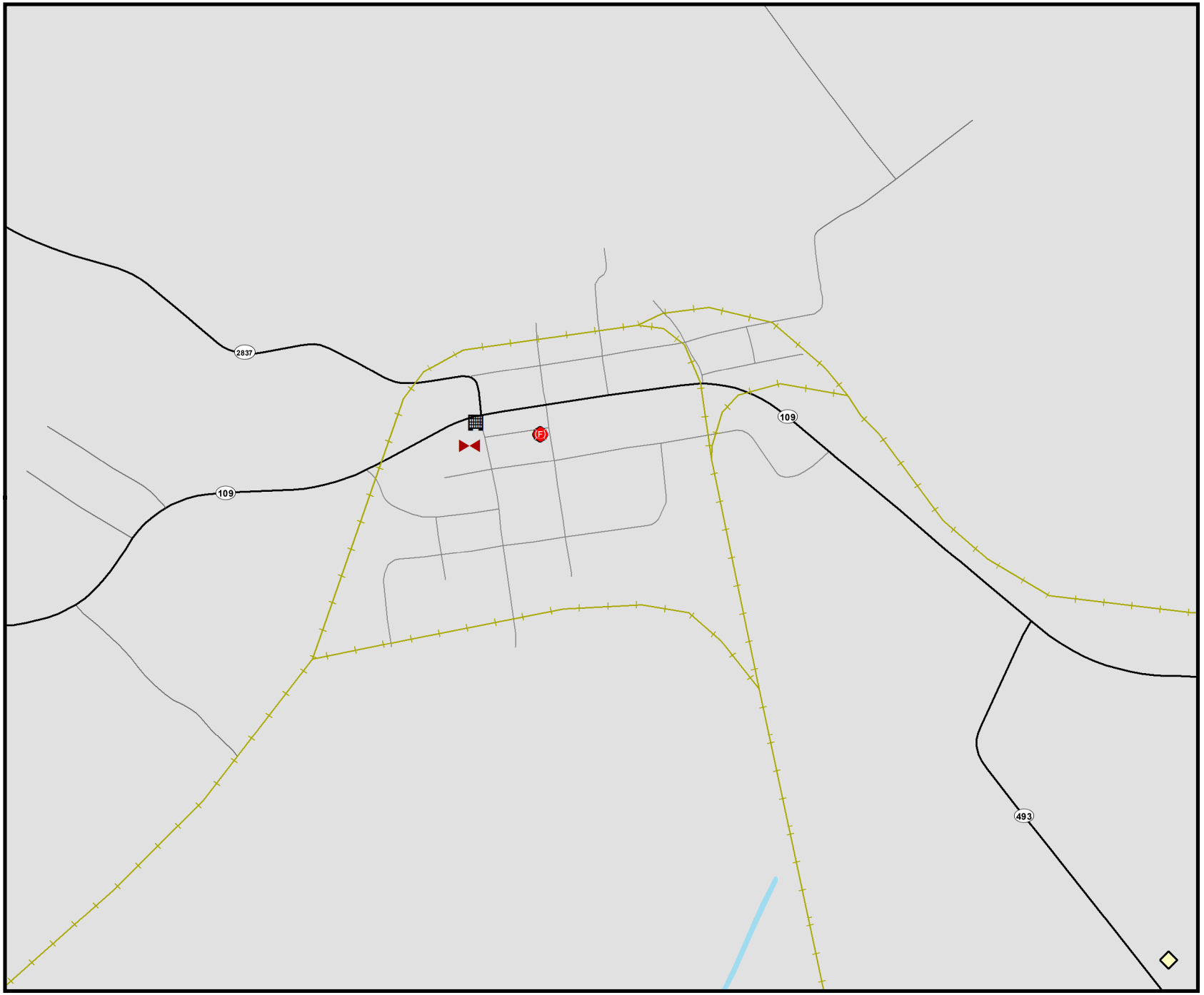
Critical Facilities

Emergency Facilities
- Fire Department
- Warning Siren

Utilities
- Substation

Civic Facilities
- City Hall

Transportation
- Railroad



Risk Level Analysis

Both qualitative and quantitative analysis are necessary when compiling risk assessment using a multijurisdictional approach. Both kinds of data have been incorporated into the analysis throughout the plan. Planners used the following existing quantitative analysis standard to assign each profiled hazard a risk level for every jurisdiction. Each hazard affected every jurisdiction to some degree. These classifications remain unchanged from previous iterations of the Plan.

REQUIREMENT §201.6(c)(2)(ii)
The risk assessment shall include a description of the jurisdiction's vulnerability and an overall summary of each hazard and its impact on the community.

Table 4.41 - Hazard Risk Assessment Classifications

Magnitude	**Tornado EF0 - EF5**	**1-25 Year / 26-100 Year / > 100 Year Events**
	Fujita Scale/Enhanced Fujita Scale	Flooding Events
	Earthquake VI-VIII	**Mild / Moderate / Severe**
	Modified Mercalli Intensity Scale	National Weather Service Event Classification
Frequency	**Very High**	**Low**
	70-100 % annual probability	1-10 % annual probability
	High	**Very Low**
	40-70 % annual probability	Less than 1 % annual probability
	Moderate	
	10-40 % annual probability	
Location	**Large**	**Low**
	More than 50 % of the jurisdiction	Less than 10 % of the jurisdiction affected
	Moderate	
	10-50 % of the jurisdiction affected	
Impact	**Catastrophic**	**Limited**
	The possibility of multiple deaths and injury	Only minor injuries
	More than 50 % of the property damaged	More than 10 % of the property damaged
	Shutdown of facilities for possibly 30 days	Shutdown of facilities for more than one day
	Possibility of relocation of critical facilities	Damage can be addressed -existing resources
	Presidential Disaster Declaration	
	Critical	**Minor**
	The possibility of multiple injuries	Few Injuries
	More than 25 % of the property damaged	Minor property damage
	Shutdown of facilities for a week or more	Minimal disruption to quality of life
	Possibility of relocation of critical facilities	Temporary shutdown of facilities
	State of Emergency.	Damage can be addressed -existing resources

Table 4.42 - GRADD Region Hazard Analysis

Hazard	Magnitude	Frequency	Area Affected	Potential Impact	Hazard Risk Index Rating
Flooding	1-25 Year Event	High	Large	Limited	1
	26-100 Year Event	Moderate	Large	Critical	
	> 100-Year Event	Low	Large	Catastrophic	
Tornadoes	EF0	Very High	Small	Limited	1
	EF1	High	Small	Limited	
	EF2	Moderate	Moderate	Critical	
	EF3	Moderate	Moderate	Catastrophic	
	EF4	Low	Large	Catastrophic	
	EF5	Very Low	Large	Catastrophic	
Severe Thunderstorms	Severe	Very High	Moderate	Critical	1
Severe Winter Storms	Severe	High	Large	Critical	2
Drought	Mild	Moderate	Large	Limited	2
	Moderate	Moderate	Large	Critical	
	Severe	Low	Large	Catastrophic	
Extreme Temperatures	Severe	Very High	Large	Critical	1
Earthquakes	VI	Low	Large	Limited	2
	VII	Low	Large	Critical	
	VIII	Low	Large	Catastrophic	
Subsidence	Low	Low	Small	Limited	3
Dam/Levee Failures	Low Hazard Dam	Low	Small	Limited	3
	Moderate Hazard Dam	Low	Moderate	Critical	
	High Hazard Dam	Low	Large	Catastrophic	
Landslides	Severe	Moderate	Moderate	Critical	2
Wildfires	Mild	Low	Small	Limited	3
	Moderate	Low	Moderate	Critical	
	Severe	Low	Large	Catastrophic	

Compilation of the results from the hazard vulnerability analysis provided classification into a risk category for each hazard and jurisdiction in the GRADD region. Tables 4.45 and 4.46 assign each jurisdiction risk and vulnerability to each profiled hazard.

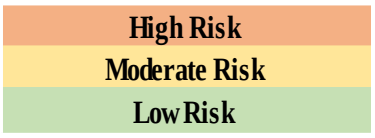


Table 4.43 - GRADD Jurisdictional Hazard Risk Level

Jurisdiction	Earthquake	Flood	Tornado	Severe Thunderstorm	Severe Winter Storm	Drought	Extreme Temperatures	Subsidence	Dam/Levee Failure	Landslides	Wildfires
Daviess Co.	1	1	1	1	2	2	1	2	3	3	3
Owensboro	1	1	1	1	2	2	1	3	3	3	3
Whitesville	2	3	1	1	2	2	1	3	3	3	3
Hancock Co.	3	1	1	1	2	2	1	3	3	3	2
Hawesville	3	1	1	1	2	2	1	3	1	3	2
Lewisport	3	1	1	1	2	2	1	3	3	3	2
Henderson Co.	1	1	1	1	2	2	1A	1	3	2	3
Corydon	1	2	1	1	2	2	1	3	3	3	3
Henderson	1	1	1	1	2	2	1	1	3	3	3
Robards	1	3	1	1	2	2	1	3	3	3	3
McLean Co.	2	1	1	1	2	2	1	3	3	2	3
Calhoun	2	1	1	1	2	2	1	3	3	2	3
Island	2	3	2	1	2	2	1	1	3	3	3
Livermore	2	1	1	1	2	2	1	2	3	2	3
Sacramento	2	3	2	1	2	2	1	1	3	3	3
Ohio Co.	3	1	1	1	2	2	1	1	2	1	2
Beaver Dam	2	1	1	1	2	2	1	3	3	3	3
Centertown	3	3	1	1	2	2	1	2	3	3	2
Fordsville	3	1	1	1	2	2	1	3	2	3	2
Hartford	2	1	1	1	2	2	1	3	3	3	3
McHenry	3	1	1	1	2	2	1	3	3	3	2
Rockport	3	1	1	1	2	2	1	1	3	3	2
Union Co.	1	1	1	1	2	2	1	1	2	2	3
Morganfield	1	2	1	1	2	2	1	2	3	3	3
Sturgis	1	1	1	1	2	2	1	1	1	3	3
Uniontown	1	1	1	1	2	2	1	2	1	3	3
Waverly	1	3	1	1	2	2	1	1	3	3	3
Webster Co.	1	1	1	1	2	2	1	1	3	3	3
Clay	1	1	1	1	2	2	1	1	3	3	3
Dixon	1	2	1	1	2	2	1	3	3	3	3
Providence	1	2	1	1	2	2	1	1	3	3	3
Sebree	1	1	1	1	2	2	1	2	3	2	3
Slaughters	1	1	1	1	2	2	1	3	3	3	3
Wheatcroft	1	1	1	1	2	2	1	1	3	3	3

Table 4.44 - GRADD Vulnerability by Jurisdiction

Jurisdiction	Earthquake	Flood	Tornado	Severe Thunderstorm	Severe Winter Storm	Drought	Extreme Temperatures	Subsidence	Dam/Levee Failure	Landslides	Wildfires
Daviess Co	1	1	1	1	2	2	1	2	3	3	3
Owensboro	1	1	1	1	2	2	1	3	3	3	3
Whitesville	2	3	1	1	2	2	1	3	3	3	3
Hancock Co	3	1	1	1	2	2	1	3	3	3	2
Hawesville	3	1	1	1	2	2	1	3	3	3	2
Lewisport	3	1	1	1	2	2	1	3	3	3	2
Henderson Co	1	1	1	1	2	2	1	1	3	2	3
Corydon	1	2	1	1	2	2	1	3	3	3	3
Henderson	1	1	1	1	2	2	1	1	3	3	3
Robards	1	3	1	1	2	2	1	3	3	3	3
McLean Co	2	1	1	1	2	2	1	3	3	2	3
Calhoun	2	1	1	1	2	2	1	3	3	2	3
Island	2	3	2	1	2	2	1	1	3	3	3
Livermore	2	1	1	1	2	2	1	2	3	2	3
Sacramento	2	3	2	1	2	2	1	1	3	3	3
Ohio Co	3	1	1	1	2	2	1	1	2	1	2
Beaver Dam	2	1	1	1	2	2	1	3	3	3	3
Centertown	3	3	1	1	2	2	1	2	3	3	2
Fordsville	3	1	1	1	2	2	1	3	1	3	2
Hartford	2	1	1	1	2	2	1	3	3	3	3
McHenry	3	1	1	1	2	2	1	3	3	3	2
Rockport	3	1	1	1	2	2	1	1	3	3	2
Union Co	1	1	1	1	2	2	1	1	2	2	3
Morganfield	1	2	1	1	2	2	1	2	3	3	3
Sturgis	1	1	1	1	2	2	1	1	1	3	3
Uniontown	1	1	1	1	2	2	1	2	1	3	3
Waverly	1	3	1	1	2	2	1	1	3	3	3
Webster Co	1	1	1	1	2	2	1	1	3	3	3
Clay	1	1	1	1	2	2	1	1	3	3	3
Dixon	1	2	1	1	2	2	1	3	3	3	3
Providence	1	2	1	1	2	2	1	1	3	3	3
Sebree	1	1	1	1	2	2	1	2	3	2	3
Slaughters	1	1	1	1	2	2	1	3	3	3	3
Wheatcroft	1	1	1	1	2	2	1	1	3	3	3

Section 5. Mitigation Strategy

The Mitigation Strategy section of the Hazard Mitigation Plan could be identified as the most utilized section, the entire backbone of the plan and planning activities. The process of implementation strategy of using data to generate and develop projects will ultimately reduce the cost of disasters.

Current Capabilities Assessment

For the 2021 Plan, the planning staff and committee had numerous new faces and established the current capabilities of the region before planning for the next five years. This goal was accomplished using an expanded capability assessment by county emergency management. The assessment explored mitigation and hazard assessment using more in-depth analysis and exploration than previous capability assessments. The information gathered and included in the 2016 version of the Hazard Mitigation Plan is compiled in the chart on the next page.

The Capability Assessment used in this 2021 iteration is displayed on the ensuing five pages following the 2016 data. The completed versions of these assessments by county are included in the appendix. Much of the information included on this iteration of the capability assessment was included in the 2016 plan. This iteration explores the data further to include how each of the capabilities assess hazards and can be incorporated into aspects of the mitigation plan to reduce the cost of disasters.

Data gathered through this assessment serves to identify gaps in current capabilities and steps that can be used to fill those gaps using current capabilities in other areas. For example, current planning mechanisms are explored including comprehensive plans, economic development plans and others to leverage monies outside normal mitigation activities to fund projects.

Table 5.1: 2016 Capability Assessment Data

Jurisdiction	Floodplain Ordinance	Building Codes	Zoning Regulations	AmeriCorps	CERT Capability	Economic Development	Regional Development	Emergency Operations	Comprehensive Plan	Stormwater	NFIP	CRS	Storm Ready	GIS	Reverse 911	EM Online	Mutual Aid
Daviess Co.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Owensboro	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Whitesville	x	x	x		x		x	x	x				x	x	x	x	x
Hancock Co.	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x
Hawesville	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x
Lewisport	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x
Henderson Co.	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Corydon		x	x		x	x	x	x	x				x	x	x	x	x
Henderson	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x
Robards		x	x		x	x	x	x	x				x	x	x	x	x
McLean Co.	x	x	x		x	x	x	x	x		x			x	x	x	x
Calhoun	x		x		x	x	x	x	x		x			x	x	x	x
Island		x			x	x	x	x	x					x	x	x	x
Livermore	x	x	x		x	x	x	x	x		x			x	x	x	x
Sacramento			x		x	x	x	x	x	x				x	x	x	x
Ohio Co.	x		x	x	x	x	x	x	x	x	x			x	x	x	x
Beaver Dam	x		x		x	x	x	x	x		x			x	x	x	x
Centertown	x				x	x	x	x	x					x	x	x	x
Fordsville					x	x	x	x	x					x	x	x	x
Hartford	x	x	x		x	x	x	x	x	x	x			x	x	x	x
McHenry	x				x	x	x	x	x					x	x	x	x
Rockport					x	x	x	x	x					x	x	x	x
Union Co.	x	x			x	x	x	x	x		x			x	x	x	x
Morganfield	x	x	x		x	x	x	x	x		x		x	x	x	x	x
Sturgis	x	x	x	x	x	x	x	x	x		x			x	x	x	x
Uniontown	x	x			x	x	x	x	x		x			x	x	x	x
Waverly	x	x	x		x	x	x	x	x		x			x	x	x	x
Webster Co.	x	x			x	x	x	x	x		x		x	x	x	x	x
Clay	x	x			x	x	x	x	x		x		x	x	x	x	x
Dixon					x	x	x	x	x				x	x	x	x	x
Providence	x	x	x	x	x	x	x	x	x		x		x	x	x	x	x
Sebree	x	x	x		x	x	x		x		x		x	x	x	x	
Slaughters	x				x	x	x	x	x		x		x	x	x	x	x
Wheatcroft	x				x	x	x	x	x		x		x	x	x	x	x

2021 Capability Assessment

Figure 5.1 - 2021 Capability Assessment Page 1

Capability Assessment Worksheet

Jurisdiction:

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan		
Capital Improvements Plan		
Economic Development Plan		
Local Emergency Operations Plan		
Continuity of Operations Plan		
Transportation Plan		
Storm water Management Plan		
Community Wildlife Protection Plan		
Other Special Plans: Brownfields, disaster recovery, etc.		

2021 Capability Assessment Page 2

Capability Assessment Worksheet

Jurisdiction:

Administrative & Technical For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.		
Administration	**Yes/No**	**Describe Capability Is coordination effective?**
Planning Commission		
Mitigation Planning Committee		
Maintenance program to reduce risk (ie. tree trimming/clearing drainage)		
Mutual Aid Agreements		
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official		
Floodplain Administrator		
Emergency Manager		
Community Planner		
Civil Engineer		
GIS Coordinator		
Other		
Technical		
Warning Systems/Services		
Hazard Data & Information		
Grant Writing		
Hazus Analysis		
Other		
How can these capabilities be expanded and improved to reduce risk?		

2021 Capability Assessment Page 3

Capability Assessment Worksheet

Jurisdiction:

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code		Version/Year:
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire Department ISO Rating		Rating:
Site Plan Review Requirements		
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance		
Subdivision Ordinance		
Floodplain Ordinance		
Natural Hazard Specific Ordinance (Storm water, etc.)		
Flood Insurance Rate Maps		
Acquisition of Land for open space and public recreation uses		
Other		
How can these capabilities be expanded and improved to reduce risk?		

2021 Capability Assessment Page 4

Capability Assessment Worksheet

Jurisdiction: _____

Financial

Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding		
Authority to levy taxes for specific purposes		
Fees for water, sewer, gas, or electric services		
Storm water utility fee		
Incur debt through general obligation bonds?		
Incur debt through private activities		
Community Development Block Grant		
Other federal funding programs		
State funding programs		

How can these capabilities be expanded and improved to reduce risk?

2021 Capability Assessment Page 5

Capability Assessment Worksheet

Jurisdiction:

Education and Outreach Identify methods already in place that could be used to implement mitigation activities and communicate hazard information		
Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.		
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)		
Natural disaster of safety related school programs		
Storm Ready certification		
Firewise Communities certification		
Public-private partnership initiative addressing disaster related issues		
Other		
How can these capabilities be expanded and improved to reduce risk?		

National Flood Insurance Program

Thirty-four cities and counties lie in the GRADD region, of these, twenty-three are active participants in the National Flood Insurance Program. Added in this iteration is additional data not previously included, jurisdictional population living in a Special Flood Hazard Area and the percentage of total population in the SFHA.

Table 5.2 - NFIP/CRS Participation by GRADD Entity

Community	NFIP Entry Date	# of NFIP Policies	Population in SFHA	% of Population in SFHA	Average NFIP Policy Cost	CRS Class June 2020	FIRM Effective Date
BEAVER DAM	9/26/1985	8	0	0%	$ 240.00	0	6/1/2011
CALHOUN	8/18/1986	16	0	0%	$ 381.33	0	4/17/2011
CLAY	8/18/1986	12	0	0%	$ 525.50	0	12/16/2013
DAVIESS CO.	9/2/1980	344	4,465	12%	$ 555.75	8	4/15/2009
HANCOCK CO.	6/24/2008	21	1,357	16%	$ 1,237.67	0	9/26/2013
HARTFORD	9/3/1985	5	301	12%	$ 497.00	0	6/1/2011
HAWESVILLE	11/4/1986	3	0	0%	$ 1,669.00	0	9/26/2013
HENDERSON CO.	4/9/1991	144	1,567	9%	$ 988.25	8	9/28/2017
HENDERSON	6/14/1978	186	1,436	5%	$ 283.75	8	9/28/2017
LEWISPORT	11/18/1986	56	0	0%	$ 464.33	0	9/26/2013
LIVERMORE	8/4/1986	10	0	0%	$ 577.67	0	4/17/2011
MCLEAN CO.	2/14/1991	43	1,420	14%	$ 265.67	0	4/17/2011
MORGANFIELD	8/31/1986	1	0	0%	$ 199.50	0	9/1/2009
OHIO CO.	9/28/1989	9	2,362	10%	$ 314.00	0	6/1/2011
OWENSBORO	7/31/1980	1,010	2,381	4%	$ 359.80	8	4/15/2009
PROVIDENCE	8/31/1986	3	128	4%	$ 514.00	0	12/16/2013
SEBREE	8/18/1986	8	0	0%	$ 277.00	0	12/16/2013
SLAUGHTERS	7/2/1986	0	0	0%	$ -	0	12/16/2013
STURGIS	8/31/1986	1	0	0%	$ 153.50	0	9/1/2009
UNION CO.	9/1/2009	20	1,755	20%	$ 806.00	0	9/1/2009
UNIONTOWN	3/31/1998	1	0	0%	$ 2,629.00	0	9/1/2009
WEBSTER CO.	4/27/2015	26	1,638	12%	$ 3,538.00	0	12/16/2013
WHEATCROFT	6/23/2014	3	0	0%	$ 387.00	0	12/16/2013

Table 5.3 - GRADD NFIP Programs by Entity

Floodplain Management Program	Permit	BFE Standards	Encroachment Review	Most Recent	Public Outreach Programs
Daviess County	X	X	X	X	X
Owensboro	X	X	X	X	X
Hancock County	X	X	X	X	-
Hawesville	X	X	X	X	-
Lewisport	X	X	X	X	-
Henderson County	X	X	X	X	X
Henderson	X	X	X	X	X
McLean County	X	X	X	X	-
Calhoun	X	X	X	X	-
Livermore	X	X	X	X	-
Ohio County	X	X	X	X	X
Beaver Dam	X	X	X	X	X
Hartford	X	X	X	X	X
Union County	X	X	X	X	-
Morganfield	X	X	X	X	-
Sturgis	X	X	X	X	-
Uniontown	X	X	X	X	-
Webster County	X	X	X	X	-
Clay	X	X	X	X	-
Providence	X	X	X	X	-
Sebree	X	X	X	X	-
Slaughters	X	X	X	X	-
Wheatcroft	X	X	X	X	-

Table 5.4 - GRADD Jurisdictions Not Enrolled in NFIP

Jurisdiction	Justification
Whitesville	This jurisdiction does not contain a Special Flood Hazard Area
Corydon	This jurisdiction does not contain a Special Flood Hazard Area
Robards	While this jurisdiction does contain a Special Flood Hazard Area, there are no current developments inside the zone; and the city is not interested in enrolling as an NFIP participant at this time
Island	This jurisdiction does not contain a Special Flood Hazard Area
Sacramento	This jurisdiction does not contain a Special Flood Hazard Area
Centertown	This jurisdiction does not contain a Special Flood Hazard Area
Fordsville	While this jurisdiction does contain a very limited section of a Special Flood Hazard Area (approximately 0.37 acres, see maps), the city is not interested in enrolling as an NFIP community at this time
McHenry	While this jurisdiction does contain a Special Flood Hazard Area, it is not interested in enrolling as an NFIP community at this time
Rockport	While this jurisdiction does contain a Special Flood Hazard Area in primarily undeveloped territory, it is not interested in enrolling as an NFIP community at this time
Waverly	This jurisdiction does not contain a Special Flood Hazard Area
Dixon	While this jurisdiction does contain a limited Special Flood Hazard Area, the city is not interested in enrolling as an NFIP community at this time

Table 5.5 - GRADD Floodplain Managers

Jurisdiction	Floodplain Manager
Daviess County	Associate Director – Owensboro Metropolitan Planning Commission
Owensboro	Associate Director – Owensboro Metropolitan Planning Commission
Hancock County	Hancock County Planning and Zoning
Hawesville	Hancock County Planning and Zoning
Lewisport	Hancock County Planning and Zoning
Henderson County	Assistant Director – Henderson City-County Planning Commission
Henderson	Assistant Director – Henderson City-County Planning Commission
McLean County	Judge/Executive – McLean County Fiscal Court
Calhoun	Zoning Administrator/Mayor – City of Calhoun
Livermore	City Clerk – City of Livermore
Ohio County	Director – Ohio County Emergency Management Agency
Beaver Dam	City Planner – Hartford/Beaver Dam Joint Planning Commission
Hartford	City Planner – Hartford/Beaver Dam Joint Planning Commission
Union County	Director – Union County Planning Commission
Morganfield	Director – Union County Planning Commission
Sturgis	Director – Union County Planning Commission
Uniontown	Director – Union County Planning Commission
Webster County	Director – Webster County Emergency Management Agency
Clay	City Clerk – City of Clay
Providence	Fire Chief – Providence Fire Department
Sebree	City Manager – City of Sebree
Slaughters	City Clerk – City of Slaughters
Wheatcroft	Mayor – City of Wheatcroft

Local Hazard Mitigation Goals & Objectives

The Green River Region's Hazard Mitigation Council considered the existing goals and objectives for hazard mitigation during the planning process for the 2021 Plan. The Council chose to include the goals and objectives from the 2016 Plan in this 2021 plan iteration. The goals and objectives remain broad enough to be applicable to the entire region, while specific enough to generate actual projects that will reduce the cost of disaster.

Requirement §201.6 (c)(3)(i)
"The hazard mitigation strategy shall include a description of the mitigation goals to reduce or avoid long term vulnerabilities to the identified hazards."

The Mitigation Goals and Objectives for the 2021 Hazard Mitigation Plan are as follows:

Goal 1: Promote Public Health and Safety.

Objective 1.1 Secure public health and safety through efforts to increase public awareness of local and regional hazards.

Action 1.1.1 Educate the public on dangers that natural hazards pose in the GRADD region.

Action 1.1.2 Advise the public on taking personal responsibility for their safety and property protection.

Action 1.1.3 Facilitate public contributions to the community with the organization of volunteer opportunities and events.

Goal 2: Protect people and property.

Objective 2.1 Pursue mitigation activities that defend and fortify vulnerable populations and properties in the Green River Region.

Action 2.1.1 Implement, reevaluate and enforce established building codes.

Action 2.1.2 Develop land use planning for all jurisdictions.

Action 2.1.3 Encourage participation in the National Flood Insurance Program and the Community Rating System.

Action 2.1.4 Establish and maintain lifeline utilities.

Action 2.1.5 Enhance emergency services through increased training and improved communications.

Action 2.1.6 Improve the system of community warning devices.

Action 2.1.7 Limit development in hazardous areas unless proper mitigation strategies are in place and enforced.

Action 2.1.8 Urge communities to update comprehensive plans per the guidelines and regulations set forth in KRS Chapter 100.00.

Action 2.1.9 Promote continued National Flood Insurance Program affiliation and compliance for current participating communities.

Goal 3: Improve the quality of life.

Objective 3.1 Support community development efforts while maintaining a strong awareness of the need for hazard mitigation.

Action 3.3.1 Promote long-range planning.

Action 3.1.2 Minimize development in floodplains and other hazardous areas unless proper mitigation measures are in place and enforced.

Goal 4: Use public funds effectively.

Objective 4.1 Develop cost effective hazard mitigation projects that will reduce vulnerabilities and strengthen the region.

Action 4.1.1 Utilize FEMA cost/benefit analysis to select and prioritize mitigation projects.

Action 4.1.2 Promote interagency and interlocal cooperation.

Action 4.1.3 Pursue all avenues of potential funding including hazard mitigation grant programs.

Hazard Mitigation Plan Resource Directory

The Resource Directory contains a collection of resources useful in the development and update of this Hazard Mitigation Plan. These sites supplied information on hazard identification, historical occurrences, event magnitudes, mitigation measures and planning possibilities. In particular, the local jurisdictions and the GRADD Hazard Mitigation Council found these sites beneficial as they determined future mitigation actions.

Table 5.6 - Resource Directory

Dams & Levees	
FEMA National Dam Safety Program	http://www.fema.gov/plan/prevent/damfailure/ndsp.shtm
Kentucky Division of Water	http://www.water.ky.gov
U.S. Army Corps of Engineers	http://www.usace.army.mil
United States Society on Dams	http://www.ussdams.org

Demographic Information	
Kentucky State Data Center	http://ksdc.louisville.edu
U.S. Census Bureau	http://www.census.gov

Drought	
Kentucky Climate Center	http://kyclim.wku.edu/
National Climatic Data Center	http://www.ncdc.noaa.org
National Drought Mitigation Center	http://www.drought.unl.edu
National Weather Service	http://www.weather.gov/
NOAA Drought Information Center	http://www.drought.noaa.gov

Earthquakes	
Center for Earthquake Research and Information	http://www.ceri.memphis.edu
National Earthquake Hazard Reduction Program	http://www.nehrp.gov
U.S. Geological Survey	http://www.usgs.gov

Flooding	
FEMA Flood	http://www.fema.gov/hazard/flood/index.shtm
FEMA Flood Mitigation Assistance Program	http://www.fema.gov/government/grant/fma/index.shtm
FEMA National Flood Insurance Program	http://www.fema.gov/business/nfip/
Spatial Hazard Events and Losses Database for the United States	http://www.sheldus.org

Funding Resources	
FEMA Flood Mitigation Assistance Program	http://www.fema.gov/government/grant/fma/index.shtm
FEMA Hazard Mitigation Grant Program	http://www.fema.gov/government/grant/hmgp/
FEMA Individual Assistance Program	http://www.fema.gov/media/fact_sheets/individualassistance.shtm
FEMA Public Assistance Grant Program	http://www.fema.gov/government/grant/pa/index.shtm

General Planning	
American Planning Association	http://www.planning.org
Community Rating System	http://www.fema.gov/business/nfip/crs.shtm
Federal Emergency Management Agency	http://www.fema.gov
FEMA Hazard Mitigation Success Stories	http://www.fema.gov/news/newsrelease.fema?id=5256
FEMA Library	http://www.fema.gov/library
FEMA Multi-Hazard Mitigation Planning	http://www.fema.gov/plan/mitplanning/index.shtm
FEMA Presidential Disaster Declarations	http://www.gismaps.fema.gov/recent.pdf
FEMA Protect Your Property	http://www.fema.gov/plan/prevent/property.shtm
FEMA Safe Rooms	http://www.fema.gov/plan/prevent/saferoom/
FEMA Wildfire	http://www.fema.gov/hazard/wildfire/index.shtm
FireWise Communities	http://www.firewise.org
Green River Area Development District	http://www.gradd.com
Habitat for Humanity	http://www.habitat.org
Institute for Business and Home Safety	http://www.disastersafety.org
Kentucky Emergency Management	http://kyem.ky.gov
National Association of Regional Councils	http://www.narc.org
National League of Cities	http://www.nlc.org
Small Business Administration	http://www.sba.gov
The Grantsmanship Center	http://www.tgci.com
U.S. Army Corps of Engineers	http://www.usace.army.mil
U.S. Department of Agriculture	http://www.usda.gov
U.S. Department of Housing and Urban Dev.	http://www.hud.gov
U.S. Department of Transportation	http://www.dot.gov
U.S. Environmental Protection Agency	http://www.epa.gov

Mapping	
Environmental Research Systems Institute	http://www.esri.com
FEMA Map Service Center	http://msc.fema.gov
Kentucky Cabinet for Economic Development	http://www.thinkkentucky.com

Land Subsidence	
Mine Safety and Health Administration	http://www.msha.gov

Landslides	
Kentucky Geological Survey	http://www.uky.edu/kgs
Kentucky Transportation Cabinet	http://transportation.ky.gov

Local News Sources	
Hancock Clarion	http://www.hancockclarion.com
Journal Enterprise	http://isurfwebsterco.com/
McLean County News	http://www.mcleannews.com/
Ohio County Times News	http://www.octimesnews.com
Owensboro Messenger-Inquirer	http://www.messenger-inquirer.com/
The Gleaner	http://www.courierpress.com/news/gleaner/
Union County Advocate	http://www.ucadvocate.com

Severe Thunderstorms and Tornadoes	
National Climatic Data Center	http://www.ncdc.noaa.org
National Lightning Safety Institute	http://www.lightningsafety.com
National Severe Storms Laboratory	http://www.nssl.noaa.gov
U.S. Department of Transportation	http://www.dot.gov
U.S. Environmental Protection Agency	http://www.epa.gov

Funding Sources

The GRADD region has experienced significant damage from past hazards, and the current risk assessment shows the future will be enhanced as well. To reduce the cost of those disasters, local communities must partner with each other along with regional, state and federal partners to leverage available funding to implement some of the needed mitigation projects. The following chart describes some of those funding sources and the details surrounding each.

Table 5.7 - Funding Sources Description

Funding Sources	Agency	Description	Notes
Community Development Block Grant (CDBG)	Department of Housing and Urban Development (HUD) Kentucky Department for Local Government (DLG)	Grant funding available to all cities and counties for community, economic development, housing, and public facility projects.	50-50 matching grant - Community must be deemed low-to-moderate income from either HUD's current LMI list (on DLG's website) or doing LMI surveys of customers serviced by the utility in project area- Highest request is $1,000,000 (total for $2,000,000 project at the least)
Community Emergency Relief Fund (CERF)	Department of Housing and Urban Development (HUD) Kentucky Department for Local Government (DLG)	Grant funds provided to communities affected by severe weather or natural disasters to restore infrastructure or housing. Applicant community must have experienced a disaster with a Declaration of Emergency.	Grant Ceiling - $100,000 Applications due on the last business day of January
Delta Regional Authority (DRA)	Delta Regional Authority	Funding categories: Basic Public Infrastructure, Transportation Infrastructure, Business Development, Workforce Development	Eligible counties include Henderson, McLean, Union & Webster Counties
Hazard Mitigation Grant Program (HMGP)	Federal Emergency Management Agency (FEMA)	Funds may become available after major disaster declarations for long term hazard mitigation projects.	Kentucky has been designated an "enhanced" state and receives an increased 10% of available funding for initiative projects outside of normal funding edibility
Building Resilient Infrastructure and Communities (BRIC)	Federal Emergency Management Agency (FEMA)	Provides funding for hazard mitigation projects and planning prior to a disaster event. Funds available annually.	Funding applications available through Kentucky Emergency Management

Funding Sources	Agency	Description	Notes
Flood Mitigation Assistance Program (FMA)	Federal Emergency Management Agency (FEMA)	The program awards funds to projects that reduce or eliminate long term risk of flood damage.	Available to NFIP enrolled communities
State Homeland Security Program	Kentucky Office of Homeland Security (KOHS)	Grant funds awarded to projects that build capabilities for implementing the goals and objectives of state homeland security strategies. Projects approved through a competitive application process between state agencies and local governments.	Fundable projects include communications, critical infrastructure and first responder equipment projects
Local Funds	Local Governments/ Organizations	At times, some communities and organizations can provide funds from their budgets to contribute to or fully fund hazard mitigation projects.	Examples of sources: Coal Severance, Road Aid, General Fund
United States Army Corps of Engineers Planning Assistance to States (PAS)	US Army Corps of Engineers	Program provides planning assistance to state agencies and local governments in the form of studies.	Examples include dam safety/failure, flood risk management, flood plain management and harbor/port studies
United State Army Corps of Engineers Management Services (FPMS)	US Army Corps of Engineers	Program provides technical services and planning guidance to agencies, governments, organizations and individuals in the form of flood plain studies.	Examples of studies and plans include dam break analysis, flood warning/preparedness, comprehensive flood plain management, flood risk management, flood proofing, flood prone structure inventory and levee evaluation
United States Department of Agriculture Smith-Lever Special Needs Funding	U.S. Department of Agriculture	Provides grant funding for cooperative extension offices for the development and implementation of education, technical assistance and communication of natural hazards to local communities.	100% matching grant

Funding Sources	Agency	Description	Notes
Drinking Water/Clean Water State Revolving Funds	Kentucky Infrastructure Authority (KIA) and Kentucky Division of Water (DOW)	The CWSRF and DWSRF provide low interest rates and flexible loan terms for funding water and wastewater system improvements.	http://dep.ky.gov/Pages/Grants-and-Loans.aspx
States' Economic Development Assistance Program	Delta Regional Authority (DRA)	Grant funding available to Henderson, McLean, Union and Webster Counties for projects that address basic public infrastructure, transportation infrastructure, business development and workforce development.	Open funding cycles year round http://dra.gov/funding-programs/states-economic-development-assistance-program/eligibility-funding-priorities/
State Funds	State Governmental Organizations/Departments	At times, state funding sources can assist in the funding of local mitigation projects where it has jurisdictional responsibility.	Example: state maintained highways
Emergency Management Performance Grant Program (EMPG)	Federal Emergency Management Agency (FEMA)	Grant funding allocated annually to the state and distributed to each county to fund planning, operations, equipment acquisitions, training, exercises, construction and renovation of all hazard projects.	Funds generally distributed to counties by October 1
Assistance to Firefighters Grant (AFG)	Federal Emergency Management Agency (FEMA)	Grant funding available to fire departments for the obtainment of equipment, protective gear, emergency vehicles, training and other hazard related resources.	Grant funding includes a 5%, 10%, or 15% cost share
Fire Prevention and Safety Grants	Federal Emergency Management Agency (FEMA)	This program provides grant funding to enhance the safety of the public and firefighters concerning fire and fire-related hazards by assisting fire prevention programs and supporting firefighter health and safety research and development.	The program's four funding categories include general education/awareness, code enforcement/awareness, fire and arson investigation and national/state/regional programs and studies

Specific Mitigation Action List

The basis for the 2021 Hazard Mitigation Plan for the Green River Area Development District is the charts on the ensuing pages. The specific mitigation actions that reduce the cost of disasters are the backbone of the Plan. Everything else included in the Hazard Mitigation Plan is supporting information for these specific mitigation actions.

Requirement §201.6 (c)(3)(ii)
The hazard mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce to effects of each hazard, with particular emphasis on new and existing buildings and infrastructures.

The Mitigation Action charts are categorized by entity and divided into Structural, Nonstructural, Response and Preparedness, Planning and Education categories. Each action has the responsible party listed with possible funding sources for each action.

Requirement §201.6 (c)(3)(iv)
For multi-jurisdictional plans, there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.

The timetable for completion is separated into three choices: short term projects, those to be completed within two years; long term projects, those completed in three-ten years; and continuous projects ongoing or revolving regularly, but important mitigation actions are necessary for inclusion. The actions are categorized by county, then by individual jurisdiction and include the hazards each action addresses.

Mitigation Project Analysis & Prioritization

The specific mitigation actions were ranked for each entity based on the following set of guidelines: type of project, effectiveness of strategy, implementation challenges, cost/benefit, funding opportunities and breadth of hazard vulnerability for the action. Figure 5.2 describes the new prioritization for the 2021 Hazard Mitigation Plan.

Figure 5.2 - Project Scoring Criteria & Prioritization Standards

Category	Points
Project Type Score	**1 - 3**
Points are cumulative based on project type.	
Structural / Infrastructure	3
Nunstructural / Upgrades	2
Emergency Response & Preparedness	1
Plans & Regulatory	1
Education / Awareness	1
Effectiveness	**1 - 5 points**
Points given on a scale of 1 - 5 based on how well the project mitigates the hazard, benefits emergency reponse efforts, and what percentage of the population benefits. The more effective the project, the higher the score.	
Ease of Implementation	**1 - 5 points**
Points given on a scale of 1 - 5. The higher the score, the easier the project is to implement. Examples are below.	
Project can be completed entirely by the local agency	5
Project must be completed by an outside entity	1
Cost / Benefit	**1 - 5 points**
Points given on a scale of 1 - 5. More points are given to projects with a higher cost/benefit ratio.	
Funding Opportunities	**2 per grant**
Two points are given for each grant funding source available to the project.	
Hazard Vulnerability	**0 - 2**
Points are cumulative based on GRADD's vulnerability to the types of hazard that the projects mitigates. Each hazard's vulnerability ranking is derived from the charts that are found in this document. The rankings for the seven GRADD counties were weighted averaged to come up with a vulernability ranking for the entire GRADD region.	
High Risk Hazards	2
Extreme Temperatures	
Tornado	
Winter Weather	
Moderate Risk Hazards	1
Drought	
Flooding / Flash Flood	
Landslide	
Land Subsistence	
Thunderstorms / Hail	
Low Risk Hazards	0
Dam/Levee Failure	*
Earthquake	
Wildfire	

Local Hazard Mitigation Strategy – Community Project List																
Daviess County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Add Mesonet Weather Station	County Emergency Management	HMGP	Short Term		X				2	5	4	5	4	10	30
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Ensure county's functional access needs population have plan of action and care in upcoming emergency planning.	County Engineer	HMGP, FMA	Long Term				X		1	2	4	4	4	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire addiitional portable generators for critical facilities	County EMA	HMGP	Long Term		X				2	4	3	4	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install fixed generators at critical facilities.	County EMA	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Educate local residents on the hazards involved with earthquakes through the local school systems	All Departments	Local Funds	Short Term					X	1	2	5	2	0	11	21
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire Digital River Gauge	Fiscal Court	HMGP, Flood Control	Short Term		X				2	5	4	5	3	1	20
Hazards Addressed: Dam/Levee Failure, Floods															
Install warning sirens in new commercial and residential developments.	County EMA	HMGP	Long Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Replace warning siren controls at EM office	County EMA	Local Funds	Short Term		X				2	4	5	5	0	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Acquire warning sirens for additional vulnerable areas	County EMA	HMGP	Long Term	X					3	4	3	3	2	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Daviess County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire severe repetitive loss properties to protect the area from flood events	County EMA	HMGP, FMA	Continuous	X					3	4	1	3	4	1	16
Hazards Addressed: Floods															
Elevate streets and highways above 100 year floodplain	County Engineer	HMGP, FMA	Long Term	X					3	5	1	2	4	0	15
Hazards Addressed: Earthquakes															
Distribute safe room brochures with building permits	OMPC, County Emergency Management	Local Funds	Short Term					X	1	1	5	3	0	3	13
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Pursue inundation mapping for critical areas	County EMA	HMGP, Local Funds	Continuous		X				2	3	2	3	2	1	13
Hazards Addressed: Dam/Levee Failure, Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Owensboro																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Improve inter-agency communication by acquiring satellite phone system	County Emergency Management	HMGP, HSP	Short Term		X				2	3	4	4	4	11	28
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities	Mayor	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Implement advanced training & acquire equipment for police, fire, EMA, and engineering depts. to improve response to disasters	Police Dept., Fire Dept., EMA, Engineering Dept.	HMGP, HSP, Local Funds	Long Term			X		X	2	2	3	3	4	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable generators and hook-ups for temporary shelters	Fire Department	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for sewer lift stations	Mayor	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire NOAA weather radios for critical facilities	Mayor	Local Funds	Short Term		X				2	4	3	4	0	11	24
Hazards Addressed: Dam/Levee Failure , Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Conduct overall assessment of critical facilities to find deficiencies and more adequately prepare for future disasters	Emergency Management	Local Funds	Long Term				X		1	2	4	5	0	11	23
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Set up back-up communications system at Owensboro Community and Technical College Campus	Emergency Management, GIS	HMGP	Short Term		X				2	3	2	2	2	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct FEMA-certified public disaster shelters/safe rooms in centralized locations	County Emergency Management	HMGP	Short Term	X					3	4	1	3	2	8	21
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods, Severe Thunderstorms, Tornadoes, Winter Storms															

Local Hazard Mitigation Strategy – Community Project List																
City of Owensboro																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Develop educational pamphlets and mailers to be distributed to citizens alongside city newsletters	City Clerk	Local Funds	Long Term					X	1	2	5	4	0	8	20
Hazards Addressed: Drought, Earthquakes, Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Acquire a new warning siren capable of alerting the community during extreme hazard events	Mayor	HMGP	Short Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Require safe rooms in new mobile home parks	City Council Members	Local Funds	Continuous	X					3	3	1	4	0	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Buy and demolish Repetitive Loss properties within city limits	Mayor, City Manager	HMGP, FMA	Long Term	X					3	4	1	4	4	1	17
Hazards Addressed: Floods															
Pursue stormwater separation project pursuant to RWRA Long Term Control Plan	Regional Water Resource Agency	CDBG, SRF	Long Term	X					3	3	1	3	4	3	17
Hazards Addressed: Floods, Severe Thunderstorms															
Install severe weather / lightning detection equipment and warning systems in city parks	Community Development, Parks Dept	HMGP, HSP	Long Term		X				2	3	3	2	4	1	15
Hazards Addressed: Severe Thunderstorms															
Elevate arterial streets and highways above the 100-year floodplain	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															
Educate local residents on the hazards involved with earthquakes, tornadoes, flooding, along with stormwater education through ongoing public education and outreach.	County Emergency Management	Local Funds	Short Term					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Distribute safe room brochures with building permits	Building Director	Local Funds	Continuous					X	1	1	5	3	0	3	13
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Whitesville																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire generators for critical facilities	Mayor, Fire Chief	HMGP	Short Term		X				2	5	4	3	2	10	26
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire and implement a HAM Radio system	Mayor, Fire Chief	HSP, HMGP	Short Term		X				2	3	3	3	4	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish mutual aid agreements between local churches/schools and the City	Mayor	Local Funds	Short Term			X			1	4	5	5	0	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Develop emergency operations plan for city government and utilities	Mayor	Local Funds	Short Term				X		1	3	5	5	0	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish an emergency public shelter at the Horn Center and equip with emergency supplies and backup generator	Mayor, Fire Chief, County Emergency Management	HMGP	Long Term		X				2	4	2	3	2	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Train emergency response volunteers through CERT program	Mayor/EMA	Local Funds	Continuous			X			1	2	3	4	0	10	20
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Engineering study for elevation of roads to ensure critical traffic route during flooding events	Mayor, Road Dept	HMGP, Transportation	Long Term				X		1	5	2	3	2	2	15
Hazards Addressed: Flooding, Severe Thunderstorms															
Educate local residents on the hazard involved with tornadoes, flooding, and earthquakes through the local school system	County EMA	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Flooding, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Hancock County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Construct a multiuse county community shelter/safe room	Judge / Executive	HMGP, Local Funds	Long Term	X					3	4	5	4	2	8	26
Hazards Addressed: Extreme Temperatures, Flooding, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Install standby generator for backup power at Hancock County Courthouse	Judge / Executive	HMGP, Local Funds	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable generators for water and sewer system usage during emergencies	Wastewater Systems Operator	HMGP	Short Term		X				2	3	3	3	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable generators for critical facilities, shelters, and water/sewer systems	County Emergency Management	HMGP	Short Term		X				2	3	3	3	2	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish shelter locations with shelter agreements and equip with emergency supplies and generator	EMA, Judge / Executive, Fire Chief	HMGP	Long Term		X				2	4	2	3	2	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct additional sirens throughout the county	EMA, Judge / Executive	HMGP	Short Term	X					3	4	3	4	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Construct a community center/safe room for the south of the county	EMA, Judge / Executive	HMGP, Local Funds	Short Term	X					3	5	1	4	2	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Install generators in county schools commonly used as community shelters	Emergency Management, School Superintendent	Local Funds, HMGP	Short Term		X				2	3	3	3	2	5	18
Hazards Addressed: Severe Thunderstorms, Severe Winter Storms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Hancock County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Elevate critical roadways to protect from flooding.	Road Superintendent	HMGP, FMA, Local Funds	Long Term	X					3	4	1	2	4	2	16
Hazards Addressed: Floods, Severe Thunderstorms															
Educate local residents on hazards through the local school system	EMA, School Superintendent	Local Funds	Continuous					X	1	2	5	3		5	16
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish an ordinance requiring safe rooms in all future manufactured housing parks	Judge / Executive	Local Funds	Short Term				X		1	2	4	4	0	3	14
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Hawesville																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Rehabilitate Levee Pump Station	Mayor, Public Works, City Clerk	HMGP	Short Term	X					3	5	1	5	2	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable pumps for water and sewer services	Mayor, Public Works, City Clerk	Local Funds, HMGP	Short Term		X				2	3	3	4	2	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct a waterline interconnect with another agency to serve as backup water supply	Mayor, Public Works, City Clerk	HMGP	Short Term	X					3	3	3	3	2	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire standby generator for Water Treatment Plant and WasteWater Treatment Plant	Mayor, Public Works, City Clerk	HMGP	Short Term		X				2	3	3	3	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable generator to serve 3 Raw Water Wells to protect the water supply	Mayor, Public Works, City Clerk	HMGP	Short Term		X				2	3	3	3	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Develop educational pamphlets and mailers to be distributed to citizens alongside city newsletters	City Clerk	Local Funds	Long Term					X	1	1	5	3	0	9	19
Hazards Addressed: Extreme Temperatures, Floods, Severe Thunderstorms, Severe Winter Storms, Severe Winter Storms, Tornadoes															
Remove old water tank (a structural hazard) located on Hawes Boulevard	Mayor, Public Works, City Clerk	Local Funds, HMGP	Short Term	X					3	3	2	2	2	6	18
Hazards Addressed: Earthquakes, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Construct safe rooms for mobile home clusters within the city	Mayor, City Clerk	HMGP	Long Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Lewisport																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Support emergency services in acquiring interoperable communications system	County EMA	HSP, HMGP	Long Term		X				2	3	3	3	4	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire water and sewer pumps to maintain water services	Mayor	Local, Funds, HMGP	Short Term		X				2	3	3	2	2	11	23
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Pursue riverbank stabilization projects	Mayor, City Manager	FMA, HMGP	Long Term		X				2	5	2	4	4	2	19
Hazards Addressed: Flooding, Landslides															
Acquire mobile checkpoint structures for use by law enforcement during emergency situations	Mayor, City Manager	HMGP	Long Term	X					3	2	2	2	2	7	18
Hazards Addressed: Dam/Levee Failure, Earthquakes, Floods, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Rehabilitate booster station to to ensure water supply resiliency.	Mayor, City Manager	HMGP	Short Term	X		X			2	5	5	2	2	2	18
Construct a community safe room	County EMA	HMGP	Long Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Improve storm drainage through maintenance of waterway to Ohio River	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	2	15
Hazards Addressed: Floods, Severe Thunderstorms															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through the local school system	All Departments	Local Funds	Continuous					X	1	2	4	2	0	3	12
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Henderson City/County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Construct safe rooms to protect areas of vulnerable population	County EMA	HMGP	Short Term	X					3	4	1	3	2	8	21
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods, Severe Thunderstorms, Tornadoes, Winter Storms															
Acquire rescue boat for Henderson Fire Department	City / County / Emergency Management	KOHS, Local Funds	Short Term			X			1	5	5	5	2	3	21
Require safe rooms in new mobile/manufactured parks	Planning Commission Director	Local Funds	Short Term	X					3	5	3	4	0	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Develop program to power warning sirens with solar power	County EMA	HMGP	Short Term	X			X		4	3	1	2	2	5	17
Develop a safe room demonstration project	Mayor, City Administrator	Local Funds	Short Term					X	1	5	3	4	0	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Develop an enhanced earthquake risk analysis plan	Mayor, City Administrator	HMGP, Local Funds	Short Term				X		1	4	3	5	2	0	15
Hazards Addressed: Earthquakes															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through the local school systems	All Departments	Local Funds	Continuous					X	1	2	5	4	0	3	15
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Develop an ongoing stormwater drainage strategy for the Countryview area	Henderson Planning Commission	HMGP, Local Funds	Short Term				X		1	2	4	4	2	1	14
Hazards Addressed: Floods															
Improve Elam Ditch drainage area to alleviate flooding during high river / heavy rain events.	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Corydon																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Acquire generators for critical facilities	Mayor	HMGP	Long Term		X				2	4	4	3	2	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Extreme Temperatures, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Acquire NOAA weather radio critical facilities	Mayor	Local Funds	Short Term		X				2	4	3	4	0	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Extreme Temperatures, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Develop educational pamphlets and mailers to be distributed to citizens alongside city newsletters	City Clerk	Local Funds	Short Term					X	1	2	5	4	0	8	20
Hazards Addressed: Drought, Earthquakes, Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Acquire generators for sewer lift stations	Mayor	HMGP	Long Term		X				2	3	3	3	2	6	19
Hazards Addressed: Floods, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Require safe rooms in new mobile home parks	City Council Members	Local Funds	Short Term	X					3	5	3	4	0	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Acquire a new warning siren capable of alerting the community during extreme hazard events	Mayor	HMGP	Long Term	X					3	4	3	3	2	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Develop a safe room demonstration project	County Emergency Management	Local Funds	Short Term					X	1	5	3	4	0	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Distribute safe room brochures with building permits	City Council Member	Local Funds	Continuous					X	1	1	5	3	0	3	13
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Robards																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Distribute Hazard Preparedness safety information through ongoing public outreach.	City Commission	Local Funds	Short Term					X	1	1	5	3	0	11	21
Hazards Addressed: Dam/Levee Failure, Earthquakes, Drought, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire a sign board to display hazard safety messages	City Commission	Local Funds	Short Term					X	1	2	3	2	0	11	19
Hazards Addressed: Dam/Levee Failure, Drought, Extreme Temperatures, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Install warning sirens in areas of vulnerable population	Mayor	HMGP	Long Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Educate local residents on the hazards involved with tornadoes, flooding, wildfires, earthquakes, and other severe storms through the local school system	County Emergency Management	Local Funds	Continuous					X	1	2	5	4	0	6	18
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Distribute safe room brochures with building permits	Planning / Zoning	Local Funds	Short Term					X	1	1	5	3	0	3	13
Hazards Addressed: Severe Thunder Storms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
McLean County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Develop Reverse-911 system	County Emergency Management	HMGP, HSP	Short Term			X			1	4	4	4	4	11	28
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish a central emergency interoperable communications system at County Courthouse	Judge / Executive	HSP, HMGP	Short Term				X		1	5	3	3	4	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install standby generator at County Courthouse	Judge / Executive	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators to provide backup power at critical facilities	Judge / Executive	HMGP	Long Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Drought, Extreme Temperatures, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Establish interlocal agreements	Judge / Executive	Local Funds	Short Term			X			1	4	5	5	0	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire NOAA radios for critical facilities	County Emergency Management	Local Funds	Short Term		X				2	4	3	4	0	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Conduct GIS infrastructure mapping for entire county	GRADD GIS Staff, Planning Staff	DRA, Local Funds	Continuous			X			1	2	3	4	2	11	23
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish CERT classes for interested members of the community	County Emergency Management	Local Funds	Continuous					X	1	3	3	4	0	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Become Storm Ready community	County Emergency Management	Local Funds	Short Term			X			1	3	5	5	0	8	22
Hazards Addressed: Drought, Earthquakes, Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
McLean County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Construct additional weather sirens for unserved areas in the County	Judge / Executive	HMGP	Long Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Elevate county roads above 100-year floodplain	Road Engineer	FMA, HMGP	Long Term	X					3	5	1	3	4	1	17
Hazards Addressed: Floods															
Support efforts to elevate KY 85 at Cypress Creek near KY 2226 between Sacramento and Island	Judge / Executive	Local Funds	Short Term			X			1	3	5	5	0	1	15
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through a public outreach program	County School Superintendent, County Emergency Management	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Calhoun																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Develop Reverse-911 system	County Emergency Management	HMGP, HSP	Short Term			X			1	4	4	4	4	11	28
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Support emergency services in acquiring necessary equipment for natural disasters	Mayor, City Council, City Staff, County Emergency Management	HMGP, HSP, Local Funds	Continuous			X			1	3	4	4	4	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire portable generators to ensure water system operability	Mayor, City Council, Public Works Superintendent	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire a stationary generator for sewer plant	Mayor, City Council, City Staff	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for all city operated sewer lift stations and water distribution center	Mayor, City Council, City Staff	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire a stationary generator at 1st Street lift station	Mayor, City Clerk	FMA, DRA	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish interrconnects and dual feed system to ensure redundancy of utility services provided to residents	Mayor, City Council, County Emergency Management	CDBG, SRF	Long Term	X					3	3	3	3	4	10	26
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															

Local Hazard Mitigation Strategy – Community Project List																
City of Calhoun																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Establish a shelter agreement with the Red Cross	Mayor, County Emergency Management	Local Funds	Short Term				X		1	3	4	5	0	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Conduct GIS dynamic modeling and flood mapping in conjunction with county officials	City Staff, GRADD GIS Department	HMGP, DRA	Short Term			X			1	3	2	3	4	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct waterline extension to serve as an interconnect to Sacramento	Mayor, City Council, City Clerk	CDBG, SRF	Long Term	X					3	2	2	3	4	8	22
Hazards Addressed: Dam/Levee Failure , Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Pursue riverbank stabilization projects	Mayor, City Council, U.S. Corps of Engineers	HMGP, FMA	Continuous	X					3	5	2	3	4	1	18
Hazards Addressed: Floods															
Create poster contests at the local elementary schools for Fire Prevention Week and Severe Weather Preparedness Month	City Fire Chief, City Staff	Local Funds	Continuous					X	1	1	4	2	0	8	16
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Support efforts to elevate KY Hwy 85 at Cypress Creek near the intersection of KY Hwy 2226 between Sacramento and Island	Mayor	Local Funds	Short Term			X			1	5	2	4	0	1	13
Hazards Addressed: Floods															
Educate local residents on the hazards involved with fires and the 911 system and emergency response through public outreach program	Fire Chief, County EMA, City Clerk	Local Funds	Continuous					X	1	2	5	3	0	0	11
Hazards Addressed: Wildfires															

Local Hazard Mitigation Strategy – Community Project List																
City of Island																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Establish a mass communications system for county wide public notifications during emergencies	Judge / Executive, County EMA	HSP, HMGP	Short Term			X			1	4	4	4	4	11	28
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Develop an emergency operations plan for the City	Mayor	Local Funds	Short Term				X		1	3	5	5	0	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities	Mayor, City Administrator	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire NOAA weather radios for critical facilities	Mayor	Local Funds	Short Term		X				2	3	3	5	0	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Equip emergency shelter with disaster response supplies	Mayor, County EMA	HMGP	Long Term			X			1	4	2	4	2	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for the sewer pump stations	Mayor, Water Superintendent	HMGP	Short Term		X				2	4	4	3	2	5	20
Hazards Addressed: Earthquakes, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Work with County to elevate KY 85 at Cypress Creek near the intersection of KY 2226 between Sacramento and Island	Mayor	Local Funds	Short Term	X					3	5	2	3		4	17
Hazards Addressed: Floods, Severe Thunderstorms, Severe Winter Storms															
Assist county efforts to construct emergency sirens on the eastern outskirts of the city	County EMA	Local Funds	Short Term	X					3	3	3	4		3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Institute a land subsidence safety and response course for the Island Fire Department	Fire Chief, County EMA	Local Funds	Short Term					X	1	2	4	5	0	1	13
Hazards Addressed: Land Subsidence															

Local Hazard Mitigation Strategy – Community Project List																
City of Island																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Mitigate closures of critical travel routes during rain and flooding events	Fiscal Court	KYTC, HMGP, Local	Long Term	X					3	5	1	1	2	1	13
Hazards Addressed: Floods															
Study risk of mine subsidence hazardous areas for land use planning	Mayor	Local Funds	Short Term				X		1	2	3	3		1	10
Hazards Addressed: Land Subsidence															

Local Hazard Mitigation Strategy – Community Project List																
City of Livermore																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Establish a central emergency interoperable communications system	Judge / Executive	HSP, HMGP, DRA	Short Term			X			1	4	4	4	6	11	30
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install generators at critical facilities	Mayor	HSP, HGMP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Obtain city personnel identification badges for use during an emergency	Mayor, City Council, City Staff	Local Funds	Short Term			X			1	3	5	5	0	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish an emergency contact list for city and county personnel	Mayor, City Council, and City Staff	Local Funds	Short Term			X			1	3	5	5	0	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install generator at Comy Dock Sewer Lift Station	Mayor, Wastewater System Operator	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish interlocal agreements	Mayor	Local Funds	Short Term			X			1	4	5	5	0	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install NOAA weather radios at critical facilities	Mayor, City Council, City Staff	Local Funds	Short Term		X				2	3	3	5		11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Retrofit City Hall to construct a storage room for emergency supplies	Mayor, City Council, City Staff	HGMP	Long Term	X					3	1	3	2	2	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															

Local Hazard Mitigation Strategy – Community Project List																
City of Livermore																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Maintain and mitigate issues with flood wall surrounding WasteWater Treatment Plant	Mayor, City Council, and City Staff	FMA, HMGP	Short Term	X					3	5	3	4	4	1	20
Hazards Addressed: Floods															
Development storm warning siren replacement program	Mayor, City Council, City Staff	HMGP	Short Term				X		1	5	3	4	2	3	18
Hazards Addressed: Tornadoes, Severe Thunderstorms															
RV safe room construction/retrofit	Mayor, City Council, City Staff	HMGP	Long Term	X					3	4	2	3	2	4	18
Hazards Addressed: Floods, Tornadoes, Severe Thunderstorms															
Retrofit City Hall with storm proof windows	Mayor, City Council, City Staff	HMGP	Long Term		X				2	3	3	3	2	3	16
Hazards Addressed: Tornadoes, Severe Thunderstorms															
Educate local citizens on the hazard involved with tornadoes, flooding, and earthquakes through public outreach program	County Emergency Manager	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Replace gravel foundation parking pads in RV Park with concrete	Mayor, City Council, City Staff	Local Funds	Short Term		X				2	2	2	2	0	1	9
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Sacramento																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Install standby generator at fire department	Mayor, City Administrator	HMGP	Short Term		X				2	5	3	4	2	10	26
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generator for backup power at 2 lift stations	Mayor, Wastewater System Operator	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Elevate KY 85 to alleviate flooding during rain events that increases travel time to hospital in Madisonville	Mayor	Local Funds	Short Term	X					3	5	1	3	0	1	13
Hazards Addressed: Floods															
Mitigate closures of critical travel routes during rain and flooding events	Fiscal Court	KYTC, HMGP, Local	Long Term	X					3	5	1	1	2	1	13
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
Ohio County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire generator for Senior Center	County Emergency Management	HMGP, CERF	Long Term		X				2	4	4	3	4	10	27
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winterstorms, Tornadoes, Wildfires															
Relocate 911 emergency dispatch center to a hardened, centralized location	Judge / Executive	HMGP, HSP	Long Term	X					3	3	4	3	4	10	27
Hazards Addressed: Dam/Levee Failures, Drought, Earthquakes, Extreme Temps, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire additional radio repeaters for emergency responders	Judge / Executive	HSP, Local Funds	Short Term		X				2	3	4	4	2	10	25
Hazards Addressed: Dam/Levee Failures, Drought, Earthquakes, Extreme Temps, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct a new fire station for Cromwell	Judge / Executive	CDBG, Local Funds	Long Term	X					3	4	1	4	2	10	24
Hazards Addressed: Dam/Levee Failures, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winterstorms, Tornadoes, Wildfires															
Acquire and install new communication system for County Emergency Services	County Emergency Managemen	HMGP	Short Term		X				2	3	2	2	2	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Stabilize riverbanks to protect from further erosion	Road Engineer	HMGP, FMA	Long Term	X					3	5	2	3	4	3	20
Hazards Addressed: Floods, Severe Thunderstorms															
Acquire loader, backhoe, and additional trucks with snow plow attachments for use by the Road Department	Judge / Executive	Local Funds	Long Term		X				2	2	4	3	0	8	19
Hazards Addressed: Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winterstorms, Tornadoes, Wildfires															
Acquire additional warning sirens for underserved areas and develop strategy to replace aging sirens	County Emergency Management	HMGP, Local Funds	Long Term		X				2	4	3	4	2	3	18
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Ohio County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Elevate arterial streets and highways above the 100 year flood plain	Road Engineer	HMGP, FMA	Long Term	X					3	5	1	3	4	1	17
Hazards Addressed: Floods															
Construct stand-alone safe rooms throughout County	County Emergency Management	HMGP	Short Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Educate local residents on the hazards involved with tornadoes, flooding, and the earthquakes through the local school system	County Emergency Management	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Flooding, Tornadoes															
Develop ordinance to require safe rooms in new mobile home parks	Judge / Executive	Local Funds	Short Term				X		1	3	3	2	0	3	12
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Install severe weather/lightning detection equipment and warning systems in all public and private recreational facilities	County Emergency Management	HMGP, Local Funds	Long Term		X				2	2	3	2	2	1	12
Hazards Addressed: Severe Thunderstorms															

Local Hazard Mitigation Strategy – Community Project List																
City of Beaver Dam																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire a standby natural gas generator for the fire station	City Commission	HMGP, HSP	Long Term		X				2	4	4	3	4	7	24
Hazards Addressed: Dam/Levee Failures, Earthquakes, Extreme Temperatures, Severe Thunderstorms, Tornadoes, Severe Winter Storms, Wildfires															
Construct a safe room	County Emergency Management	HMGP	Long Term	X					3	4	1	3	2	8	21
Hazards Addressed: Extreme Temperatures, Floods, Severe Thunderstorms, Tornadoes, Severe Winter Storms															
Pursue Repetitive Loss Properties for mitigation	County Emergency Management	HMGP, FMA	Long Term	X					3	5	2	3	4	1	18
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, earthquakes, and other severe storms through a program of public outreach.	All Departments	Local Funds	Continuous					X	1	2	5	3	0	5	16
Hazards Addressed: Earthquakes, Flooding, Severe Thunderstorms, Tornadoes															
Acquire fire department response vehicle for floodwater	City Commission	KOHS, Local	Short Term			X			1	5	5	2	2	1	16
Hazards Addressed: Floods															
Implement building regulations and codes to mitigate the effects of hazards in the city	Mayor	Local Funds	Short Term			X			1	3	3	4	0	4	15
Hazards Addressed: Tornadoes, Severe Thunderstorm, Earthquakes, Floods															
Develop ordinance that all new mobile home parks construct a safe room	City Commission	Local Funds	Short Term				X		1	4	3	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Distribute safe room brochures with building permits	Planning / Zoning	Local Funds	Continuous					X	1	1	5	3	0	3	13
Hazards Addressed: Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Centertown																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Purchase equipment for the fire department and other emergency response units	Fire Chief	HMGP, HSP	Long Term		X				2	4	4	4	4	11	29
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Rehabilitate waste water pump stations serving the city	Mayor	CDBG, SRF	Long Term		X				2	3	4	4	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for the city's water system and other critical facilities	City Clerk	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct safe room and community center as part of a fire station renovation project	Fire Chief	HMGP, CDBG	Short Term	X					3	4	1	3	4	7	22
Hazards Addressed: Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Enhance shelter capacity of City Hall; designate site as a warming and cooling center	Mayor	HMGP	Short Term		X				2	4	3	4	2	7	22
Hazards Addressed: Extreme Temperatures, Severe Thunderstorms, Severe Winter Storms, Tornadoes															
Support efforts to elevate road at intersection of KY 69 and KY 85 to limit flooding and sewer inflow and infiltration	Mayor	Local Funds	Short Term			X			1	5	3	5	0	2	16
Hazards Addressed: Flooding, Severe Thunderstorms															
Construct new potable water tank to replace tank currently located on previously mined land	Mayor	CDBG, SRF	Short Term	X					3	3	2	2	4	2	16
Hazards Addressed: Land Subsidence, Landslides															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through public outreach	All Departments	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Increase culvert sizing under roadways to mitigate closures during rain and flooding events	City Clerk	HMGP, Local Funds	Short Term	X					3	1	3	2	2	1	12
Hazards Addressed: Severe Thunderstorms															

Local Hazard Mitigation Strategy – Community Project List																
City of Fordsville																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire generators for waste water treatment plant and two wastewater lift stations	Mayor, City Commissioners	HMGP, CERF	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Support County in replacement of communication system	Mayor, City Commissioners	HMGP, HSP, Local Funds	Continuous			X			1	3	4	3	4	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct potable water interconnect to increase resiliency for water supply	Mayor, Public Works Superintendent	HMGP	Short Term	X					3	3	3	3	2	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct safe rooms for two mobile home clusters within the city.	Mayor	HMGP	Short Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Repair area of exposed sewer line behind elementary school	Mayor, City Commissioners	HMGP	Long Term	X					3	5	2	4	2	0	16
Hazards Addressed: Earthquakes															
Educate local residents on the hazards involved with severe thunderstorms, tornadoes, flooding, earthquakes, and usage of warning devices with public outreach campaign	Mayor, City Commissioners	Local Funds	Continuous					X	1	2	5	3	0	5	16
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Hartford																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Acquire NOAA weather radios for critical facilities	Mayor	Local Funds	Short Term		X				2	3	3	5	0	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities	Mayor	HMGP	Long Term		X				2	4	3	3	2	10	24
Hazards Addressed: Dam/Levee Failures, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence , S. Thunderstorms, Tornadoes, S. Winter Storms, Wildfires															
Acquire generators for lift stations	Water System Operator	HMGP	Long Term		X				2	4	3	3	2	10	24
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct a new police station	Police Chief	Local Funds	Long Term	X					3	3	1	4	0	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Mitigate flooding issues associated with Rough River and erosion of roadways	County EMA	HMGP, FMA	Long Term	X					3	5	2	3	4	2	19
Hazards Addressed: Floods, Severe Thunderstorms															
Rehabilitate waterlines throughout the city	Mayor	CDBG, SRF	Long Term	X					3	2	2	4	4	3	18
Hazards Addressed: Earthquakes, Extreme Temperatures, Land Subsidence															
Acquire a new 4x4 vehicle for the police department	Police Chief	Local Funds, HSP	Long Term		X				2	1	3	2	2	8	18
Hazards Addressed: Dam/Levee Failure, Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Alleviate flooding issues along Barn Street near Centertown Road.	Mayor	HMGP, FMA	Long Term	X					3	4	1	4	4	1	17
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through the local school system	County EMA	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Flooding, Tornadoes															
Continue to support the National Flood Insurance Program	Mayor	Local Funds	Continuous			X			1	3	5	3	0	1	13
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
Union County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire generators for critical facilities	Union County Fiscal Court	HMGP, CERF	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire and install new interoperable communication system for County Emergency Services	Judge / Executive	HSP, HMGP	Short Term				X		1	5	3	3	4	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire mobile generators for pump and lift stations throughout the county	County Emergency Management	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire weather radios for community buildings and residents	County Emergency Management	Local Funds	Short Term		X				2	4	3	4	0	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Construct or renovate facility to house Emergency Operations Center, 911 center, sheriff's dispatchers	Judge / Executive, Fire Chief, County Emergency Management	HMGP	Long Term	X					3	4	2	3	2	10	24
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Provide disaster training for first responders and interested local residents	Emergency Management	Local Funds	Continuous					X	1	3	5	2	0	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Implement building regulations to mitigate the effects of hazards	County	Local Funds	Continuous			X			1	3	5	5	0	6	20
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Repair/replace fire hydrants in critical county areas	County Road Engineer	Local Funds	Long Term	X					3	5	3	4	0	4	19
Hazards Addressed: Droughts, Earthquakes, Extreme Temperatures, Land Subsidence, Severe Thunderstorms, Wildfires															

Local Hazard Mitigation Strategy – Community Project List																
Union County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Mitigate headwater flooding issue along Hwy 130	Road Engineer	FMA, HMGP	Long Term	X					3	5	1	3	4	1	17
Hazards Addressed: Floods															
Extend sewer lines and install lift stations around the Sturgis area	Wastewater Systems Operators	CDBG, SRF	Long Term	X					3	1	3	3	4	2	16
Hazards Addressed: Floods, Severe Thunderstorms															
Increase capacity of county water lines to capably supply fire hydrants through increased pipe diamater size from 4" to 6-8"	Wastewater Systems Operators	CDBG, SRF	Long Term	X					3	1	3	3	4	2	16
Hazards Addressed: Floods, Severe Thunderstorms															
Assess through engineering studies and possibly elevate roads inundated during heavy rains and/or flooding	Road Engineer	HMGP, FMA	Long Term				X		1	2	3	4	4	2	16
Hazards Addressed: Floods, Severe Thunderstorms															
Expand sewer lines through a County Joint Sewer project	Wastewater Systems Operators	CDBG, SRF	Long Term	X					3	1	3	3	4	2	16
Hazards Addressed: Floods, Severe Thunderstorms															
Collect GPS data for culverts to create a monitoring system	GRADD GIS Staff, Planning Commission	DRA, Local Funds	Continuous			X			1	2	4	4	2	2	15
Hazards Addressed: Floods, Severe Thunderstorms															
Educate local citizens on the hazards involved with tornadoes, flooding, and earthquakes through public outreach program	School Superintendent, Emergency Management	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Distribute Safe Room and Fire Prevention information with building permits	Building Inspector	Local Funds	Continuous					X	1	1	4	3	0	3	12
Hazards Addressed: Severe Thunderstorms, Tornadoes, Wildfires															

Local Hazard Mitigation Strategy – Community Project List																
City of Morganfield																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Acquire generators for critical facilities to include waster water treatment plant, lift stations, and others	Mayor, City Administrator	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Continue to provide support for interoperable communications for emergency services	Mayor	Local Funds, HSP	Continuous			X			1	4	1	3	2	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Work with Emergency Management Agency to create disaster related brochures, training classes, and practical drills for all groups and schools	All Departments	Local Funds	Long Term					X	1	2	4	2	0	11	20
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Undertake storm drainage projects and landscaping and sloping initiatives	Mayor, City Administrator	CDBG, SRF, Local Funds	Continuous	X					3	3	2	4	4	2	18
Hazards Addressed: Floods, Severe Thunderstorms															
Replace aging water and sewer lines	Water Systems Operator, City Administrator	CDBG, SRF, Local Funds	Continuous	X					3	2	2	4	4	2	17
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms															
Install safe rooms at appropriate locations across the city	Mayor, City Administrator	HMGP	Short Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Improve drainage under the bypass through use of increased diameter culverts	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	2	15
Hazards Addressed: Floods, Severe Thunderstorms															

Local Hazard Mitigation Strategy – Community Project List																
City of Morganfield																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Educate local residents on the hazards involved with earthquakes, tornadoes, storms, and floods through the local school system and community initiatives	All Departments	Local Funds	Continuous					X	1	2	5	3	0	4	15
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms, Tornadoes															
Address inflow and infiltration problems in the Old Camp Breckenridge area	Mayor, City Administrator	CDBG, Local Funds	Long Term	X					3	3	2	2	2	2	14
Hazards Addressed: Floods, Severe Thunderstorms															
Renovate wastewater treatment plant	Water Systems Operator, City Administrator	Local Funds	Short Term	X					3	1	3	2	0	3	12
Hazards Addressed: Earthquakes, Severe Thunderstorms, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Sturgis																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Construct community safe room	Mayor, City Clerk	HMGP	Long Term	X					3	4	1	3	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Implement First Net communication for eligible responders	County Emergency Management	HSP, Local Funds	Short Term			X			1	3	4	3	2	10	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Provide disaster training program for first responders and interested residents	County Emergency Management	Local Funds	Continuous					X	1	3	3	4	0	11	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Replace waterlines within the City	Mayor, City Clerk	CDBG, SRF	Long Term	X					3	2	3	3	4	3	18
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods															
Combine city/county sewer systems	Wastewater System Operator	CDBG, SRF	Short Term	X					3	2	2	2	4	3	16
Hazards Addressed: Earthquakes, Extreme Temperatures, Floods															
Maintain Army Corps of Engineers Levee Certification through compliance with all regulations and maintenance	Mayor	DRA, Local Funds	Short Term				X		1	5	3	4	2	1	16
Hazards Addressed: Dam/Levee Failure, Floods															
Implement building regulations and codes to mitigate the effects of hazards in the city	Mayor	Local Funds	Short Term			X			1	3	3	4	0	4	15
Hazards Addressed: Tornadoes, Severe Thunderstorm, Earthquakes, Floods															
Address drainage issues experienced throughout the city	Mayor, City Clerk	HMGP, FMA	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Uniontown																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire weather radios for community buildings	Mayor, City Council	HMGP	Short Term		X				2	4	3	4	2	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities, city halls, and pump and lift stations	Public Works Superintendent	HMGP	Long Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Pursue a storm drainage project to resolve problem areas	Public Works Superintendent	HMGP, FMA	Long Term	X					3	5	3	3	4	2	20
Hazards Addressed: Floods, Severe Thunderstorms															
Develop plan to acquire storm sirens for underserved areas and replace aging sirens	Mayor, City Council	HMGP	Short Term				X		1	5	4	4	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Separate wastewater and storm water systems to reduce inflow and infiltration	Wastewater Systems Operator	HMGP, CDBG, SRF	Long Term	X					3	3	2	2	6	2	18
Hazards Addressed: Floods, Severe Thunderstorms															
Pursue ACOE Levee Certification to comply with regulations and maintenance requirements	Mayor	DRA, Local Funds	Short Term				X		1	5	3	4	2	1	16
Hazards Addressed: Dam/Levee Failure, Floods															
Pursue acquisistion of Repetitive Loss Properties	Mayor	HMGP, FMA	Continuous	X					3	4	1	3	4	1	16
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through public outreach program	Mayor, City Clerk	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Waverly																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Construct weather warning siren	Mayor	HMGP	Long Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Mitigate flooding issues associated with local roads and properties	Road Engineer	FMA, HMGP	Long Term	X					3	5	1	3	4	1	17
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through public outreach program	All Departments	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
Webster County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire and implement an improved emergency communications system	Webster County Fiscal Court	HMGP, HSP	Long Term		X				2	4	5	5	2	11	29
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Upgrade and expand the use of early warning devices (NOAA weather radios)	County Emergency Management	Local Funds	Short Term		X				2	4	5	5	0	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Relocate 911 center	Judge / Executive	HMGP, HSP	Long Term	X					3	3	4	3	4	10	27
Hazards Addressed: Dam/Levee Failures, Drought, Earthquakes, Extreme Temps, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Expand present GIS system to include layers for hazard mitigation	GRADD GIS Staff	DRA, HSP, Local Funds	Long Term		X				2	2	4	3	4	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities to include water and wastewater facilities, first responder facilities, shelters, and more	County Emergency Management	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Build emergency generators and pumps to provide sewage treatment and potable water in the event of a natural disaster	Water and Wastewater Systems Operators	HMGP, Local Funds	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Elevate county roads in flood prone areas to mitigate flooding during events	Webster County Fiscal Court	HMGP, FMA	Long Term	X					3	5	1	5	4	1	19
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
Webster County																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Develop program to install additional warning sirens in underserved areas and replacement of aging sirens	County Emergency Management	HMGP	Short Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Improve drainage with the installation of additional water drains and retention basin	Webster County Fiscal Court	HMGP, FMA	Long Term	X					3	4	1	5	4	1	18
Hazards Addressed: Floods															
Construct safe rooms for areas with vulnerable populations	County Emergency Management	HMGP	Long Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Pursue acquisition and mitigation of Repetitive Loss Properties	County Emergency Management	HMGP, FMA	Continuous	X					3	4	1	3	4	1	16
Hazards Addressed: Floods															
Construct detention areas to help slow the velocity of storm water	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															
Set ordinance to require inspection of new buildings for compliance with applicable codes	Judge / Executive	Local Funds	Short Term			X			1	2	3	2	0	6	14
Hazards Addressed: Earthquakes, Floods, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Educate local residents as to the hazards involved with tornadoes, flooding, and earthquakes through a public outreach program	County Emergency Management	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List															
City of Clay															
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Install warning sirens in underserved areas	Fire Chief	HMGP, CERF, HSP	Long Term	X					3	4	4	3	6	11	31
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire additional emergency communications devices	Fire Chief	HMGP, HSP	Long Term		X				2	5	3	3	4	11	28
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for critical facilities, including police and public works buildings	Mayor	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Pursue GIS mapping of gas lines and gas meters	Public Works, GRADD GIS Staff	DRA, HSP, Local Funds	Long Term			X			1	2	4	4	4	8	23
Hazards Addressed: Dam/Levee Failure, Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Improve drainage by placing additional drains throughout the city	Public Works	HMGP, FMA	Long Term	X					3	4	4	4	4	2	21
Hazards Addressed: Floods, Severe Thunderstorms															
Acquire equipment to respond to disaster events, including snow plow, backhoe, dump truck, utv, etc.	Mayor	Local Funds	Long Term		X				2	2	4	3	0	8	19
Hazards Addressed: Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winterstorms, Tornadoes, Wildfires															
Purchase repetitive loss and severe repetitive loss properties	Mayor	PDM, HMGP, FMA	Short Term	X					3	4	1	3	6	1	18
Hazards Addressed: Floods															
Acquire community storm shelter for vulnerable populations	Mayor	HMGP	Short Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Support efforts to elevate portions of KY 132 and KY 109 to alleviate flooding	Mayor	Local Funds	Short Term			X			1	3	5	5	0	1	15
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Clay																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Elevate flood prone roads within the city	Public Works	HMGP, FMA	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through City Hall	Mayor	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Dixon																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire permanent generators for school buildings	Mayor	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failures, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Replace Leeper Avenue (Hwy 132 West) waterline	Mayor, City Council, City Clerk	CDBG, SRF	Long Term	X					3	2	2	3	4	8	22
Hazards Addressed: Dam/Levee Failure , Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Upgrade 1600' of 2" waterline with 4" waterline in Lakeview area	Mayor, City Council, City Clerk	CDBG, SRF	Long Term	X					3	2	2	3	4	8	22
Hazards Addressed: Dam/Levee Failure , Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Acquire snow blade	Mayor, Public Works	Local Funds	Short Term		X				2	5	3	4	0	2	16
Hazards Addressed: Severe Winter Storms															
Construct community safe room	Mayor, City Clerk	HMGP	Long Term	X					3	4	1	3	2	3	16
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Educate local residents on the hazards involved with tornadoes, flooding, earthquakes	Emergency Management	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Flooding, Tornadoes															

Local Hazard Mitigation Strategy – Community Project List																
City of Providence																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire and install communications system upgrades to ensure interoperability among systems and first responders	Judge / Executive	HSP, HMGP	Short Term				X		1	5	3	3	4	11	27
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install generators at critical facilities for first responders	Public Works Director	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generators for water and waste water systems	Public Works Director	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire additional response vehicles for first responders	Mayor	HSP, Local Funds	Long Term		X				2	4	3	4	2	11	26
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Collect GPS data for sewer and water infrastructure	Public Works Director, GRADD GIS Staff	KIA	Continuous			X			1	2	4	4	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire an all-terrain vehicle for emergency use by police department and fire department	Mayor	HSP, Local Funds	Long Term		X				2	2	4	2	2	10	22
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Install additional warning sirens in underserved areas	County Emergency Management	HMGP	Short Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Improve drainage throughout the city	Public Works Director	DRA, HMGP, FMA	Long Term	X					3	3	1	2	6	2	17
Hazards Addressed: Floods, Severe Thunderstorms															

Local Hazard Mitigation Strategy – Community Project List																
City of Providence																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Repair sewer system infiltration	Public Works Director	CDBG, SRF	Short Term	X					3	3	2	3	4	1	16
Hazards Addressed: Floods															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through public outreach program	All Departments	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through the local school system	All Departments	Local Funds	Continuous					X	1	2	5	3	0	3	14
Hazards Addressed: Earthquakes, Floods, Tornadoes															
Replace damaged culverts and storm drains and increase size of culverts	Engineering Department	FMA, HMGP	Long Term	X					3	3	1	2	4	1	14
Hazards Addressed: Floods															
Install an underground electric distribution line from Belleville Road to City Lake Pump House	Public Works Director	HMGP	Long Term	X					3	3	1	2	2	1	12
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Sebree																
Project Scope	Responsible Party	Funding Source	Estimated Timetable	Project Type					Ranking Criteria						Priority Rating
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	Structural / Infrastructure	Nonstructural / Upgrades	Emergency Response & Preparedness	Plans & Regulatory	Education & Awareness	Project Type	Effectiveness	Ease of Implementation	Cost / Benefit	Funding Opportunities	Hazard Vulnerability	
Acquire a generator for the fire station	Fire Chief	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire generator for elementary school	Mayor, School Superintendent	HMGP, HSP	Short Term		X				2	4	4	3	4	10	27
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire a generator for the city water plant/water tank, lift station, and pump station	Mayor, City Staff, County EMA	HMGP, HSP	Long Term		X				2	4	4	3	4	8	25
Hazards Addressed: Earthquakes, Floods, Landslides, Land Subsidence, Severe Thunderstorms, Severe Winter Storms, Tornadoes, Wildfires															
Acquire new portable radios for city personnel and fire department	Mayor, City Manager	HSP, Local Funds	Short Term		X				1	5	3	3	2	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Establish a city storm shelter/safe room	Mayor, City Clerk	HMGP	Long Term	X					3	4	1	3	2	11	24
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Upgrade siren warning system to cover entire population	Mayor, County EMA	HMGP	Long Term	X					3	4	4	3	2	3	19
Hazards Addressed: Severe Thunderstorms, Tornadoes															
Educate local residents on the hazards involved with tornadoes, flooding, and earthquakes through the local school system	All Departments	Local Funds	Continuous					X	1	2	5	3	0	4	15
Hazards Addressed: Earthquakes, Flooding, Severe Thunderstorms, Tornadoes															
Renovate fire station to include additional truck bays	City Council	CDBG	Long Term	X					3	2	1	1	2	2	11
Hazards Addressed: Floods, Severe Thunderstorms															
Improve storm water drainage of Sebree Watkins Road	Mayor, City Clerk	Local Funds	Long Term	X					3	3	1	2	0	1	10
Hazards Addressed: Floods															

Local Hazard Mitigation Strategy – Community Project List																
City of Slaughters																
Project Scope	**Responsible Party**	**Funding Source**	**Estimated Timetable**	**Project Type**					**Ranking Criteria**						**Priority Rating**
			Short Term (0-2 yrs) Long Term (3-10 yrs) Continuous	**Structural / Infrastructure**	**Nonstructural / Upgrades**	**Emergency Response & Preparedness**	**Plans & Regulatory**	**Education & Awareness**	**Project Type**	**Effectiveness**	**Ease of Implementation**	**Cost / Benefit**	**Funding Opportunities**	**Hazard Vulnerability**	
Acquire generators for municipal buildings	Mayor	HMGP	Short Term		X				2	4	4	3	2	10	25
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Acquire new fire department emergency response equipment	Mayor / Fire Chief	Local Funds, HSP	Long Term			X			1	4	3	4	2	11	25
Hazards Addressed: Dam/Levee Failure, Drought, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Coordinate with the Red Cross and local churches to establish emergency shelters	Mayor, County EMA	Local Funds	Long Term			X			1	5	2	4	0	10	22
Hazards Addressed: Dam/Levee Failure, Earthquakes, Extreme Temperatures, Floods, Landslides, Land Subsidence, S. Thunderstorms, S. Winter Storms, Tornadoes, Wildfires															
Require proper elevation on floodplain structures	Building Inspector	FMA, HMGP, Local Funds	Continuous				X		1	4	3	3	4	1	16
Hazards Addressed: Floods															
Enforce building codes in the floodplain through requirement of city and state permits	Building Inspector	Local Funds	Continuous				X		1	3	3	4	0	1	12
Hazards Addressed: Floods															
Establish Helicopter landing pad due to location adjacent to I69	City Council	KOHS	Long Term	X		X			4	3	1	1	2	1	12
Hazards Addressed: Floods															

Monitoring, Evaluating, Updating

To realize the full value of the Hazard Mitigation Process, conditions must be satisfied, specifically, maintenance of the document to ensure it remains a living document. Maintenance of the document is a primary goal of the Hazard Mitigation Council with the following obligations remaining paramount:

Requirement §201.6(c)(4)(i): The plan maintenance process shall include a section describing the method and schedule of monitoring, evaluation, and updating the mitigation plan with a five-year cycle.

- Continued public involvement;
- Changing conditions in each city, county and region;
- Mitigation actions and strategies reflecting those changing conditions; and
- Assessment of the effectiveness of those mitigation actions and strategies.

The overall goal of hazard mitigation and the Hazard Mitigation Plan Update for the Green River Area Development District and involved partners, is to reduce the cost of disaster. This reduction in cost is achieved through hazard mitigation strategies being incorporated into every planning mechanism and community development project. Expanding or enhancing current capabilities, developing new mitigation projects and maintaining current and past mitigation actions are all necessary steps in that reduction. The cyclic nature of hazard mitigation guarantees new forms of learning and evaluations to improve current and past processes. Analysis ensures the repeated cycle of disaster—rebuild—disaster is broken, and the impact is diminished.

That continuous evaluation can only be achieved through the following broad objectives developed by the partners involved in the Hazard Mitigation Plan Update process:

- Regular assembly of the Hazard Mitigation Council according to bylaws to ensure continuous monitoring of the plan;
- Implementation of the plan into existing programs and planning processes;
- Monitoring mitigation strategies included in the Hazard Mitigation Plan; and
- Increase utilization and practice of the plan before writing the 2026 plan iteration.

Two significant studies in the region that will be completed and added to the Plan. A seismic study being completed by the Kentucky Geological Survey and the University of Kentucky of

GRADD's seven counties will provide detail and mapping on the study of liquefication and hazards following a seismic event. The risk assessment section of the Hazard Mitigation Plan will be enhanced by the work of this study and a detailed report will be added in the appendix following its completion. Following completion of this report, the Hazard Mitigation Council will meet to determine any needed changes due to the results of the study. The other project benefitting the Hazard Mitigation Plan is the critical infrastructure resilience and dependency project that will begin in January 2021 for the region.

Through meetings with stakeholders, both public and private, from every municipality and infrastructure system in the GRADD region, this project will study how critical infrastructure is dependent upon each other and study the vulnerability of critical infrastructure. The project results will be added to the risk assessment as a supplement upon completion. Necessary maintenance of the Mitigation Strategy will need to consider the project results.

Evaluation Process

The 2021 evaluation process analyzed the previous plan editions, focusing on the maintenance process of each. The goal from the beginning construction and planning process was to ensure the 2021 edition of the plan was a living document, capable of planning for the future and changing to maintain relevancy. The evaluation for the 2021 Plan kept this goal at the forefront of the process.

Table 6.1 details the previous plan iterations of 2011 and 2016 procedures for maintenance and evaluation and explains how the 2021 version will be modified to achieve those overall objectives.

Table 6.1 - Evolution of Evaluation

	2011 Plan Procedure	2016 Plan Procedure	2021 Evaluation	2021 Plan Procedure
Public Involvement	Hazard Mitigation Council will meet twice per year in open public meetings if agenda items exist. Officers will cancel if no business. At minimum Council will meet once per year.	GRADD Hazard Mitigation will meet twice per year provided there is enough business to develop a substantive agenda.	Hazard Mitigation Council will meet at least once per year.	Hazard Mitigation Council will continue to meet at minimum once per year.
Annual Evaluation	Annual evaluation of Hazard Mitigation Plan posted on www.GRADD.com. will include information on recent events, plan usage, council activities, hazard mitigation projects in progress and complete.	Annual evaluations will include summary of significant plan changes and an evaluation of funding and other resources utilized to implement projects.	Annual evaluations were completed in 2011, 2013, 2014, 2017 and 2019.	Annual evaluations will continue to be conducted using information from quarterly reports and meetings with EM Directors.
Quarterly Evaluation	County EM Directors will complete quarterly reports and submit to GRADD staff. EM Directors will have an opportunity to present any information and/or experiences at full council meetings.	County EM Directors will continue to complete quarterly reports. GRADD staff will meet with EM Directors prior to completion of the annual report to address any report deficiencies.	Quarterly reports will be submitted and compiled by GRADD staff regularly. Meetings with EM directors will also occur.	Quarterly reports and EM annual meetings will continue as a significant supplement to the Hazard Mitigation Plan Maintenance Procedure.

	2011 Plan Procedure	2016 Plan Procedure	2021 Evaluation	2021 Plan Procedure
Mitigation Strategy	The responsible party for each Mitigation Action will provide input to GRADD staff on the outcomes from implementation of the Mitigation Action.	EM Directors will relay outcomes from the responsible party to GRADD. In addition, GRADD will survey Mitigation Strategy updates from municipalities annually.	More emphasis needs to be put on ensuring updates to the Mitigation Strategy are recorded.	GRADD staff will implement new requests for information following projects listed in the Mitigation Strategy, as well as new project ideas needed. An agenda item for this update will take place at Hazard Mitigation Council meetings.
Risk Assessment	The GRADD Hazard Mitigation Council will rely on recommendations from County EM Directors and GRADD staff to determine whether changes to the Risk Assessment section are necessary.	GRADD Hazard Mitigation Council will continue to rely on recommendations from County EM Directors and GRADD staff.	Very few changes were made regularly to the Risk Assessment.	Any necessary changes will continue to be implemented upon recommendation from EM Directors and GRADD staff.
Planning Process	GRADD Hazard Mitigation Council Officers and EM Directors will meet with GRADD staff 3.5 years after FEMA approval to develop a strategy for the plan update process.	GRADD staff will continue to meet with County EM Directors approximately 3.5 years after FEMA approval to develop a strategy for the plan update process.	This process was very efficient for the 2021 Plan Update Process.	A meeting with Hazard Mitigation Council officers, EM Directors, & GRADD staff will be scheduled for July 2024 to develop strategy for the 2026 Plan Update.

Section 6: Plan Maintenance

	2011 Plan Procedure	2016 Plan Procedure	2021 Evaluation	2021 Plan Procedure
Planning Process	GRADD Hazard Mitigation Council will meet following FEMA approval to review components of the approval and to critique the planning process.	GRADD Hazard Mitigation Council will meet following FEMA approval to review components of the approval and to critique the planning process.	Meetings were conducted and proved resourceful to the planning process.	Hazard Mitigation Council will meet following FEMA approval of the 2021 Plan Update to critique the planning process and review approval as done in the past.
Mitigation Strategy	The Plan Goals, Objectives and Actions of the Mitigation Strategy will be an action item on each council agenda to address relevance and to propose any necessary revisions.	The Plan Goals, Objectives and Actions will be reviewed on annual basis using the Annual Report and GRADD Hazard Mitigation Council.	More emphasis will need to be placed on the update of mitigation projects.	Emphasis will be placed on goals at every Hazard Mitigation Council meeting, ensuring projects and goals remain relevant and that this plan will be a living document.
Implementation	Council meetings will provide opportunities for stakeholders to share mitigation action outcomes. GRADD staff will seek relevant speakers from state agencies.	Council meetings will continue to be utilized as platforms for stakeholders and guest speakers to share hazard mitigation strategies.	This goal was accomplished at Hazard Mitigation Council meetings.	Council meetings will continue to be utilized for best practice guidance and change updates but will also focus on funding opportunities and changes available for projects.
Mitigation Strategy	Following a disaster declaration, GRADD staff will meet with EM Directors to ensure the Mitigation Strategy is complete. Findings and amendments will be presented during the next scheduled GRADD Hazard Mitigation Council meeting.	GRADD staff will meet with EM Directors to review mitigation strategies, identify eligible projects, identify new projects following a declared disaster and review the HGMP funding announcement details.	Following declared disasters, this practice proceeded as planned.	Staff will continue to meet with EM Directors following disaster declaration to assess actions.

Quarterly Evaluation

Emergency Management Directors from the seven counties that comprise the Green River Area Development District play a crucial role in the maintenance of the Hazard Mitigation Plan. These partners help keep the plan updated quarterly through submission of their quarterly report. Updated in 2019 to integrate a simpler, easier approach, the quarterly report is a crucial part of maintaining the plan and ensuring it is a living document.

As seen below, the quarterly report includes updates for completed mitigation projects, projects in process and proposed mitigation projects. There is also an area for concerns or comments not contained on the report elsewhere. The completion and submission of this report is crucial to ensuring the plan is a living document that provides value for all partners.

Figure 6.1 - Hazard Mitigation Plan Quarterly Report

GRADD Hazard Mitigation Plan
Quarterly Report

Due:
April 15, July 15, October 15, and January 15.

County: _____

Year: _____ Quarter: _____

Mitigation Strategies—Completed Projects

Entity	Project	Funding Source	Included in 2016 HMP?	Description

Mitigation Strategies—Projects in Process

Entity	Project	Funding Status	Included in 2016 HMP?	Description

Proposed Mitigation Projects

Entity	Project	Potential Funding	Partnering Entities	Description

Comments & Concerns

Please include any questions, comments, concerns or ideas concerning Hazard Mitigation and this process

Prepared By: _____

Annual Evaluation

GRADD staff will assist the Hazard Mitigation Council with an annual evaluation (Figure 6.2) of the Hazard Mitigation Plan. The evaluation results will be included as an agenda item for discussion at an annual Hazard Mitigation Council meeting.

Figure 6.2 - GRADD Hazard Mitigation Plan Annual Evaluation

GRADD Staff: Evaluation Period:
1. Did the Hazard Mitigation Council meet during this period? If a meeting was canceled, please explain. 2. What agenda items were included for the Council meetings? 3. Did Council meeting guest speakers present any new ideas, best practices, or upcoming guidance? 4. Please list any changes made to the Risk Assessment during this evaluation period. 5. Were any changes made to the Mitigation Strategy during this evaluation period? 6. Are there mitigation projects currently in progress? If yes, please list. 7. Please list any mitigation projects successfully completed during this evaluation period. 8. Please list any Presidential Disaster Declarations during this period and the declared counties. 9. Were meetings held with EM Directors following the declaration to assess needs? 10. Please list any ideas, changes, or critiques of the planning process that were presented.
Hazard Mitigation Council Review Date:

Incorporating Hazard Mitigation into Existing Planning Mechanisms

The process for constructing a Hazard Mitigation Plan provides valuable tools that should be incorporated into other planning mechanisms both at the county and city levels, as well as multijurisdictional planning. Existing plans play a key role in the preparation of the plan update and subsequent plans should be updated to ensure the latest data and goals created in the Hazard Mitigation Plan are included. All local and regional plans should incorporate some type of mitigation goals in their updates. Examples are listed below:

- County Emergency Operations Plans
- Comprehensive Economic Development Strategy (CEDS)
- Community Comprehensive Plans
- GRADD Water Management Plan
- Owensboro-Daviess County Stormwater Plan
- Transportation Plans
- City Disaster Plans

These plans should be updated to include changes made to the latest iteration of the Hazard Mitigation Plan to account for changes to risk assessment and vulnerability analysis for the region, changes to goals and outcomes of mitigation strategy and to account for new data compiled. This approach ensures a comprehensive look at all available data. The plans include a diverse group of stakeholders from across the region's seven counties. The Hazard Mitigation Council members and GRADD staff have an obligation to ensure decisionmakers and stakeholders not involved in the Hazard Mitigation planning process are aware of plan updates and new data.

Requirement §201.6(c)(4)(ii)
The plan shall include a process by which local governments incorporate the requirements of the mitigation plan into planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

The goal is to make this plan a living document helping cities, counties and the region reduce the cost of disasters. The only way to ensure this goal is reached is for the Hazard Mitigation Plan to be embedded in all planning efforts performed throughout the region. If the mitigation strategy does not reflect the planning efforts for an area or group, the mitigation strategy needs to be adapted to reflect those efforts.

Section 6: Plan Maintenance

Increased strain on fiscal resources makes it necessary to use every available resource to reduce vulnerability for each municipality. Through implementation of the Hazard Mitigation Plan into other planning mechanisms, funding from various agencies can be combined to solve a problem or fill a gap in resilience. Best practices from other planning resources and jurisdictions can be combined and shared on a regional level, yet this effort is only accomplished if value is created through the Hazard Mitigation Plan. This value lies not only in the plan, but communication created by the plan process and the required maintenance of the plan. This required maintenance encourages communities and the region to regularly address how those efforts are developed and implemented to solve problems.

Continued Public Outreach and Involvement

The Green River Area Development District, the Hazard Mitigation Council and all involved partners place value in the opportunity for public involvement in all phases of the planning process, construction and maintenance of the Hazard Mitigation Plan. Each Hazard Mitigation Council meeting is advertised through many media outlets: local newspapers, social media and community websites. These are open meetings, and the public is invited to participate.

Requirement §201.6 (c)(4)(iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

The plan update will be placed on the GRADD website and each municipality's website for comments prior to jurisdictional adoption. Immediately following adoption, the approved plan will be given to each partner for their continued use. Copies of the plan will be available on participating websites, and the public will be encouraged through media releases to examine and provide feedback on the plan. The survey used during plan construction was well received, and a similar survey will be released for the public to provide feedback on the finished plan.

A benefit of the Internet and social media age is the ability for instant feedback provided by the public. It is a goal of this council to advertise mitigation actions being discussed as possible projects, actions when they are in process and upon completion. This generated feedback will be compiled and analyzed by the council to ensure the mitigation strategy is fully vested.

Plan Maintenance Schedule

Included in the Table 6.2 is the preferred date, responsible party and outcome of plan maintenance during this Hazard Mitigation Cycle.

Table 6.2 – Plan Maintenance Schedule

Time Frame	Responsible Party	Outcome
February 2021	Hazard Mitigation Council	Meet following FEMA approval of the 2021 Plan Update to critique the planning process and review approval.
December 2021	GRADD Staff / Council	Complete annual evaluation of Plan.
February 2022	Hazard Mitigation Council	Reconvene planning partners to discuss progress on mitigation actions and evaluate plan's effectiveness and application to existing planning mechanisms.
December 2022	GRADD Staff	Complete annual evaluation of Plan.
February 2023	Hazard Mitigation Council	Meet to discuss progress on mitigation actions and discuss annual evaluation.
June 2023	GRADD Staff	Apply for grant funding for plan update.
December 2023	GRADD Staff	Complete annual evaluation of Hazard Mitigation Plan.
February 2024	Hazard Mitigation Council	Meet to discuss progress on mitigation actions and annual evaluation.
July 2024	Hazard Mitigation Planning Partners	Meet with Hazard Mitigation Council Officers, EM Directors, & GRADD Staff to develop strategy for the 2026 Plan Update.
December 2024	GRADD Staff	Complete annual evaluation of Plan.
February 2025	Hazard Mitigation Council	Meet to discuss progress on mitigation actions and discuss Hazard Mitigation Process.
July 2025	Hazard Mitigation Council	Meet to review final draft of plan and submit to state partners for review.
September 2025	GRADD Staff	Submit plan to FEMA for final approval.
January 2026	Region Officials	Adopt the FEMA-approved HMP.

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Appendix A

2021 Hazard Mitigation Plan Update Adoption Schedule

Jurisdiction	Date of Original Plan Adoption	2011 Plan Update Adoption	2016 Plan Update Adoption	2021 Plan Update Adoption
Daviess County	August 4, 2005	November 16, 2010	January 21, 2016	
City of Owensboro	September 20, 2005	November 16, 2010	February 2, 2016	
City of Whitesville	August 3, 2005	December 7, 2010	January 5, 2016	
Hancock County	August 8, 2005	November 8, 2010	January 11, 2016	
City of Hawesville	September 13, 2005	November 16, 2010	January 12, 2016	
City of Lewisport	August 18, 2005	December 7, 2010	January 21, 2016	
Henderson County	August 2, 2005	November 1, 2010	January 19, 2016	
City of Corydon	August 4, 2005	November 4, 2010	February 9, 2016	
City of Henderson	August 9, 2005	November 9, 2010	January 12, 2016	
City of Robards	September 14, 2005	November 11, 2010	January 14, 2016	
McLean County	September 14, 2005	October 26, 2010	January 19, 2016	
City of Calhoun	August 9, 2005	October 12, 2010	February 9, 2016	
City of Island	September 12, 2005	November 1, 2010	January 4, 2016	
City of Livermore	October 13, 2005	November 11, 2010	January 14, 2016	
City of Sacramento	September 6, 2005	December 17, 2010	January 25, 2016	
Ohio County	September 27, 2005	November 9, 2010	January 12, 2016	
City of Beaver Dam	August 8, 2005	November 8, 2010	January 11, 2016	
City of Centertown	August 8, 2005	November 1, 2010	March 7, 2016	
City of Fordsville	August 8, 2005	November 8, 2010	January 11, 2016	
City of Hartford	July 28, 2005	October 28, 2010	January 28, 2016	
City of McHenry	August 22, 2005	November 23, 2010	February 15, 2016	
City of Rockport	August 11, 2005	December 9, 2010	February 11, 2016	
Union County	August 23, 2005	October 26, 2010	January 12, 2016	
City of Morganfield	September 22, 2005	October 28, 2010	January 28, 2016	
City of Sturgis	August 8, 2005	November 8, 2010	January 4, 2015	
City of Uniontown	August 8, 2005	November 8, 2010	January 18, 2016	
City of Waverly	October 4, 2005	November 2, 2010	February 2, 2016	
Webster County	August 8, 2005	October 25, 2010	January 11, 2016	
City of Clay	September 13, 2005	November 9, 2010	January 12, 2016	
City of Dixon	August 8, 2005	November 8, 2010	January 11, 2016	
City of Providence	September 6, 2005	November 1, 2010	February 1, 2016	
City of Sebree	August 1, 2005	December 6, 2010	January 4, 2016	
City of Slaughters	August 2, 2005	November 2, 2010	February 2, 2016	
City of Wheatcroft	July 16, 2005	November 8, 2010	January 11, 2016	



Think Progress. Think Tomorrow. Think GRADD.

GREEN RIVER AREA DEVELOPMENT DISTRICT
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Green River Area Development District are subject to periodic flooding, tornadoes, severe winter storms, severe thunder storms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the Green River Area Development District desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation funds after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and coordinated the required five year updates of the plan.

NOW, THEREFORE, BE IT RESOLVED that the Green River Area Development District Board of Directors hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update for the Green River Region.
2. Recognizes that the Green River Area Development District will ensure that the Hazard Mitigation Plan Update will be reviewed according to the Plan Maintenance Procedures, and that any needed adjustments to the plan will be developed in concert with the GRADD Hazard Mitigation Council and all local jurisdictions.
3. Agrees to consider any other future official actions as may be reasonably necessary to carry out the objectives of the Green River Area Development District Hazard Mitigation Plan Update for the Green River Region.

Adopted on: _____

Certified by: _____
Chairman of the Board of Directors

Attested by: _____
Executive Director

David Johnston, Chairman ▪ Brad Schneider, Vice Chairman ▪ Al Mattingly, Jr., Secretary ▪ Steve Henry, Treasurer ▪ Joanna Shake, Executive Director

SISTER REGION: Olomoucký kraj www.kr-olomoucky.cz

Green River Area Development District ▪ 300 GRADD Way ▪ Owensboro, Kentucky 42301-0200
(270) 926-4433 ▪ Fax (270) 684-0714 ▪ www.GRADD.com ▪ TDD Users: 1-800-648-6056
Serving the Municipal and County Governments of Daviess ▪ Hancock ▪ Henderson ▪ McLean ▪ Ohio ▪ Union ▪ Webster

EQUAL HOUSING LENDER

DAVIESS COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Daviess County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Daviess County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Daviess County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Daviess County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Daviess County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Daviess County should be developed and presented to the Daviess County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Al Mattingly

Attested by: _____

CITY OF OWENSBORO
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Owensboro, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Owensboro desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Owensboro, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Owensboro City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Owensboro, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Owensboro should be developed and presented to the Owensboro City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Tom Watson

Attested by: _____

CITY OF WHITESVILLE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Whitesville, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Whitesville desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Whitesville, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Whitesville City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Whitesville, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Whitesville should be developed and presented to the Whitesville City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Patsy Mayfield

Attested by: _____

HANCOCK COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Hancock County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Hancock County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Hancock County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Hancock County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Hancock County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Hancock County should be developed and presented to the Hancock County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Johnny Roberts

Attested by: _____

CITY OF HAWESVILLE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Hawesville, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Hawesville desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Hawesville, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Hawesville City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Hawesville, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Hawesville should be developed and presented to the Hawesville City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Charlie King

Attested by: _____

CITY OF LEWISPORT
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Lewisport, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Lewisport desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Lewisport, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Lewisport City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Lewisport, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Lewisport should be developed and presented to the Lewisport City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Chad Gregory

Attested by: _____

HENDERSON COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Henderson County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Henderson County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Henderson County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Henderson County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Henderson County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Henderson County should be developed and presented to the Henderson County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Brad Schneider

Attested by: _____

CITY OF CORYDON
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Corydon, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Corydon desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Corydon, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Corydon City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Corydon, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Corydon should be developed and presented to the Corydon City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Ronda Moore Smith

Attested by: _____

CITY OF HENDERSON
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Henderson, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Henderson desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Henderson, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Henderson City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Henderson, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Henderson should be developed and presented to the Henderson City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Steve Austin

Attested by: _____

CITY OF ROBARDS
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Robards, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Robards desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Robards, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Robards City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Robards, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Robards should be developed and presented to the Robards City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor David Sellers

Attested by: _____

MCLEAN COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of McLean County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, McLean County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including McLean County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the McLean County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of McLean County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to McLean County should be developed and presented to the McLean County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Curtis Dame

Attested by: _____

CITY OF CALHOUN
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Calhoun, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Calhoun desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Calhoun, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Calhoun City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Calhoun, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Calhoun should be developed and presented to the Calhoun City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Ron Coleman

Attested by: _____

CITY OF ISLAND
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Island, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Island desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Island, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Island City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Island, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Island should be developed and presented to the Island City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Vicki Hughes

Attested by: _____

CITY OF LIVERMORE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Livermore, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Livermore desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Livermore, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Livermore City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Livermore, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Livermore should be developed and presented to the Livermore City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Jesse Johnson

Attested by: _____

CITY OF SACRAMENTO
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Sacramento, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Sacramento desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Sacramento, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Sacramento City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Sacramento, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Sacramento should be developed and presented to the Sacramento City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Betty Howard

Attested by: _____

OHIO COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Ohio County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Ohio County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Ohio County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Ohio County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Ohio County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Ohio County should be developed and presented to the Ohio County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive David Johnston

Attested by: _____

CITY OF BEAVER DAM
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Beaver Dam, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Beaver Dam desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Beaver Dam, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Beaver Dam City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Beaver Dam, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Beaver Dam should be developed and presented to the Beaver Dam City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Paul Sandefur

Attested by: _____

CITY OF CENTERTOWN
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Centertown, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Centertown desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Centertown, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Centertown City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Centertown, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Centertown should be developed and presented to the Centertown City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Terry Kessinger

Attested by: _____

CITY OF FORDSVILLE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Fordsville, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Fordsville desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Fordsville, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Fordsville City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Fordsville, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Fordsville should be developed and presented to the Fordsville City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Beatrice Edge

Attested by: _____

CITY OF HARTFORD
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Hartford, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Hartford desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Hartford, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Hartford City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Hartford, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Hartford should be developed and presented to the Hartford City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor George Chinn

Attested by: _____

CITY OF MCHENRY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of McHenry, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of McHenry desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including McHenry, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the McHenry City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of McHenry, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of McHenry should be developed and presented to the McHenry City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Dennis Chinn

Attested by: _____

CITY OF ROCKPORT
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Rockport, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Rockport desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Rockport, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Rockport City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Rockport, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Rockport should be developed and presented to the Rockport City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Robert Harris

Attested by: _____

UNION COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Union County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Union County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Union County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Union County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Union County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Union County should be developed and presented to the Union County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Adam O'Nan

Attested by: _____

CITY OF MORGANFIELD
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Morganfield, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Morganfield desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Morganfield, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Morganfield City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Morganfield, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Morganfield should be developed and presented to the Morganfield City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Randy Greenwell

Attested by: _____

CITY OF STURGIS
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Sturgis, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Sturgis desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Sturgis, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Sturgis City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Sturgis, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Sturgis should be developed and presented to the Sturgis City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Douglas Rodgers

Attested by: _____

CITY OF UNIONTOWN
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Uniontown, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Uniontown desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Uniontown, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Uniontown City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Uniontown, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Uniontown should be developed and presented to the Uniontown City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Thomas Byrd

Attested by: _____

CITY OF WAVERLY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Waverly, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Waverly desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Waverly, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Waverly City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Waverly, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Waverly should be developed and presented to the Waverly City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor David Wolfe

Attested by: _____

WEBSTER COUNTY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Webster County, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, Webster County desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Webster County, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Webster County Fiscal Court hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Webster County, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Council and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to Webster County should be developed and presented to the Webster County Fiscal Court for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Judge/Executive Steve Henry

Attested by: _____

CITY OF CLAY
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Clay, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Clay desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Clay, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Clay City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Clay, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Clay should be developed and presented to the Clay City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Jackie Edens

Attested by: _____

CITY OF DIXON
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Dixon, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Dixon desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Dixon, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Dixon City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Dixon, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Dixon should be developed and presented to the Dixon City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Carolyn Townsend

Attested by: _____

CITY OF PROVIDENCE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Providence, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Providence desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Providence, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Providence City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Providence, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Providence should be developed and presented to the Providence City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Doug Hammers

Attested by: _____

CITY OF SEBREE
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Sebree, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Sebree desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Sebree, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Sebree City Council hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Sebree, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Sebree should be developed and presented to the Sebree City Council for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Ozzie O'Nan

Attested by: _____

CITY OF SLAUGHTERS
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Slaughters, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Slaughters desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Slaughters, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Slaughters City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Slaughters, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Slaughters should be developed and presented to the Slaughters City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Jeffrey Coomes

Attested by: _____

CITY OF WHEATCROFT
Resolution for Adoption of the
2021 Green River Area Development District Hazard Mitigation Plan Update

WHEREAS, certain areas of Wheatcroft, Kentucky, are subject to periodic flooding, tornadoes, severe winter storms, severe thunderstorms, landslides, and other natural hazards that have potential to cause damages to people and properties within the area; and

WHEREAS, the City of Wheatcroft desires to prepare and mitigate for such natural hazards; and

WHEREAS, under the Disaster Mitigation Act of 2000, the United States Federal Emergency Management Agency (FEMA) requires that local jurisdictions have in place a FEMA-approved Hazard Mitigation Plan as a condition of receipt of certain future Federal mitigation fund after November 1, 2004; and

WHEREAS, under the Disaster Mitigation Act of 2000, FEMA stipulates that all local Hazard Mitigation Plans must be updated and FEMA approved every five years to maintain the eligibility of local jurisdictions for certain Federal mitigation funding; and

WHEREAS, to assist cities and counties in meeting this requirement, the Green River Area Development District facilitated the development of a multi-jurisdictional Hazard Mitigation Plan and the five year updates covering member jurisdictions of the Green River Area Development District, including Wheatcroft, Kentucky; and

WHEREAS, the Green River Area Development District Hazard Mitigation Plan Update was developed in accordance with the Disaster Mitigation Act of 2000 regulations and FEMA guidance.

NOW, THEREFORE, BE IT RESOLVED that the Wheatcroft City Commission hereby:

1. Adopts the 2021 Green River Area Development District Hazard Mitigation Plan Update as the official Hazard Mitigation Plan of Wheatcroft, Kentucky.

2. Authorizes, if necessary, the Green River Area Development District Hazard Mitigation Commission and local emergency management officials to review the Hazard Mitigation plan. Furthermore, any necessary amendment(s) to the portions of the plan pertaining to the City of Wheatcroft should be developed and presented to the Wheatcroft City Commission for consideration prior to inclusion in the plan.

Adopted on: _____

Certified by: _____
Mayor Pat Clark

Attested by: _____

GRADD Demographics by County

County	Population	Kentucky Rank Population (120 Counties)	Households	Median Household Income	Poverty Rate (ACS 2017)	Land Size (Square Miles)	Kentucky Rank Land Size (120 Counties)
Daviess	101,104	7	39,531	48,371	22.3%	458	18.0
Hancock	8,758	105	3,744	49,135	24.3%	188	108.0
Henderson	46,252	23	18,719	43,458	19.3%	436	24.0
McLean	9,361	101	3,826	44,242	19.2%	252	82.0
Ohio	24,087	49	9,055	41,470	21.3%	587	5.0
Union	14,915	76	5,527	42,139	22.9%	343	51.0
Webster	13,180	83	5,095	39,273	21.4%	332	55.0
GRADD	**217,657**	---	**85,497**	**44,013**	**21.5%**	**2596**	---

Source: United States Census Bureau. 2017 American Community Survey 5-Year Estimates. U.S. Census Bureau, American Community Survey Office. Web. 6 December 2018. http://www.census.gov/.

GRADD Demographics by City

County	City	Population	Households	Median Household Income	Poverty Rate (ACS 2017)	Land Size (Square Miles)	Kentucky Population Rank (539 Total)
Daviess	Owensboro	59,828	25,155	40,146	20.0%	19	4
	Whitesville	554	222	$42,031	19.3%	0	318
Hancock	Hawesville	992	423	44,263	20.3%	2	231
	Lewisport	1,695	746	$39,968	25.7%	1	177
Henderson	Corydon	703	239	$42,273	23.9%	1	281
	Henderson	28,745	11,966	36,274	23.4%	15	12
	Robards	509	188	$61,250	12.7%	3.04	329
McLean	Calhoun	736	352	$32,500	22.7%	1	275
	Island	445	180	$41,875	21.1%	0	344
	Livermore	1,297	544	33,839	29.8%	1	200
	Sacramento	445	197	$30,682	27.7%	0	344
Ohio	Beaver Dam	3,589	1,447	36,716	22.2%	3	108
	Centertown	432	160	$39,643	34.1%	0	350
	Fordsville	526	204	$32,750	21.9%	0	322
	Hartford	2,740	1,096	36,538	21.9%	3	129
	McHenry	390	137	$38,571	27.3%	0.65	360
	Rockport	267	114	$31,875	29.5%	0.74	406
Union	Morganfield	3,401	1,667	31,698	16.3%	3	111
	Sturgis	1,805	778	37,096	24.0%	2	168
	Uniontown	938	398	$24,815	32.1%	1	240
	Waverly	295	142	$47,500	11.4%	0.27	395
Webster	Clay	1,117	496	39,185	16.9%	1	219
	Dixon	891	376	$46,250	19.5%	1.26	245
	Providence	3,038	1,240	23,548	41.0%	6.08	118
	Sebree	1,554	563	32,600	22.4%	2.95	184
	Slaughters	207	75	$48,750	24.8%	0	428
	Wheatcroft	153	55	$25,000	29.5%	0.25	446
GRADD		**117,292**	**49,160**	**$37,690**	**23.8%**	**69**	
		Total	*Total*	*Average*	*Average*	*Total*	

Source: https://www.census.gov/data/datasets/2016/demo/popest/total-cities-and-towns.htm

GRADD Households by County

	County	Total Households	Family Households with Children	Family Households Single Parents	Average Household Size	Owned Units	Rented Units
2000	Daviess	36,033	8,562	6,979	2	25,326	10,707
	Hancock	3,215	940	3,281	3	2,650	565
	Henderson	18,095	4,212	230	2	12,176	5,919
	McLean	3,984	995	1,657	2	3,199	785
	Ohio	8,899	2,325	292	3	7,150	1,749
	Union	5,710	1,353	613	3	4,446	1,264
	Webster	5,560	1,348	479	2	4,342	1,218
	GRADD	**81,496**	**19,735**	**427**	**3**	**59,289**	**22,207**
2010	Daviess	38,619	7,288	8,004	2	26,390	12,229
	Hancock	3,285	775	3,828	3	2,649	636
	Henderson	18,705	3,315	292	2	12,243	6,462
	McLean	3,833	765	1,878	3	3,004	829
	Ohio	9,176	1,922	314	3	7,067	2,109
	Union	5,549	1,081	780	3	4,123	1,426
	Webster	5,272	1,017	496	3	4,027	1,245
	GRADD	**84,439**	**16,163**	**416**	**3**	**61,189**	**24,363**
2018	Daviess	39,808	7,460	8,441	2	26,597	13,211
	Hancock	3,301	750	4,197	3	2,588	713
	Henderson	18,480	2,817	262	2	11,257	7,223
	McLean	3,818	803	2,088	2	2,999	819
	Ohio	9,076	1,694	301	3	6,866	2,210
	Union	5,465	960	740	2	3,786	1,679
	Webster	4,975	870	446	3	3,630	1,345
	GRADD	**84,923**	**15,354**	**407**	**3**	**57,723**	**27,200**

Source: U.S. Census Bureau

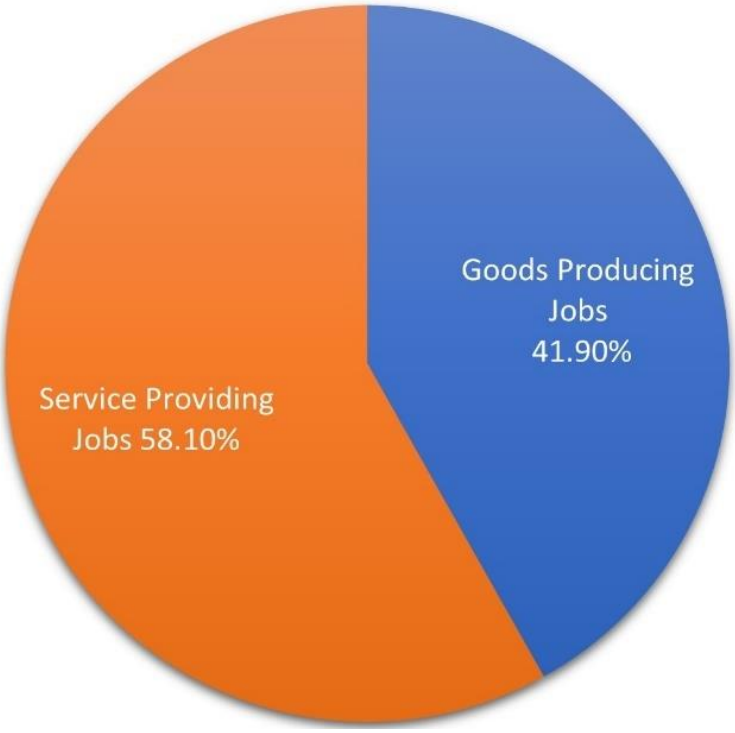
GRADD Population Projection by County

County	Year	Total Population	Individuals 65+
Daviess	1990	87,264	--
	2000	91,657	--
	2010	96,706	14,118
	2020	102,033	18,227
	2030	106,676	22,823
	2040	110,129	24,274
Hancock	1990	7,851	--
	2000	8,424	--
	2010	8,551	1,196
	2020	8,786	1,665
	2030	8,839	1,934
	2040	8,629	1,998
Henderson	1990	43,112	--
	2000	44,827	--
	2010	46,260	6,551
	2020	46,358	8,445
	2030	45,516	10,320
	2040	43,987	10,176
McLean	1990	9,601	--
	2000	9,983	--
	2010	9,515	1,611
	2020	9,274	1,935
	2030	8,642	2,151
	2040	7,942	2,179
Ohio	1990	21,103	--
	2000	22,933	--
	2010	23,834	3,682
	2020	24,235	4,559
	2030	23,832	5,290
	2040	23,181	5,387
Union	1990	16,526	--
	2000	15,378	--
	2010	15,278	2,057
	2020	14,906	2,610
	2030	14,290	3,012
	2040	13,278	2,925
Webster	1990	13,940	--
	2000	14,097	--
	2010	13,579	2,060
	2020	12,600	2,388
	2030	11,288	2,615
	2040	9,910	2,514
GRADD Region	1990	199,397	--
	2000	207,299	--
	2010	213,723	31,275
	2020	218,192	39,829
	2030	219,083	48,145
	2040	217,056	49,453

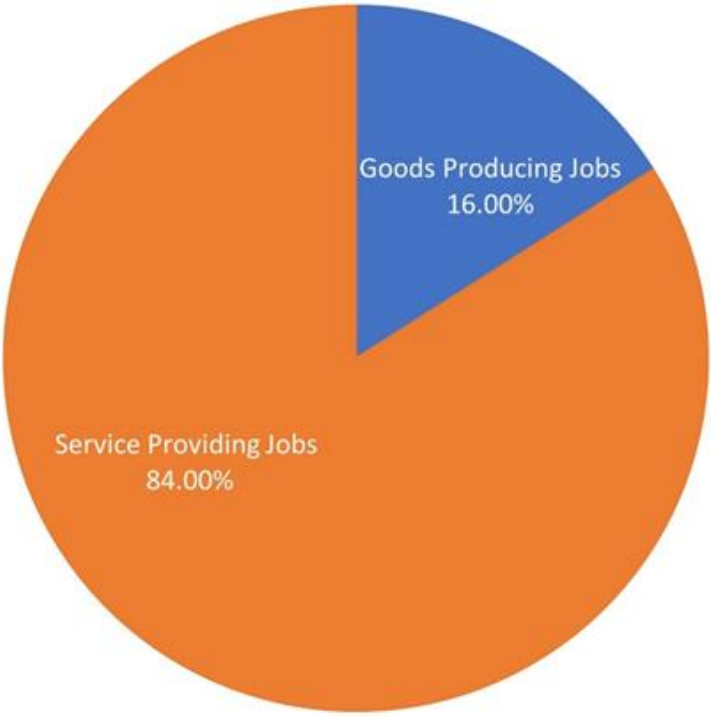
Source: US Census Bureau, American Fact Finder 2018 5-year Estimates

Economic Diversity

Green River Area Development District



United States



Source: U.S. Bureau of Labor

GRADD Employment by Industry

	County	Total	Ag	Public	Building	Money	Health Care	IT	Production	Retail Trade
2010	Daviess	41,667	101	8,711	1,807	2,013	4,567	488	5,377	5,560
	Hancock	3,615	0	482	102	118	150	-	2,448	139
	Henderson	18,152	68	2,846	834	471	2,433	170	4,151	2,016
	McLean	1,544	-	576	77	74	153	-	138	238
	Ohio	6,757	61	1,525	132	151	740	50	2,431	724
	Union	4,991	72	812	94	117	947	17	557	585
	Webster	2,634	53	799	318	84	262	-	305	347
	GRADD	**79,181**	**356**	**15,746**	**3,328**	**3,026**	**9,243**	**725**	**15,291**	**9,610**
2016	Daviess	44,800	254	5,737	1,733	3,007	8,262	420	5,571	5,917
	Hancock	3,986	-	464	493	65	133	-	2,393	130
	Henderson	19,587	80	2,748	753	403	2,733	190	5,385	2,115
	McLean	1,691	228	543	48	57	140	-	148	242
	Ohio	7,300	75	1,567	177	113	713	51	2,774	740
	Union	4,245	91	801	104	116	1,011	-	674	522
	Webster	2,961	58	721	301	68	343	-	230	312
	GRADD	**84,569**	**786**	**12,582**	**3,609**	**3,830**	**13,335**	**661**	**17,173**	**9,978**
2019	Daviess	45,673	166	5,429	1,941	2,904	8,438	318	5,924	5,771
	Hancock	3,996	-	474	135	64	155	-	2,747	130
	Henderson	18,823	133	2,529	717	352	2,546	173	5,217	1,870
	McLean	1,741	225	543	73	59	155	-	137	187
	Ohio	7,268	58	1,618	156	101	739	19	2,716	799
	Union	4,057	98	750	87	112	907	-	742	520
	Webster	2,617	77	694	497	82	337	-	242	293
	GRADD	**84,174**	**757**	**12,038**	**3,607**	**3,674**	**13,277**	**510**	**17,726**	**9,570**

Source: U.S. Census Bureau. The Quarterly Census of Employment and Wages (QCEW) utilizes the North American Industry Classification System (NAICS)

GRADD Wage and Labor Table

County	Civilian Labor Force	Average Weekly Wage	Unemployment Rate	Average Wage Per Hour	Employment	Number of Workers
Daviess	47,570	$807.79	3.6%	$19.94	45,870	46,411
Hancock	4,028	$1,335.81	3.2%	$19.94	3,898	3,921
Henderson	22,359	$821.98	3.7%	$19.94	21,542	19,248
McLean	4,251	$668.37	3.9%	$19.94	4,086	1,706
Ohio	9,803	$665.95	4.6%	$19.94	9,352	7,452
Union	6,116	$704.89	4.2%	$19.94	5,862	4,087
Webster	5,688	$733.44	3.9%	$19.94	5,469	2,554
GRADD	**99,815**	**$812.92**	**3.7%**	**$19.94**	**96,079**	**87,110**
Kentucky	**2,085,841**	**$887.82**	**3.9%**	**$21.24**	**2,005,165**	**1,847,252**

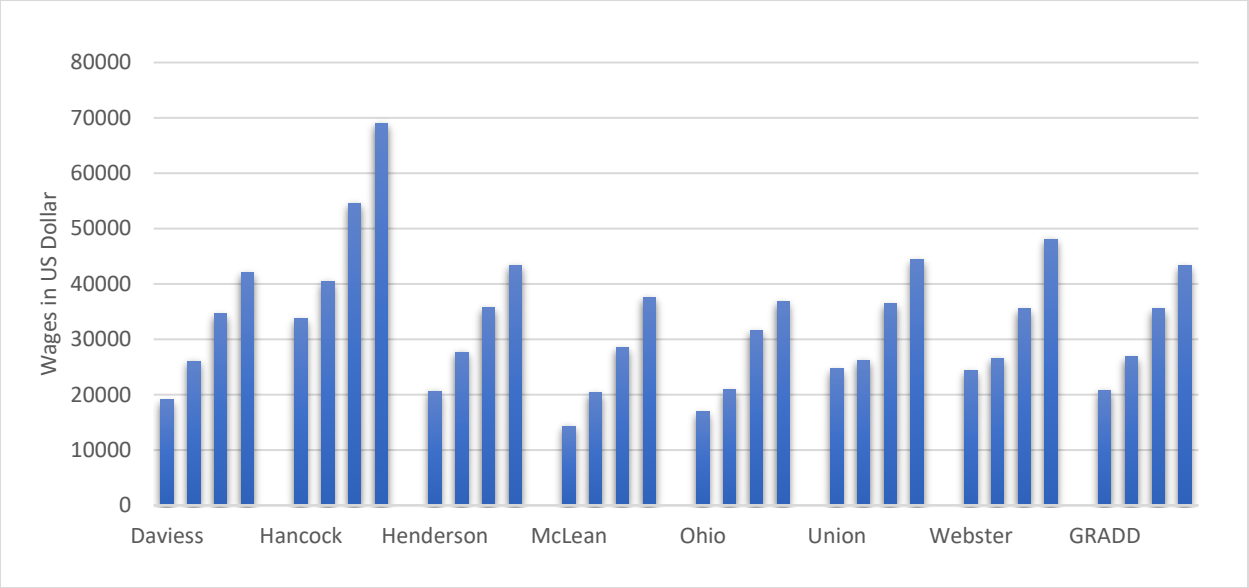
Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages, 2019

GRADD Employment Totals

	County	Total Labor Force	Employed Labor Force	Unemployed Labor Force	Unemployment Rate
1990	Daviess	43,654	41,047	2,607	6
	Hancock	3,528	3,158	370	11
	Henderson	22,119	20,763	1,356	6
	McLean	4,325	3,940	385	9
	Ohio	8,678	7,911	767	9
	Union	7,278	6,596	682	9
	Webster	6,005	5,534	471	8
	GRADD	**95,587**	**88,949**	**6,638**	**7**
2000	Daviess	46,584	44,247	2,337	5
	Hancock	4,165	3,924	241	6
	Henderson	22,877	22,028	849	4
	McLean	4,736	4,460	276	6
	Ohio	10,518	9,844	674	6
	Union	7,496	7,092	404	5
	Webster	6,794	6,458	336	5
	GRADD	**103,170**	**98,053**	**5,117**	**5**
2010	Daviess	46,619	41,635	4,984	11
	Hancock	4,103	3,566	537	13
	Henderson	22,664	19,888	2,776	12
	McLean	4,449	3,919	530	12
	Ohio	10,339	8,990	1,349	13
	Union	7,490	6,633	857	11
	Webster	6,097	5,421	676	11
	GRADD	**101,761**	**90,052**	**11,709**	**12**
2019	Daviess	47,599	45,699	1,900	4
	Hancock	4,040	3,882	158	4
	Henderson	22,145	21,297	848	4
	McLean	4,241	4,037	204	5
	Ohio	9,770	9,230	540	6
	Union	6,009	5,727	282	5
	Webster	5,830	5,601	229	4
	GRADD	**99,634**	**95,473**	**4,161**	**4**

Source: U.S. Bureau of Labor Statistics, 2019

Green River Area Development District Average Yearly Wages



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages

GRADD Average Yearly Wages Table

	County	Average Yearly Wage
1990	Daviess	$19,089
	Hancock	$33,742
	Henderson	$20,622
	McLean	$14,320
	Ohio	$16,916
	Union	$24,696
	Webster	$24,371
	GRADD	**$20,807**
2000	Daviess	$26,044
	Hancock	$40,524
	Henderson	$27,676
	McLean	$20,334
	Ohio	$20,883
	Union	$26,241
	Webster	$26,607
	GRADD	**$26,841**
2010	Daviess	$34,629
	Hancock	$54,586
	Henderson	$35,670
	McLean	$28,539
	Ohio	$31,548
	Union	$36,470
	Webster	$35,496
	GRADD	**$35,513**
2018	Daviess	$42,010
	Hancock	$69,031
	Henderson	$43,416
	McLean	$37,633
	Ohio	$36,803
	Union	$44,428
	Webster	$48,084
	GRADD	**$43,339**

Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment & Wages

GRADD Median Household Income & Poverty Rate

	County	Median Household Income	Per Capita Income	Total Poverty Rate	Poverty Rate (under 18)	Poverty Rate (Children 5 to 17 living in families)
1989	Daviess	$25,230	N/A	12.7%	16.4%	14.8%
	Hancock	$27,376	N/A	12.5%	18.7%	16.6%
	Henderson	$25,106	N/A	12.5%	16.8%	15.0%
	McLean	$21,071	N/A	14.0%	18.6%	17.3%
	Ohio	$19,436	N/A	19.1%	24.1%	21.6%
	Union	$24,356	N/A	14.3%	17.3%	13.9%
	Webster	$22,634	N/A	14.5%	20.0%	17.9%
	GRADD	**$23,601**	**N/A**	**14.2%**	**18.8%**	**16.7%**
2000	Daviess	$38,067	N/A	11.2%	15.3%	12.9%
	Hancock	$40,005	N/A	10.2%	14.2%	13.2%
	Henderson	$36,902	N/A	11.9%	16.6%	14.5%
	McLean	$32,346	N/A	13.4%	18.3%	17.1%
	Ohio	$30,580	N/A	15.6%	21.4%	19.5%
	Union	$35,049	N/A	13.0%	18.1%	16.6%
	Webster	$33,346	N/A	13.6%	19.7%	18.4%
	GRADD	**$35,185**	**N/A**	**12.7%**	**17.7%**	**16.0%**
2010	Daviess	$41,878	34987	16.2%	24.6%	22.5%
	Hancock	$46,729	40442	14.2%	20.1%	17.8%
	Henderson	$41,309	31744	16.5%	22.4%	20.7%
	McLean	$38,580	32266	16.4%	24.1%	21.2%
	Ohio	$35,975	27689	20.4%	29.5%	26.9%
	Union	$41,209	29172	19.4%	27.0%	24.2%
	Webster	$41,516	30216	15.1%	21.6%	20.7%
	GRADD	**$41,028**	**32,849**	**16.9%**	**24.2%**	**22.0%**
2018	Daviess	$51,441	41754	15.3%	19.2%	17.6%
	Hancock	$56,769	36929	12.0%	16.3%	14.8%
	Henderson	$51,161	39891	16.3%	21.6%	21.1%
	McLean	$48,080	41603	13.9%	19.0%	16.4%
	Ohio	$44,751	33262	17.2%	25.0%	23.1%
	Union	$47,067	33736	16.3%	21.9%	20.8%
	Webster	$47,132	39188	18.4%	22.0%	22.3%
	GRADD	**$49,486**	**39,521**	**15.6%**	**20.7%**	**19.4%**

Source: U.S. Census Bureau

Appendix M

Community Meeting Participation

	Title	Community/Organization
Stuart Shultz	Operations Manager	Atmos
Jeff Kelley	PVA	Webster County
Rocky Williams	Deputy	Webster County
David May	Director	Public Works
Doug Hammers	Mayor	Providence
Rocky Williams	Deputy	Webster County
Jamie Harkins	Director	Public Works
David Garrett	Employee	Public Works
Jeff Yates	Fire Chief	Dixon
Jeff Kelley	PVA	Webster County
Tiffany Taylor	Deputy PVA	Webster County
Matt Bell	Director safe schools	Webster County Schools
Carolyn Townsend	Mayor	Dixon
Cynthia Carr	City Clerk	Sturgis
Doug Rodgers	Mayor	Sturgis
Tyler Gentry	Superintendent	Public Works
Sean Sheffer	County Engineer	Union County
Melissa Coker	Director Economic Development	Union County
Jeremy Roach	Assistant Superintendent	Union County Schools
Patricia Sheffer	Superintendent	Union County Schools
Clay Wells	PVA	Union County
Brent Wigginton	City Manager	City of Lewisport
Karen Robertson	PVA	Hancock County
Chad Gregory	Mayor	City of Lewisport
Paul Nave	Director	Daviess County 911
Jill Payne	Assistant Principal	Trinity High School
Ronnie Mayfield	Facilities	St. Joseph Monastery
Frankie Fulkerson	Public Works	City of Whitesville
Al Mattingly	Judge/Executive	Daviess County
Janet Perez	City Clerk	City of Whitesville
Casey Hamilton	Public Works	City of Whitesville
Thomas Byrd	Mayor	Uniontown
Jennifer Buckman	City Clerk	Uniontown
David Wolfe	Mayor	City of Waverly
Clay Wells	PVA	Union County
Melissa Coker	Director	Union County First Industrial
Adam O'Nan	Judge/Executive	Union County

Community Meeting Participation

Emery Thomas	Superintendent	Sebree
Lucia Jenkins	Assistant Fire Chief	Providence Fire Department
Ozzie O'Nan	Mayor	Sebree
Doug Sauls	911 Director	Webster County
Jackie Edens	Mayor	Clay
Jeff Kelley	PVA	Webster County
Christy Freeman	City Clerk	Clay
Franklin Reinhard	Superintendent	Clay
David Sellers	Mayor	Robards
Jessie Howard	Planner	GRADD
Blake Edge	Planner	GRADD
Todd Jones	City Council Member	City of Hartford
Jeremy Moore	EM Director	Webster County
David May	Director of Public Works	City of Providence
Jeremy Moore	EM Director	Webster County
Cyndi Isbill	Planner	GRADD
Greg Noel	EM Director	Union County EMA
Skyler Stewart	Planner	GRADD
Andy Ball	Director	Daviess County EM
Rebecca Logan	Director	Green River Health Department
Kenny Garret	EM Director	Henderson Co EMA
Pat C. Hardesty	Area Manager	Kentucky Emergency Management (KYEM)
Curtis L. Dame	Judge/Executive	McLean County
Sage O. Taylor	Executive Assistant	Hancock County Fiscal Court
Kasey K. Emmick	Magistrate	Hancock County Fiscal Court
David K. Veach	EM Director	Hancock County EMA
Frankie L. Springfield	Sheriff	Webster County Sheriff's Office
Don L. Edwards	Fire Chief	Sebree Fire Department
Brandon Carlisle	Utility Worker	City of Clay
Sheree L. Taylor	General Deputy	Webster County PVA
Frank Skinner	Director	Webster County Housing Authority
Greg Noel	EMA Director	Union County
Cindy Carr	City Clerk/Treasurer	Union County Fiscal Court
Andy Ball	Director	Daviess County EMA
Doug Hoyt	Director of Procurement and Contracts	Kenergy

Appendix M

Community Meeting Participation

Adam L. Mills	Assistant Superintendent	Southeast Daviess Water
Sean M. O'Bryan	Director of Engineering	Regional Water Resource Agency (RWRA)
Mark Brashear	County Engineer	Daviess County Fiscal Court
Trey Pedley	Planner	Owensboro Metropolitan Planning Commission (OMPC)
Joe Schepers	Executive Director	Regional Water Resource Agency (RWRA)
Joseph K. Stiff	Sergeant	Daviess County Detention
Michelle Hall	Director of Personnel	Union County Public Schools
Tom Massie	IT Manager	Green River Area Development District
William Andrews	Geologist and Section Head, Geologic Mapping	Kentucky Geological Survey
Kyle Veach	Emergency Manager Director	Hancock County
Betty Howard	Mayor	City of Sacramento
Lelan Hancock	Assistant City Manager	City of Owensboro
Therese Payne	Support Staff	Green River Area Development District
Patsy Mayfield	Mayor	City of Whitesville
Joanna Shake	Executive Director	Green River Area Development District
Buzzy Newman	City Manager	City of Henderson
Nick Grinstead	Planning Grants Manager/Program Coordinator	University of Kentucky
Randy Greenwell	Mayor	City of Morganfield
Vicki Hughes	Mayor	City of Island
Pat Hardesty	Area Manager	Kentucky Emergency Management
Vicky Connor	Emergency Management Planner	Daviess County
Barbara Gardner	Clerk	City of Island
Andrea Shelton	Clerk	City of Livermore
Jason Roberts	Public Works Superintendent	City of Lewisport
John Garner	Police Chief	City of Lewisport
Roscoe Chappell	Public Works	City of Lewisport
Rick Millikan	Fire Chief	City of Morganfield
Gary Vetter	City Administrator	City of Morganfield
Les Piper	Public Works Director	City of Morganfield
Ed Carroll	Commissioner	City of Robards
Bob Lawson	Superintendent	Henderson County Schools
Steve Steiner	Asst. Superintendent	Henderson County Schools

Community Meeting Participation

Ed Brady	Sheriff	Henderson County
Jennifer Marks	Planning Assistance Director	Henderson County Planning & Zoning
Bobbie Jarrett	Housing Authority Director	Henderson Housing Authority
Scott Foreman	Fire Chief	Henderson Fire Dept
Chris Watson	Training & Safety Captain	Henderson Fire Dept
Jordan Webb	911 Director	Henderson 911
Steve Smith	Transmission Manager	Henderson Municipal Power and Light
George Chinn	Mayor	City of Hartford
Megan Gross	Community Engagement Coordinator	New Beginnings
Leon Geary	Public Works	City of Hartford
Jason Geary	Public Works Superintendent	City of Hartford
Paul Sandefur	Mayor	City of Beaver Dam
David Stevens	Fire Chief	City of Beaver Dam
Sarah Stone	President	Ohio County Chamber of Commerce
Larry Carter	City Superintendent	City of Beaver Dam
Mark Powers	Chief of Police	Hawesville Police Dept.
Jason Bevil	Assistant Chief	Hawesville Fire Dept.
Lora Basham	City Clerk	City of Hawesville
Rick Cox	Deputy Director	Hancock County EM
John Ogle	Water Department	City of Hawesville
Tina Ford	Assistant City Clerk	City of Hawesville
Robert Adkins	Public Works Superintendent	City of Hawesville
Daniel Crum	Planner	Owensboro Metropolitan Planning Commission
Stephen Franklin	Deputy Director Public Works	City of Owensboro
Kevin Collignon	City Engineer	City of Owensboro

Presidential Declared Disaster Declarations – GRADD Region

DR#	Declaration Date	Disaster Type	Declared Counties
305	5/10/1971	Tornado	Ohio
821	2/24/1989	Severe Storm, Flooding	McLean, Ohio
1089	1/13/1996	Blizzard	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
1163	3/4/1997	Flooding	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
1310	1/10/2000	Flooding, Heavy Rain, Severe Storm, Tornado	Daviess, Hancock, Henderson, Webster
1414	5/7/2002	Flooding, Severe Storm, Tornado	Hancock, Henderson, McLean, Ohio, Union, Webster
1471	6/3/2003	Landslide, Severe Storm, Tornado, Flooding	Henderson, McLean, Union, Webster
1523	6/10/2004	Severe Storm, Tornado, Flooding, Mudslide	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
1537	8/6/2004	Severe Storm, Flooding	Daviess, Hancock, Ohio
1578	2/8/2005	Severe Winter Storm, Record Snow	Hancock, McLean, Union, Webster
1757	5/19/2008	Severe Storm, Tornado, Flooding, Mudslide, Landslide	Hancock, McLean, Ohio
1802	10/9/2008	Severe Windstorm Associated with Tropical Depression Ike	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
1818	2/5/2009	Severe Winter Storm, Flooding	Daviess, Hancock, Henderson, McLean, Ohio, Union, Webster
1912	5/11/2010	Severe Storm, Flooding, Mudslide, Tornado	Hancock, Henderson, McLean, Ohio, Union
1976	5/4/2011	Severe Storm, Tornado, Flooding	Daviess, Hancock, Henderson, McLean, Union, Webster
4057	3/6/2012	Severe Storm, Tornado, Straight-Line Winds, Flooding	Ohio
DR-4218	5/12/2015	Severe Winter Storm, Snowstorm, Flooding, Landslide, Mudslides	Daviess, Hancock, Ohio, Webster
DR-4278	8/26/2016	Severe Storms, Tornadoes, Flooding, Landslides and Mudslides	Daviess, Ohio, Union, Webster
DR-4361	4/26/2018	Severe Storms, Tornadoes, Flooding, Landslides, Mudslides	Hancock, Henderson, McLean, Ohio, Union, Webster
DR-4428	4/17/2019	Severe Storms, Straight-line Winds, Flooding, Landslides, Mudslides	Hancock, Henderson, Union, Webster
DR-4540	4/24/2020	Severe Storms, Flooding, Landslides, Mudslides	Henderson, Union

Source: NCDC Storm Events Database

Presidential Disaster Declaration Narratives

DR 305. On April 27, 1971, a tornado touched down west of Cool Springs in southern Ohio County and proceeded east/southeast through Little Bend and into Butler County. According to the National Weather Service, a witness near the touchdown point of the tornado said it swerved as it approached his house, just grazing the home but destroying a garage and nearby barn. At Little Bend, the tornado was described as 17 yards wide and moving at 40 mph with large hail. A barn was destroyed here, and roof shingles were found embedded two inches into a large oak tree.

DR 821: During February 12-16, 1989, 10-12 inches of rain fell across west and central Kentucky. Almost half of that rainfall fell on February 14 alone. Above average precipitation during this winter elevated river levels in central Kentucky and this additional precipitation caused the Green River and Rough River to flood the counties of McLean and Ohio in the Green River Region. Damage across the commonwealth of Kentucky was estimated at $25 million and the storms were blamed for at least four deaths in Kentucky.

DR 1089: The Blizzard of 1996 was a severe winter storm occurring over the weekend of January 6th and 8th of 1996. The snow began in Kentucky around 11 a.m. CST on the 6th. Between six and twelve inches of snow were reported across north central Kentucky, shutting down traffic and essentially stranding people in their homes for the weekend.

DR 1163: In late February through early March 1997, a large, powerful storm system moved over the Great Plains causing extensive flooding over central Kentucky and extreme southern Indiana. This storm which drew warm, moist air from the Gulf of Mexico, interacted with a subtle stationary front over Kentucky, causing heavy showers and thunderstorms to break out in the region. Because the front was stationary, many of these storms continued to re-generate, striking the same areas repeatedly. The deluge resulted in record flooding along several tributaries of the Ohio River and some of the worst flooding along the Ohio River since at least 1964 and in some places since the Great Flood of 1937. Ninety-two counties in Kentucky and fourteen counties in Indiana were declared disaster areas. The entire region saw roughly $400,000 in damage.

DR 1310: On January 3, 2000, severe storms struck the Commonwealth. Two F3 tornadoes spawned in western Kentucky during this event. One of these tornadoes moved through Daviess

Presidential Disaster Declaration Narratives

County and the City of Owensboro. The tornado developed near Rome, Kentucky, moving across the southern portion of the Owensboro-Daviess County Regional Airport before entering the heart of the City of Owensboro. The National Weather Service estimated that the storm's peak winds reached upwards of 180 mph. As the storm moved through Daviess County and Owensboro it caused extensive damage. 1200 homes and businesses sustained varying degrees of damage. One hundred and one homes were destroyed while 573 sustained major damage. The storm resulted in 18 injuries and thankfully, no fatalities.

DR 1414: On April 28, 2002, severe storms developed in western Kentucky, spawning tornadoes in the process. One tornado struck the GRADD region, traveling through southern Webster County before entering Hopkins County. In Webster County, the storm produced major damage as the storm paralleled KY 120 through the city of Providence. While traveling through Providence, the storm was rated at F3 intensity. Roughly two dozen people were injured by the storm in Webster County. The storm destroyed sixteen mobile homes and ten permanent homes. About 100 additional homes were damaged because of the storm. Upon entering Hopkins County, the storm caused significant damage to 10-15 additional residences.

DR 1471: In May 2003, a series of tornado outbreaks occurred spawning over 400 tornadoes across 19 US states and one Canadian province. Kentucky was one of the states affected, seeing several tornadoes during the outbreak, including one in the GRADD region. On Sunday May 11, 2003, Sacramento, KY was struck by an F3 tornado. This tornado left a swath of damage 80 yards wide and 1 and ¾ miles long. Two minors were injured, and three homes were severely damaged by the storm. In addition, numerous barns, sheds and other structures were also damaged or destroyed. On June 3, 2020, President George W. Bush issued a major disaster declaration for McLean and other GRADD counties because of this storm and others that took place during this severe weather outbreak.

DR 1523: In June 2004, a series of severe storms struck northwestern Kentucky. These storms impacted several counties within the GRADD region, prompting President George W. Bush to issue a major disaster declaration for Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster Counties. Daviess County was struck particularly hard, seeing a series of intense downbursts that produced peak winds of up to 120 mph. The damage was primarily concentrated in a five-mile-wide path from Stanley through Owensboro to Yelvington. Approximately 40 to

Presidential Disaster Declaration Narratives

50 houses received major damages with an additional 40 to 50 homes receiving minor damage. This storm also damaged property throughout Union and Henderson Counties prior to entering Daviess County.

DR 1537: On July 13, 2004, several severe thunderstorms spread through western Kentucky. The storm had damaging winds of speeds up to 55 knots in Hancock County. Trees, limbs and powerlines were knocked down across the region. Some power poles were also broken. The event caused approximately $74,000 in property damage in the GRADD region alone and $377,000 in all Kentucky counties.

DR 1578: On December 22nd, 2005, a record-setting winter storm dropped up to 18 inches of snow across western Kentucky, closing even major roads, shutting down most businesses and prompting the governor to declare a State of Emergency. Gusty north winds from 15 to 25 mph with a few gusts up to 35 mph caused blowing and drifting of snow, with drifts up to five feet reported. The snow fell in two waves: the first during the early and mid-morning hours and the second from mid-afternoon through about midnight. Travel became nearly impossible, and many vehicles were abandoned on roads across western Kentucky. Five-foot drifts in open, rural areas made roads impassable, even to some off-road vehicles. National Guard Humvees were used for emergency purposes. Mail delivery was suspended in most areas for at least one day. The weight of the snow caused several roofs to collapse, including that of a furniture store in Paducah, a lumber company in Benton and two commercial buildings in Owensboro. One fatality was indirectly attributed to the storm: a 64-year-old man died of a heart attack while shoveling snow at his home in Graves County. The Owensboro and Paducah Airports were closed for about a day. For several days, many stores were out of certain items due to delayed deliveries. Recovery efforts were slowed by gusty winds and bitterly cold arctic air, as low as eight degrees below zero on Christmas morning.

DR 1757: On May 7, 2008, Governor Steven L. Beshear requested a major disaster declaration due to strong thunderstorms producing tornadoes, floods, flash floods, hail, mudslides and landslides during the period of March 18 to April 11, 2008. A strong low-pressure system moved east-northeast across central Illinois during the morning of March 18 and into western Kentucky that afternoon. Peak wind gusts were generally from 45 to 50 mph at most locations. Numerous tree limbs were blown down across western Kentucky.

Presidential Disaster Declaration Narratives

DR 1802: On September 26, 2008, Governor Steven L. Beshear requested a major disaster declaration due to strong surface wind from remnants of Hurricane Ike between September 14-15, 2008. In the GRADD region, winds up to 56 knots caused $38.8 million in property damage and $20.5 million in crop damage. Trees and large limbs were downed, and some fell on homes and vehicles, causing considerable damage. Hundreds of insurance claims were filed for damaged vehicles and buildings. Dozens of roads were blocked by downed trees and power lines. Numerous power poles and utility lines were down, including power poles that were snapped. Approximately two-thirds of western Kentucky was without power at the peak of the outages. Complete power restoration took six days, though most customers were back online within 72 hours. Schools were closed in some counties until power was restored.

The Daviess County and Owensboro 911 dispatch centers received a combined total of 770 emergency calls related to the storm. The governor declared a statewide State of Emergency. Daviess County reported that 111 structures sustained major damage, 550 received minor damage, and nine were destroyed. Daviess County officials believed minor damage was significantly under reported, with perhaps another 1,000 structures receiving minor damage. In Mclean County, half the roof was blown off the Sacramento Elementary School. Numerous small fires were started because of damaged electrical lines. Some of the fires were grass and brush fires, and others involved homes and businesses. One house in Sacramento was destroyed by a fire. Another fire burned 150 acres of farmland on Highway 136 in Calhoun. In Webster County, a train struck a fallen tree on the tracks. There were no injuries or major damage. The Natcher Bridge over the Ohio River near Owensboro was closed when a crane barge broke free from its moorings and crashed into the piers. No major damage was reported to the bridge.

DR 1818: The January 2009 ice storm was a major ice storm impacting several states, with Kentucky being the hardest hit. Over 500,000 residences were without power, including 100,000 without power for more than a week. The storm resulted in the deaths of 36 Kentuckians, primarily caused by hypothermia or carbon monoxide poisoning due to power generators or kerosene heaters being used indoors without proper ventilation. On February 1, 2009, Governor Steven L. Beshear requested a major disaster declaration due to the ice storm and the snow, rain and flooding that followed. The entire Kentucky National Guard was called out to assist with

recovery efforts. No deaths or injuries were reported in the GRADD region, but property damages in the seven counties amounted to approximately $59.2 million.

DR 1912: On May 3, 2010, and in an amended request dated May 8, 2010, Governor Steven L. Beshear requested a major disaster declaration due to severe storms, flooding, mudslides and tornadoes during the period of May 1 to June 1, 2010. A large storm system developed at the end of April and brought several rounds of very heavy rain to western Kentucky between April 30th and May 2nd. Rainfall amounts from two to five inches were recorded over western Kentucky. No deaths or injuries were reported, but flooding caused $45,000 in property damage and $73,000 in crop damage in the GRADD region.

DR 1976: On April 28, 2011, Governor Steven L. Beshear requested a major disaster declaration due to severe storms, tornadoes and flooding beginning on April 22, 2011 and continuing through May 2, resulting in 4 injuries and over $20.7 million in property damages in the GRADD region. On April 22, severe thunderstorms produced damaging winds and tornadoes. An F2 tornado was recorded that night around 10 p.m. moving from Union County through Webster and Henderson before weakening to an F0 in Daviess County. Peak winds were estimated near 125 mph. Several grain bins and barns were destroyed along the Union/Webster County line along Highway 56 and on a secondary road. Dozens of trees were uprooted and snapped. The tornado entered Webster County along Highway 56 and exited into Henderson County near Poole. While over Webster County, roofs were completely removed from three homes on the north and west side of Poole. Several homes and garages suffered partial loss of shingles and damage caused primarily by falling trees.

In Henderson County, a barn and garage were destroyed southwest of Robards. Dozens of trees were snapped or uprooted. Widespread flooding continued from April into May across western Kentucky. Numerous rounds of showers and thunderstorms produced additional average rainfall amounts of four to six inches, which caused isolated flash flooding. Between nine and twenty-two inches of rain fell across the region between April 22 and May 3. Most creeks and streams flooded for an extended period. Numerous roads were flooded and closed, including some major state roads such as U.S. Highways 62, 60 and 51. Some schools delayed or cancelled classes due to the large number of flooded roads. All main roads to Providence in Webster County were closed. The communities of Clay and Blackford in Webster County were isolated by flooding,

accessible by boat only. Hundreds of thousands of acres of farmland were flooded, delaying crop planting by several weeks.

DR 4057: On March 4, 2012, Governor Steven L. Beshear requested an expedited major disaster declaration due to severe storms, tornadoes, straight-line winds and flooding during the period of February 29 to March 3, 2012. A supercell moved across Ohio County through the town of Hartford. West of Hartford, law enforcement reported roofs torn off homes and cars overturned. Significant property damage was reported due to 1-inch hail and extensive wind damage.

DR 4218: On April 27, 2015, Governor Steven L. Beshear requested a major disaster declaration due to a severe winter storm, snowstorm, flooding, landslides and mudslides during the period of March 3-9, 2015. Beginning on the evening of March 3rd, steady and continuous rain fell over western and central Kentucky before changing into snow around 5 p.m. on March 4th. Approximately two to three inches of rain and six to eight inches of snow accumulated in the GRADD region. Travel became very difficult. Across western Kentucky, authorities received hundreds of requests for assistance from stranded motorists, and there were over one hundred accidents. Some of the coldest air ever recorded in the month of March invaded western Kentucky the day after the snowstorm, hindering snow removal efforts. Two more heavy rainfall events occurred during the next week. On the 9th and 10th, one to two inches of rain fell, followed by two to four more inches on the 13th and 14th. The combined effect of all these rain and snow events was a prolonged flooding event in the GRADD region resulting in $20,000 in property damage and one death occurring when a motorist drove down a flooded road in a remote area adjacent to Audubon State Park.

DR 4278: On August 19, 2016, Governor Matthew G. Bevin requested a major disaster declaration due to severe storms, tornadoes, flooding, landslides and mudslides during the period of July 2-9, 2016. Four rounds of severe storms hit the GRADD region in rapid succession resulting in $152,000 of property damage: the first during the afternoon and evening hours on July 3rd; the second during the afternoon on July 4th; the third on the 6th; and the final storm on the 7th. The primary impact was damaging winds and localized flash flooding. The third round of storms complicated cleanup efforts in western Kentucky from the previous two rounds. Widespread damaging winds on the 6th were followed by flash flooding that night. Although

thunderstorm wind damage on the 7th was less severe than on the 6th, there were pockets of winds up to 70 mph.

DR 4361: On April 10, 2018, Governor Matthew G. Bevin requested a major disaster declaration due to severe storms, tornadoes, flooding, landslides and mudslides during the period of February 21 to March 21, 2018 that resulted in $245,000 in property damage and one death in the GRADD region. Repeated rounds of moderate to heavy rainfall totaled between eight to nine inches across central Kentucky from February 15 to February 28. The Ohio River along the Indiana and Kentucky border rose into moderate to major flood stage, resulting in numerous flash floods. A water rescue was conducted near Mason Creek on Highway 359 in Union County when a vehicle was swept off the roadway by a flash flood. Fire department dive team members recovered the body of the victim from the submerged car. On March 11th, two to six inches of snow fell across western Kentucky. The heavy wet snow and gusty winds downed some tree limbs and left roads in poor condition.

DR 4428: On April 3, 2019, Governor Matthew G. Bevin requested a major disaster declaration due to severe storms, straight-line winds, flooding, landslides and mudslides during the period of February 6 to March 10, 2019 resulting in $15,000 in property damage in the GRADD region. After a wet January, frequent moderate to heavy rain events during the month of February resulted in high river levels and flooding. Additional damage was caused by an F1 tornado on February 7th a few miles northwest of Robards. The maximum estimated winds were near 100 mph. Sleet, rain and freezing snow added further moisture to the ground and rivers on the 15th. On the 20th, another rainstorm dropped an additional two to three inches of water over western Kentucky. This rainfall fell on moist ground, causing many creeks and smaller rivers to flood. The flooding was exacerbated by very high levels on the Ohio and Mississippi Rivers, which caused tributary rivers and creeks to back up into western Kentucky.

DR 4540: FEMA announced that federal disaster assistance has been made available to the commonwealth of Kentucky to supplement state, tribal and local recovery efforts in the areas affected by severe storms, flooding, landslides and mudslides from February 3rd to 29th, 2020. A very wet February contributed to another period of river flooding. Minor to moderate flooding was observed along the entire western Kentucky stretch of the Ohio River. Moderate flooding was observed along the Green River. Considerable flooding of fields occurred. Several

secondary state roads were flooded or closed. The Green River crested on February 16th at Paradise at 388.92 feet, which is almost nine feet above flood stage. The crest at Calhoun occurred on the 18th at 27.25 feet, which is four and a half feet above flood stage.

Recent Experiences

- Do you have any examples of infrastructure facilities or systems that have been damaged during a recent incident?
- Have there been any recent incidents where issues at one infrastructure facility or system have caused impacts at another facility? For example, have power outages caused impacts at a water treatment plant or emergency services facility?
- What were the consequences of that incident?
- Did any other facility rely upon the affected facility or system for their operation?
- How long did it take to recover the service provided by that facility or system?
- Were there intermediate actions taken to restore service?
- Was consideration given to reducing the risk of future failure during recovery
- What were the lessons learned from this incident?
- What solutions exist?

Critical Infrastructure in The Community

- How do important businesses and community facilities depend upon lifeline systems?
- Which lifeline systems do they rely upon?
    - Energy
        - Electric power – substations, transmission lines, generation facility
        - Natural gas – pipelines, storage, extraction facility
        - Fuel – storage, production facility
    - Water/Wastewater
        - Water – treatment plants, pump stations, storage tanks, pipelines
        - Wastewater – treatment plants, lift stations, main sewer lines
    - Transportation
        - Road – highways, bridges
        - Rail – stations/hubs, rail lines
        - Maritime – ports
        - Air – airports
    - Communications
        - Phone – cellular, landline
        - Internet / SCADA

Dependencies

- What community functions depend on the identified lifeline systems? (i.e., business, manufacturing, government, healthcare, education, emergency services, neighborhoods, etc.)
- Are there specific lifeline systems/services that are particularly critical to the continued operation of each function?
- Does the function have an alternate means of operating if it lost the critical lifeline system/service upon which it is dependent?
- What plans/partners are in place to get alternate critical services (water, power, supplies, etc.) following a disaster?
- Are there redundant or backup critical system interconnects?

BYLAWS
OF THE
GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL
Amended February 2013

ARTICLE I

NAME

Section I. The name of this organization shall be the GRADD Hazard Mitigation Council, hereinafter referred to as the Council.

Section II. The organization has as its primary concern the development, maintenance, and updating of a Multi-jurisdictional Hazard Mitigation Plan that will cover the Green River Area Development District (GRADD).

ARTICLE II

GEOGRAPHIC AREA

Section I. The geographic area to be served by the council shall be the counties of Daviess, Hancock, Henderson, McLean, Ohio, Union and Webster in Kentucky.

ARTICLE III

PURPOSE

Section I. The purpose of the Council shall be to work in conjunction with city officials, county officials, Kentucky Emergency Management, and the Department of Homeland Security through the Federal Emergency Management Agency, pursuant to the Disaster Mitigation Act of 2000 and 44 CFR Parts 201 and 206, to have the plan adopted by all city and county jurisdictions and the GRADD Board of Directors.

Section II. The Council will review and vote on endorsement of mitigation goals and objectives for natural hazards and on action steps for their implementation.

Section III. The Council will direct the required five (5) year update of the Multi-jurisdiction Natural Hazard Mitigation Plan.

Section IV. GRADD, in conjunction with the Council, shall develop and maintain a Multi-jurisdictional Hazard Mitigation Plan consistent with Kentucky Emergency Management regulations. The plan shall:

A. Include a risk assessment identifying natural hazards, assets in areas of vulnerability, and vulnerable populations;
B. Include a strategy outlining mitigation strategies and a methodology for prioritizing and implementing the measures within jurisdictions;

C. Include a process for implementing the plan through existing mitigation plans and other planning mechanisms; and
D. Include plan maintenance procedures, which will highlight methods for evaluation and updating the plan.

ARTICLE IV

COUNCIL MEMBERSHIP

Section I. The Council shall be composed of individuals who reside within the geographic area served by the Council. The membership shall be representative of each city and county jurisdiction. The Council shall consist of the following:

A. Each county judge/executive, or his or her designated representative.
B. Each mayor, or his or her designated representative.

Section II. A city or county jurisdiction is considered a participant in the Plan when:

A. The jurisdiction adopts the plan by resolution and has an active representative on the Council
B. Sixth (6^{th}) class cities may be represented by the county. The city must complete a Membership Designation Form authorizing the county to serve as its representative.
C. A representative is considered active if they have not missed three consecutive Council meetings without proxy or excuse.

Section III. The Federal Emergency Management Agency has designated GRADD as the planning representative who shall be responsible for conducting the hazard mitigation planning process.

Section IV. A quorum of the Council shall be defined to mean at least one representative from a minimum of four (4) counties.

Section V. Each representative on the Council shall be entitled to one vote on all actions of the Council even if they represent more than one jurisdiction.

ARTICLE V

OFFICERS

Section I. The officers of the Council shall include a Chair and a Vice Chair.

Section II. The Council shall elect the Chair of the Council bi-annually. The term of the Chair shall be defined as two (2) years. The Chair shall be elected at the time of adoption of these bylaws and take office. The election of a new Chair shall take place every two years thereafter at the first scheduled meeting of the calendar year.

Section III. The Council shall elect the Vice Chair of the Council bi-annually. The term of the Vice Chair shall be defined as two (2) years. The election of a new Vice Chair shall take place every two years thereafter at the first scheduled meeting of the calendar year.

ARTICLE VI

DUTIES OF THE OFFICERS

Section I. The Chairman of the Council shall:

A. Preside at all meetings of the Council;
B. See that all orders and resolutions of the Council are carried out;
C. Appoint committees as maybe directed by the Council;
D. Represent the Council at various public meetings, closed committees, hearings, cooperating agency meetings, etc., at which Council affairs may be discussed and considered; and
E. Carry on a variety of public relations activities, such as speaking before citizens groups, holding news conferences, etc., where Council proposals, programs, and accomplishments may be discussed.

Section II. The Vice-Chair~~s~~ of the Council shall:

A. Preside over meetings of the Council when the Chair is not available to do so;
B. Serve a two-year term; and
C. Assume the duties of the Chair when the Chair is unable to address all responsibilities.

ARTICLE VII

MEETINGS

Section I. The regular meeting of the Council shall be held at GRADD at the time and date selected by the members of the Council.

Section II. Robert's Rules of Order shall govern all questions of parliamentary proceedings of the meeting of the Council

Section III. The Council shall solicit public input for the plan by publishing a public notice in the newspaper of greatest circulation in each county.

Section IV. The Council shall meet at least once per year. Meetings will be scheduled for the months of April and October; however, the Council officers can cancel one of these meetings if there is not enough Council business to develop an agenda. During plan update years, the Council will meet as frequently as necessary, based on a determination of the Council officers. The Council will be notified at least ten (10) days in advance of each meeting by memorandum.

Section V. The Council shall abide by Kentucky Open Records Law.

ARTICLE VIII

AMENDMENTS

Section I. These bylaws may be amended by a majority vote of the Council attending any regular or special meeting of the Council, provided that the proposed amendment be distributed to the Council with notice of the meeting at least ten (10) prior to said meeting.

ARTICLE IX

Section I. All matters pertaining to the Council not specified or delegated herein shall be subject to the action of the majority or the Council.

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL

April 27th, 2016

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Wednesday, April 27th, at 10:00 a.m., at the GRADD office in Owensboro, Kentucky. The following persons were in attendance:

MEMBERS PRESENT

Vernon Martin, Union Co. EMA
Dennis Revlett, City of Livermore
Charlie Shields, Ohio County EMA
Jamie Harkins, City of Dixon
Jim Crowell, City of Providence
Charlie Strole, City of Island
Jason Geary, City of Hartford
Mary Wallace, City of Beaver Dam
David Abrams, City of Calhoun
Jeremy Moore, Webster County EMA
Andy Ball, Daviess County EMA
Theresa Greer, City of Whitesville

GUESTS AND STAFF PRESENT

Lance Morris, Owensboro Daviess County GIS
Amy Bleichroth-King, KY Geological Survey
Jim Howard, Daviess County EMA
Rick Montague, Hancock County EMA
Henry Morgan, Guest
Vicky Connor, Daviess County EMA
Dirk Dooper, City of Owensboro
Dustin Duncan, GRADD
Joanna Shake, GRADD
William Andrews, KY Geological Survey
Savanna Vaugh, Ohio County EMA
Sean Sheffer, Union Co. Planning Comm.
Todd Edgell, Hancock County EMA
Pat Hardesty, KYEM
Jim Mayse, Messenger-Inquirer
Patsy Mayfield, City of Whitesville
Carl Sims, GRADD

I. CALL TO ORDER

Chairman Vernon Martin called the meeting to order and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

Chairman Martin presented the minutes of the August 6, 2015, meeting of the GRADD Hazard Mitigation Council for approval.

A motion was made by Jeremy Moore and seconded by Charlie Shields to approve the minutes of the August 6, 2015,

meeting of the GRADD Hazard Mitigation Council. A vote was taken and the motion carried.

III. NEW BUSINESS

A. Guest Speaker – Dr. William Andrews, Kentucky Geological Survey

Dr. William Andrews from Kentucky Geological Survey presented to those in attendance the findings of the Daviess County Earthquake Risk Analysis project that was in the final stages of completion. Dr. Andrews explained that the purpose of the project was to conduct in depth soil analysis and seismic activity testing in Daviess County to determine earthquake risk susceptibility. Dr. Andrews stated that while geologic mapping is available to the whole state, Daviess County's population and known soil types made it a priority to conduct further analysis. Further geologic testing has been conducted in other areas of the state, primarily western Kentucky and other high population centers. Dr. Andrews profiled the different earthquake type hazards that are possible for the region including liquefaction and landslides. The effect of ground motion amplification over a wider area was also explained in detail.

Kentucky Geological Survey identified different soil types throughout the county and conducted spot seismic testing to identify the levels of risk in the area (rated A-E, best to worst). Dr. Andrews concluded that there were some significant areas in the county with a "D" rating and sparse locations with an "E" rating. This rating combined with other factors, including topographic slope, evidence of liquefaction, and past historical resulted in a comprehensive risk analysis. Dr. Andrews summarized the findings, by saying while there were higher risk soil types in the area, the expected effects of the earthquake on the region are not as devastating as previous predictions models and theories would suggest. A brief discussion was made amongst the Council about the study's results and the possibility of funding a similar project for the rest of the GRADD region.

B. Review of the 2016 Hazard Mitigation Plan Update

Carl Sims, GRADD Regional Planner, reviewed the timeline of the State and FEMA's approval process that occurred after the Council's last meeting in August. Mr. Sims said that FEMA approval was granted on 12/29/2015 with no changes requested. Carl highlighted the rarity of FEMA approval on a plan's first draft. Mr. Sims announced that local plan adoptions were pursued post FEMA approval and final acceptance of the plan was granted on 1/12/2016. The effective dates of the newly adopted plan are January 31, 2016 – January 30, 2021.

Mr. Sims continued his presentation by explaining that the plan is now in maintenance mode. Carl said that efforts to keep the plan updated and relevant in between the update years will include the use of quarterly reports, annual reports, Hazard Mitigation Council meetings, and the collection of related newspaper articles.

Carl Sims then highlighted the update process that was adopted for the 2016 plan update. He reviewed the hazards which were added to the plan, the use of planning meetings, and the new maintenance procedures. Mr. Sims asked for comments and questions regarding the process and after receiving none, finished his presentation.

C. Funding Opportunities

Dustin Duncan, GRADD Local Government Analyst, discussed with those in attendance various funding opportunities that were available for hazard mitigation projects. Mr. Duncan profiled the Community Development Block Grant program's 2016 funding cycle including the program's match requirements, due date, and eligible projects. Mr. Duncan also briefed the group on Homeland Security grants which will have a funding cycle opening up in June and referenced eligible projects. Lastly, Mr. Duncan advised that in addition to FEMA's Hazard Mitigation Grant Program funding, the Delta Regional Authority can have set asides for disaster funding upon a declared event and that eligible counties would include Webster, Union, Henderson, and McLean.

D. 2015 Annual Report

Carl Sims introduced to the group copies of the 2015 Annual Report. He explained that the report was a part of existing maintenance procedures in place for the Hazard Mitigation Plan and that this meeting provided the first opportunity for GRADD to profile its findings with the Council.

Mr. Sims reviewed the report and highlighted the significant hazard events which occurred during the year. Carl also noted the status reports of mitigation strategies that were ongoing or completed during the year. Mr. Sims stated that the use of data from the National Climatic Data Center was once again included in the report to supplement hazard occurrence information.

IV. ADJOURNMENT

With no further business, Chairman Martin entertained a motion for adjournment.

A motion was made by Charlie Shields and seconded by Jason Geary to adjourn. A vote was taken and the motion carried.



Think Progress. Think Tomorrow. Think GRADD.

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL

November 13, 2017

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Monday, November 13, 2017, at 1:30 p.m., at the GRADD office in Owensboro, Kentucky. The following persons were in attendance:

MEMBERS PRESENT

George Chinn, City of Hartford
Buzzy Newman, City of Henderson
Larry Koerber, Henderson County EMA
Greg Noel, Union County EMA
Jeremy Moore, Webster County EMA
Greg Beyke, City of Whitesville
Ted Self, City of Corydon

GUESTS PRESENT

Dirk Dooper, City of Owensboro
Alex VanPelt, Kentucky Department of Water
Jeff Rascoe, Green River District Health
Geni Jo Brawner, Kentucky EMA
Jennifer Marks, GRADD
William Andrews, UK Geological Survey
Jessica Austin, Green River District Health
Nick Grinstead, UK Hazard Mitigation
Jiten Shah, GRADD
Tom Lovett, GRADD

I. CALL TO ORDER

Jeremy Moore called the meeting to order and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

The minutes of the April 27, 2016, meeting of the GRADD Hazard Mitigation Council were presented for approval.

A motion was made by Greg Noel and seconded by Buzzy Newman to approve the minutes of the April 27, 2016, meeting of the GRADD Hazard Mitigation Council. A vote was taken and the motion carried.

III. NEW BUSINESS

A. Community Rating System Participation

Alex VanPelt of the Kentucky Department of Water addressed the council about the Community Rating System and encouraged communities to participate. As he explained, communities earn points for flood mitigation efforts. As the communities gain points, they receive a rating (10 being the lowest, one being the highest). For each increase in a community's rating, residents receive a discount on flood insurance. Mr. VanPelt stressed that just complying with state and federal regulations a community should earn a nine rating, which knocks five percent off insurance rates. He stressed the program was an easy way to help communities increase their flood preparedness, while saving residents and businesses some money.

B. Funding Opportunities & Overview of 2021 FEMA PDM Application

Nick Grinstead from the UK Hazard Mitigation Grant Program updated the council about where it stood in relation to grant applications with FEMA and some things the council could do pre-emptively. He pointed out that while GRADD's Hazard Mitigation Plan will not expire until 2021, the region was ahead of the ball by already having applied for funding to pay for the production of the next plan. He reminded the council that regular meetings, such as the one being held on that day, was one of the criteria keeping the region eligible for grant money from FEMA. He explained changes that FEMA would be requiring in the next hazard mitigation plan.

After these two presentations, there was discussion among those present about the CRS program. The general consensus was that it was a pretty quick and easy way to improve their communities and save residents some money.

C. Nominating Committee

The council moved to formalize the selection of Jeremy Moore as chairman and Buzzy Newman as vice chairman. After a brief discussion, it was decided to nominate the two separately.

A motion was made by Buzzy Newman and seconded by Ted Self to approve the nomination of Jeremy Moore as chairman. A vote was taken and the motion carried.

A motion was made by Ted Self and seconded by Larry Koerber to approve the nomination of Buzzy Newman as vice chairman. A vote was taken and the motion carried.

IV. OTHER BUSINESS AND OPEN DISCUSSION

None.

V. ADJOURNMENT

With no further business to come before the council, the meeting was adjourned.

tl/ci

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL MEETING

July 10, 2019

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Wednesday, July 10, 2019 at 12:00PM at the GRADD office in Owensboro, Kentucky.
The following persons were in attendance:

MEMBERS PRESENT

Jim Crowell, City of Providence
Jeremy Moore, Webster Co. EM
Ted Self, City of Corydon
Trey Pedley, OMPC
Greg Noel, Union Co. EM
Kyle Veach, Hancock Co. EM
Vicki Hughes, City of Island
Sage Taylor, Hancock Co. Fiscal Ct.
Kenny Garrett, Henderson Co. EM
George Chinn, City of Hartford
Vicky Connor, Daviess Co. EM
Betty Howard, City of Sacramento
Terry Dossett, McLean Co. EM
Pat Hardesty, KY EM
Patsy Mayfield, City of Whitesville
Lelan Hancock, City of Owensboro

GUESTS PRESENT

Sandra Patel, Homeland Security
Joe Kendall, Homeland Security
Nick Grinstead, UK
Drew Andrews, USGS
Joanna Shake, GRADD
Jessie Howard, GRADD
Skyler Stewart, GRADD
Jennifer Marks, GRADD
Hunter Phillips, GRADD
Blake Edge, GRADD
Cyndi Isbill, GRADD
Greyson Evans, Bluegrass ADD

I. CALL TO ORDER

Jeremy Moore called the meeting to order and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

The minutes from the November 13, 2017 meeting of the GRADD HMPC were presented for approval. A motion was made by Mayor George Chinn & seconded by Greg Noel to approve the minutes from November 13. A vote was taken and the motion carried.

III. NEW BUSINESS

A. Drew Andrews, USGS

Drew Andrews, from the University of Kentucky and the USGS gave a presentation which included an update of the seismic study currently being performed for the GRADD region. He discussed the information currently available in Kentucky and the impact the study would have on the GRADD region, which is fundamental information on liquefaction during a seismic event. Drew hopes to have a preliminary draft of the analysis ready for the January meeting of the HMPC.

B. Nick Grinstead, University of Kentucky

Nick Grinstead, from the Hazard Mitigation Grants office at the University of Kentucky gave a presentation of the process for the 2021 Hazard Mitigation Plan Update. He introduced our special guests from the Department of Homeland Security, Sandra Patel, and Joe Kendall, who were there to discuss a pilot program for the GRADD region. FMA planning projects are given the highest priority, with an emphasis on capital projects. Public participation is crucial to the successful development of the Hazard Mitigation Plan. Plan maintenance is now required, along with documentation, throughout the plan update process. FEMA will directly ask for an evaluation of past mitigation projects versus priorities, if it is not included in the Plan. The changes in priorities from the last plan is an essential element of the 2021 update.

C. 2016 Plan Amendments

Blake Edge, Hazard Mitigation Coordinator from GRADD described the plan amendments which were derived from quarterly reports and individual meetings with EM directors and that they will be added as an appendix to the 2016 plan. A motion was made by Mayor Mayfield to approve these amendments, and a second was made by Kenny Garrett. A vote was taken and the motion carried. The amendments will be added as an appendix to the 2016 Plan Update.

D. Next Steps for Hazard Mitigation Plan

Blake Edge discussed the Emergency Directors Work Session on the Threat & Hazard Identification & Risk Assessment (THIRA), as well as the Stakeholder Preparedness Review (SPR) that will be conducted on August 13 at GRADD. He also discussed the upcoming community meetings for each entity of GRADD and that these meetings would start roughly on August 16.

IV. OTHER BUSINESS AND OPEN DISCUSSION

No other business was brought forth by council members.

V. ADJOURNMENT

With no further business to come before the council, the meeting was adjourned.

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL MEETING

January 22, 2020

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Wednesday, January 22, 2020 at 10:00AM at the GRADD office in Owensboro, Kentucky.
The following persons were in attendance:

MEMBERS PRESENT

Jeremy Moore, Webster Co. EM
Buzzy Newman, City of Henderson
Ted Self, City of Corydon
Trey Pedley, OMPC
Greg Noel, Union Co. EM
Vicki Hughes, City of Island
Charlie Shields, Ohio County EM
Tyler Gentry, City of Sturgis
Jesse Johnson, City of Livermore
Cindy Carr, City of Sturgis
Matthew Warren, OMPC
Al Mattingly, Daviess Co. Fiscal Court
Kenny Garrett, Henderson Co. EM
George Chinn, City of Hartford
Vicky Connor, Daviess Co. EM
Betty Howard, City of Sacramento
Jason Geary, City of Hartford
Andy Ball, Daviess Co. EM
Pat Hardesty, KY EM
Patsy Mayfield, City of Whitesville
Lelan Hancock, City of Owensboro
Seth Lawson, State Farm

GUESTS PRESENT

Sandra Pinel, CISA
Joe Kendall, CISA
Chandra Woolums, CISA
Drew Andrews, USGS
Jennifer Alvey, GRADD
Blake Edge, GRADD

I. CALL TO ORDER

Jeremy Moore called the meeting to order and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

The minutes from the July 10, 2019 meeting of the GRADD HMPC were presented for approval. A motion was made by Pat Hardesty & seconded by Mayor Howard to approve the minutes from July 10. A vote was taken, and the motion carried.

III. NEW BUSINESS

A. Nominating Committee

A motion was made by Trey Pedley and seconded by Kenny Garrett to approve the nominating committee recommendation of Jeremy Moore and Buzzy Newman serve as Chair and Vice-Chair, respectively for another term. A vote was taken, and the motion carried.

B. Blake Edge, GRADD

Blake Edge, from GRADD gave an update on the plan process to date. He discussed value of the plan for each jurisdiction in the GRADD region and the planning strategy for the update process. Blake presented the timeline of the process which began in Fall, 2019 with the risk assessment and is currently beginning the mitigation strategy phase of the community meetings. The plan will be completed for review in the summer of 2020 and will be ready for adoption by each community in the 4th quarter of 2020.

C. Drew Andrews, USGS

Drew Andrews, from the University of Kentucky and the USGS gave a presentation which included an update of the seismic study currently being performed for the GRADD region. He discussed the project goals and deliverables for participants in the study and discussed the timeline of the project. He will have some final mapping complete at the July meeting of the Hazard Mitigation Council.

D. Sandra Pinel & Chandra Woolums, CISA

Dr. Sandra Pinel and Chandra Woolums from CISA gave an update on the Pilot Project with the Department of Homeland Security, FEMA, KY Emergency Management, University of Kentucky and GRADD. This project is studying the dependencies and resiliency of the area infrastructure. Dr. Pinel gave an update on the process to date and an overview of the study scope of work. The first community meeting to discuss the project and do a trial run with data will take place this week in Whitesville. The goal of the project is a repeatable process that can be used by other units of government around the US.

IV. OTHER BUSINESS AND OPEN DISCUSSION

No other business was brought forth by council members.

V. ADJOURNMENT

With no further business to come before the council, the meeting was adjourned.

Appendix R

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL MEETING

September 1, 2020

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Tuesday, September 1, 2020 at 10:00AM virtually on Zoom.

The following persons were in attendance:

MEMBERS PRESENT

Buzzy Newman, City of Henderson
Vicki Hughes, City of Island
Adam O'Nan, Union County Fiscal Court
George Chinn, City of Hartford
Vicky Connor, Daviess Co. EM
Kyle Veach, Hancock Co. EM
Randy Greenwell, City of Morganfield
Betty Howard, City of Sacramento
Andy Ball, Daviess Co. EM
Pat Hardesty, KY EM
Patsy Mayfield, City of Whitesville
Lelan Hancock, City of Owensboro

GUESTS PRESENT

Joanna Shake, GRADD
Blake Edge, GRADD
Trey Pedley, GRADD
Drew Andrews, KGS
Nick Grinstead, KYEM
Therese Payne, GRADD

I. CALL TO ORDER

Jeremy Moore called the meeting to order and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

The minutes from the January 22, 2020 meeting of the GRADD HMPC were presented for approval. A motion was made by Pat Hardesty & seconded by Mayor Howard to approve the minutes from January 22. A vote was taken, and the motion carried.

III. NEW BUSINESS

A. Seismic Study Update

Drew Andrews, from the University of Kentucky and the USGS gave a presentation which included an update of the seismic study currently being performed for the GRADD region. He discussed the deliverables of the project and displayed a draft of the poster.

B. Blake Edge, GRADD

Blake Edge, from GRADD gave an update on the plan process to date. He discussed value of the plan for each jurisdiction in the GRADD region and the planning strategy for the update process and highlights of the community meetings so far. Blake presented the timeline of the process at the status of the plan. He also discussed the new BRIC funding opportunity from FEMA and gave an overview of the funding.

IV. OTHER BUSINESS AND OPEN DISCUSSION

No other business was brought forth by council members.

V. ADJOURNMENT

With no further business to come before the council, the meeting was adjourned.

GREEN RIVER AREA DEVELOPMENT DISTRICT
HAZARD MITIGATION COUNCIL MEETING

February 12, 2021

M-I-N-U-T-E-S

The Green River Area Development District (GRADD) Hazard Mitigation Council met on Tuesday, February 12, 2021, at 9:00 a.m., via ZOOM.

The following persons were in attendance:

MEMBERS PRESENT

Jeremy Moore, Chairman
Greg Noel, Union Co. EM
Vicki Hughes, City of Island
Pat Hardesty, KY EM
Vicky Connor, Daviess Co. EM
Nick Grinstead, UK Hazard Mitigation
Andy Ball, Daviess Co. EM
Lelan Hancock, City of Owensboro
Kyle Veach, Hancock Co. EM
Randy Greenwell, City of Morganfield
Adam O'Nan, Union County
Doug Rodgers, City of Sturgis
Charlie Shields, Ohio Co. EM

GUESTS PRESENT

Kyle Wolf
Joe Kendall
Chandra Woolums
Daniel Crum
Emery Thomas
Sandra Pinel
Stephen Cauffman
Joanna Shake, GRADD
Blake Edge, GRADD
Taylor Burchett, GRADD
Therese Payne, GRADD

MEMBERS ABSENT

Buzzy Newman, City of Henderson
Betty Howard, City of Sacramento
George Chinn, City of Hartford
Patsy Mayfield, City of Whitesville

I. CALL TO ORDER

Chairman Jeremy Moore called the meeting to order at 9:04 a.m. and welcomed those in attendance.

II. OLD BUSINESS

A. Approval of Minutes

The minutes of the September 1, 2020, GRADD Hazard Mitigation Council meeting were presented for approval.

> A motion was made by Andy Ball and seconded by Randy Greenwell to approve the minutes of the September 1, 2020, GRADD Hazard Mitigation Council meeting. A vote was taken and the motion carried.

III. NEW BUSINESS

A. Grant Opportunities Website

Chairman Jeremy Moore asked Taylor Burchett, Disaster Recovery Coordinator at GRADD to share the new grants website. Ms. Burchett explained she and Hunter Phillips, Community Development Planner at GRADD, have been working on compiling the new grants page. She shared how to navigate the pages and explained if anyone should have any questions, they should contact her or Hunter Phillips.

B. 2021 Plan Update Process

Blake Edge, Director of Community and Economic Development, gave an update on the plan process, explaining how the plan was devised using demographics of the region, as well as information from the Comprehensive Economic Development Strategy (CEDS) and community meetings. The largest part of the plan is devoted to risk assessment, which includes expanded storm data from a variety of sources. This section of the plan allows GRADD staff to display damage by county, date, and type of weather event. This data will prove very useful when applying for grants. Mr. Edge will share that data with the council. Another important update from the plan came from the community meetings. GRADD staff was able to increase the critical facilities database based on these individual meetings. GIS Analyst, Jennifer Alvey, has improved the database based on what was gleaned from those meetings. Mr. Edge reached out to council members in Ohio and Henderson Counties for their help filling in the gaps in the asset value and replacement costs portion of the spreadsheet for their counties. Staff has been unable to get a response from the PVAs in those counties to fill in that information in the database. Mr. Edge also discussed how the plan addressed risk based on historical damages. A chart is included in the plan which he will send to all council members, for their review. Finally, the most important part of the plan is the mitigation project prioritization. Jennifer Alvey also devised a scoring guide to assess a project to for prioritization. Mr. Edge pointed out one factor which boosts the probability of funding is multiple funding sources. The plan is currently in the final stages of revision. The goal is to submit the plan to Kentucky Emergency Management (KYEM) by March 1, 2021. The review should take 45 to 90 days, then the plan gets submitted to the Federal Emergency Management Agency (FEMA), for their review.

Mr. Edge shared the difficulty of getting projects funded through FEMA's new Building Resilient Infrastructure and Communities (BRIC) grants. The problem lies in the benefit cost analysis. Mr. Edge shared two local projects that were not awarded and explained why they didn't get funded. For both projects, there was a lack of historical damages, which adversely affected the cost analysis. Mr. Edge then shared a project that did get funded. This project was a public-private partnership.

Chairman Jeremy Moore thanked Mr. Edge and his staff for all their hard work that has been done on the Hazard Mitigation Plan 2021 Update.

IV. ADJOURNMENT

With no further business to come before the council, the meeting was adjourned.

A motion was made by Judge/Executive Adam O'Nan to adjourn seconded by Mayor Doug Rodgers. A vote was taken, and the motion carried.

Hazard Mitigation Survey

244	08:59	Active	
Responses	Average time to complete	Status	Ideas

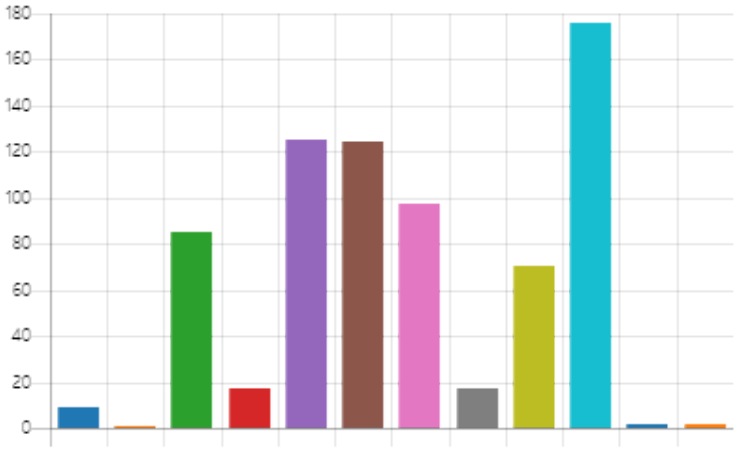
1. Have you or someone in your household directly experienced or been impacted by a natural disaster, such as an earthquake, severe weather, flood, tornado, or other type of natural disaster?

Yes	151
No	90



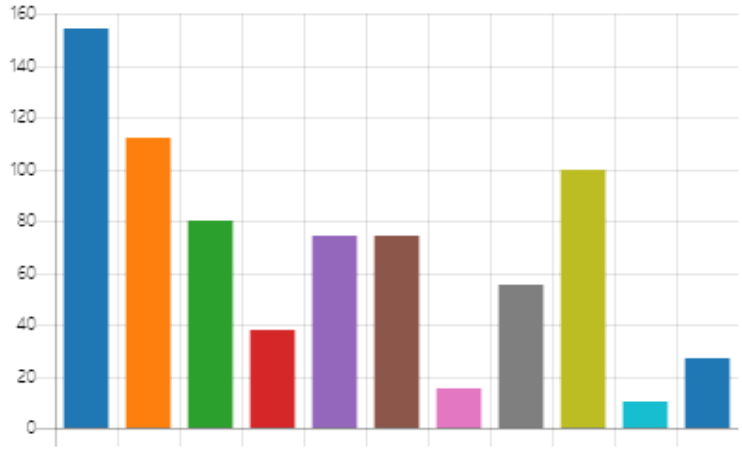
2. Please select the TOP THREE (3) natural hazards you think pose the GREATEST THREAT to your community and household.

Drought	9
Dam Failure	1
Earthquake	85
Extreme Temperatures	17
Flooding	125
Thunderstorm Winds/Hail	124
Ice Storms	97
Medical Pandemic	17
Severe Winter Storms	70
Tornadoes	176
Landslide/Subsidence	2
Wildfire	2



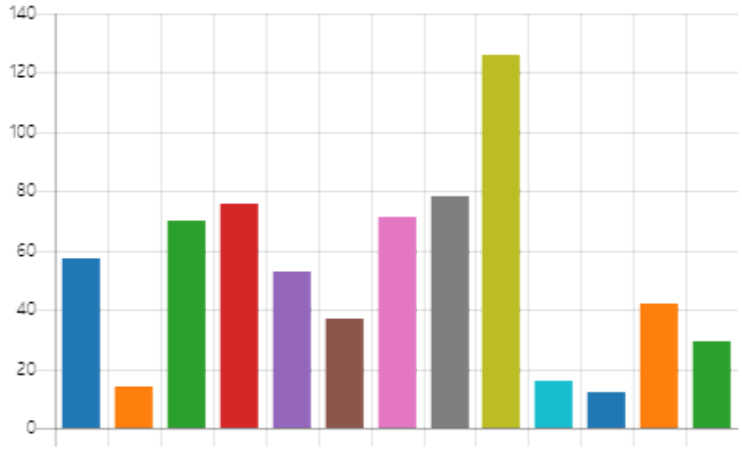
3. Have you ever received information about how to make members of your household and your home safer from natural disasters from any of the following?

News Media	154
County Emergency Managem...	112
Government Agency	80
Insurance Agent	38
Utility Company	74
Neighbor/Friend/Family Mem...	74
Elected Official	15
American Red Cross	55
Social Media	100
Library	10
Unsure	27



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

Newspaper Stories	57
Newspaper Ads	14
Television Stories	70
Television Ads	76
Radio News	53
Radio Ads	37
Email Newsletters	71
Online News Outlets	78
Facebook	126
Twitter	16
Instagram	12
Public Workshops or Conferen...	42
Schools	29



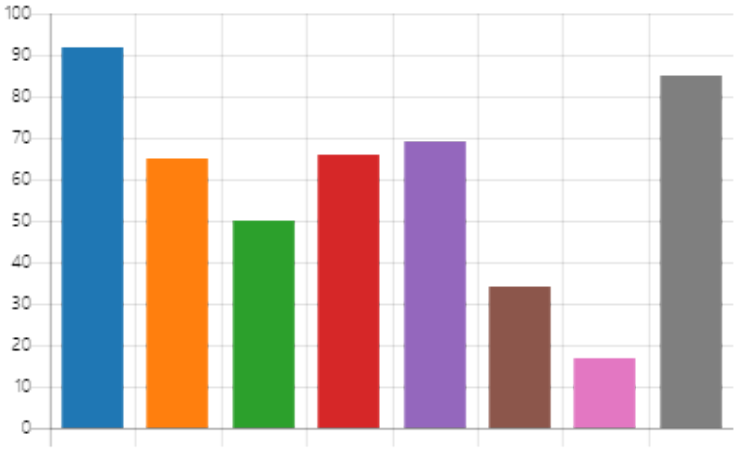
5. Prior to receiving this survey, were you aware of your county's Hazard Mitigation Plan?

Yes	101
No	137



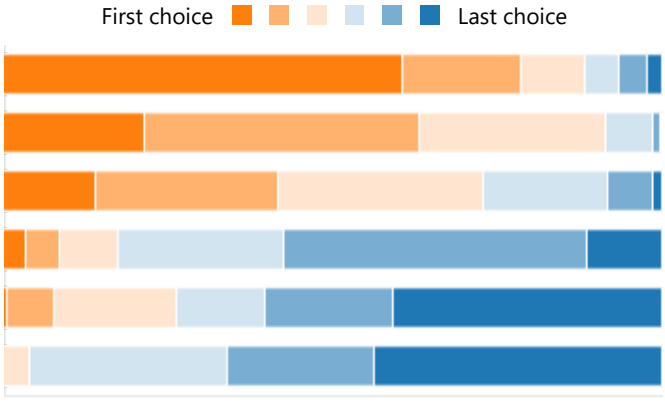
6. Would you like more information about any of the following:

How to prepare a household ...	92
How to prepare a family com...	65
How to get involved in comm...	50
Mitigation activities and proje...	66
Information about hazards tha...	69
Floodplain Information	34
Insurance	17
None	85

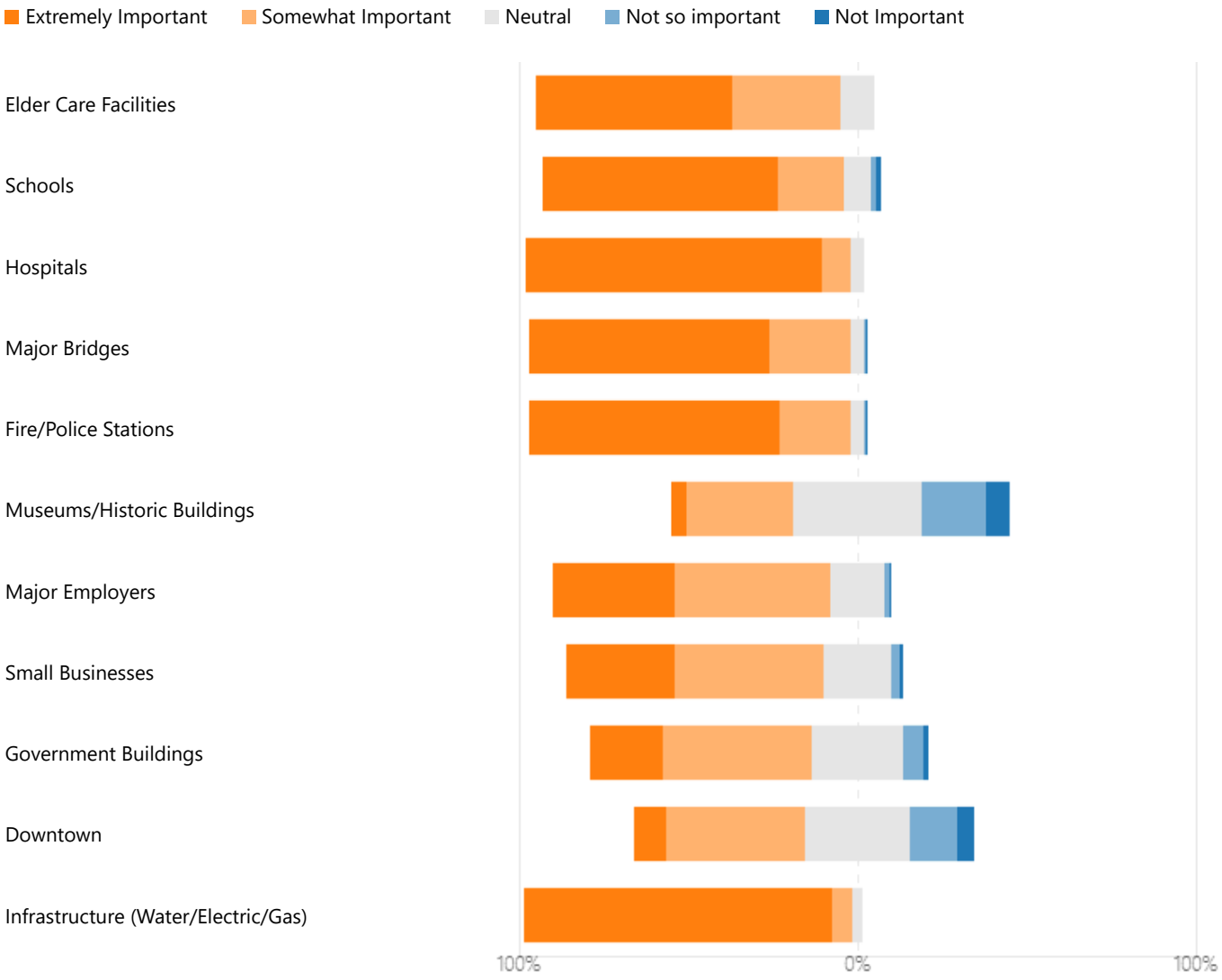


7. In your opinion, which of the following categories is most susceptible to the impacts of natural hazards in your community?

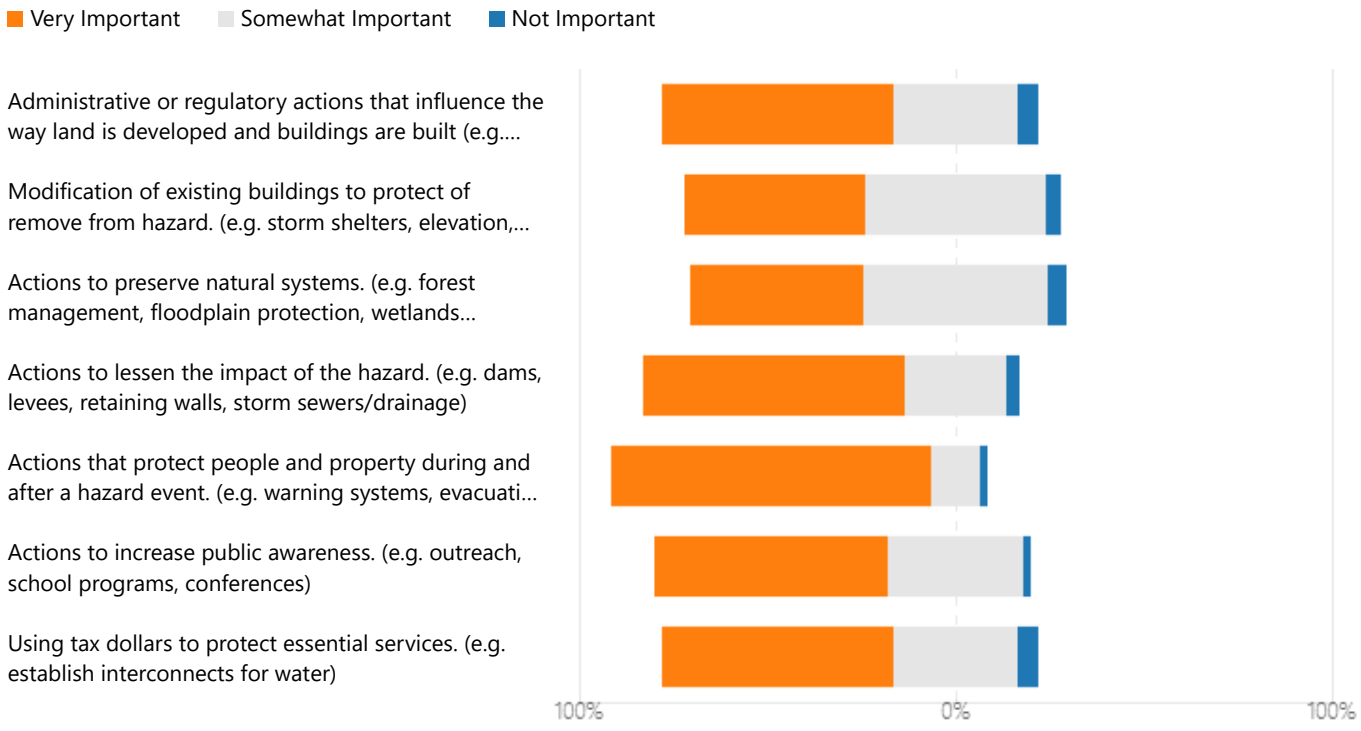
Rank	Options
1	Human (Loss of life and/or inj...
2	Infrastructure (Damage or loss...
3	Economic (Business Closures a...
4	Environmental (Loss of forests,...
5	Governance (Ability to maintai...
6	Cultural/Historic (Damage or l...



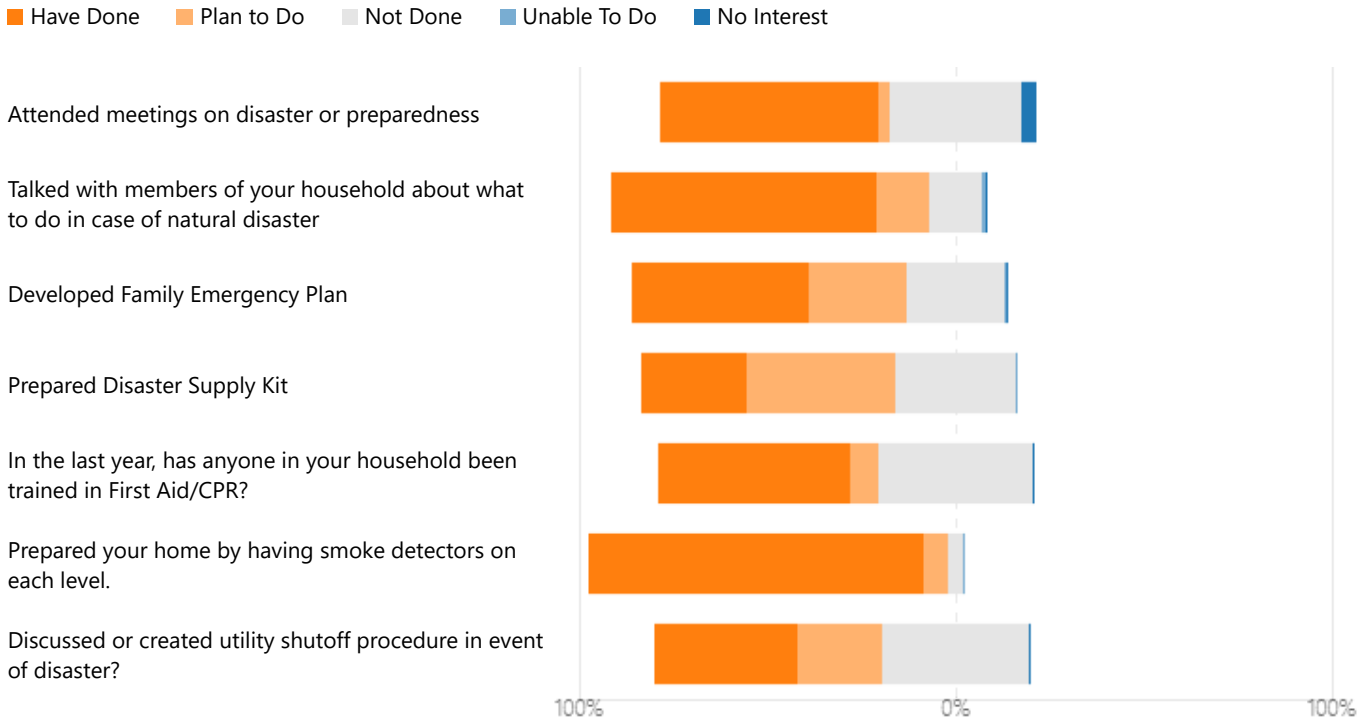
8. What specific types of community assets are most important to you?



9. A number of activities can reduce your community's risk from natural hazards.

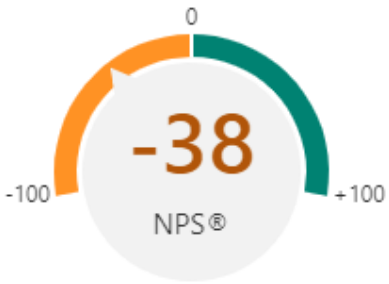


10. In your household, have you or someone in your household...



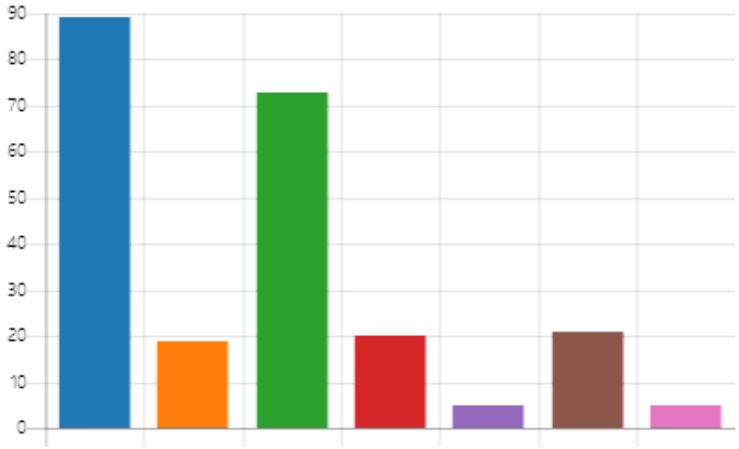
11. How confident are you at your household's level of preparedness for a natural disaster?

Promoters	27
Passives	90
Detractors	116



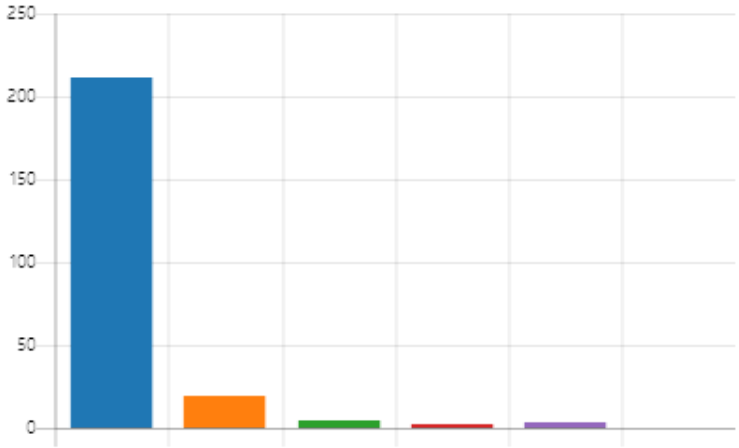
12. In which county do you live?

Daviess	89
Hancock	19
Henderson	73
McLean	20
Ohio	5
Union	21
Webster	5



13. Please specify what type of home you live in.

Single Family Home	211
Manufactured Home	19
Apartment (5 Units or Less in ...	5
Apartment (5 Units or More in...	2
Condominium/Townhouse	3
Duplex	0



14. Do you live in a flood plain?

Yes	20
No	218



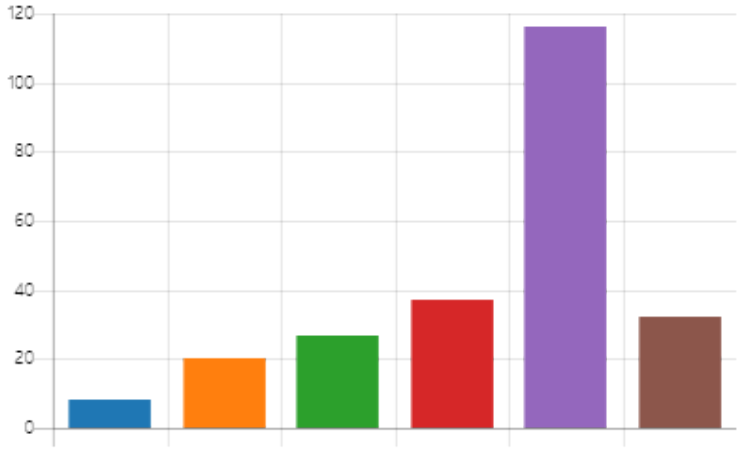
15. Do you have flood insurance?

Yes	32
No	207



16. What is your total household income?

Less than $20,000	8
$20,000 - $40,000	20
$40,000 - $60,000	27
$60,000 - $80,000	37
More than $80,000	116
Don't want to answer	32



GRADD DAMS

NAME	COUNTY	RIVER	CITY	YEAR COMPLETE	DAM LENGTH (ft.)	DAM HEIGHT (ft.)	HAZARD
DAVIESS COUNTY SPORTSMAN LAKE DAM	DAVIESS	LITTLE BLACKFORD CREEK	OWENSBORO	1960	700	21	L
KINGFISHER LAKE DAM	DAVIESS	PUP CREEK	OWENSBORO	1942	400	14	L
CARPENTER LAKE DAM	DAVIESS	PUP CREEK	OWENSBORO	1936	325	16	L
MILLER LAKE DAM	DAVIESS	PANTHER CREEK	MOSLEYVILLE-AREA	1930	340	24	L
RED HILL LAKE DAM	DAVIESS	PANTHER CREEK	PETTIT	1958	550	20	L
ROSZEL LAKE DAM	DAVIESS	TRIB-NORTH FORK PANTHER CREEK	MASONVILLE-AREA	1935	485	18	L
CAMP PENNYROYAL LAKE	DAVIESS	TRIB-NORTH FK. BARNETT CREEK	HEFLIN-VICINITY	1957	500	28	L
WINDY HOLLOW LAKES	DAVIESS	TRIB-FLAT LICK CREEK	CURDSVILLE	1951	800	30	L
CLARK & COOMES OIL FIELD LAKE	DAVIESS	TRIB-DESSERTER CREEK	OKLAHOMA	1962	490	20	L
PANTLE DAM	DAVIESS	TR-PUP CREEK	OWENSBORO	1951	550	15	L
MICHAEL MORAN FLOOD LAKE DAM	DAVIESS	S. FORK PANTHER CREEK	PETTIT	1946	525	23	L
WHITAKER LAKE DAM	DAVIESS	PUP CREEK	OWENSBORO	1940	450	20	L
ARMSTRONG LAKE DAM	DAVIESS	PANTHER CREEK	PETTIT	1968	375	32	L
DAVIESS CNTY LANDFILL SED POND	DAVIESS	TRIB-EAST FORK KNOB CREEK	NO TOWN	1996	2180	15	L
JMP LAKE FOREST INC	DAVIESS	UNNAMED TRIB.	LAKE FOREST	1998	180	17	H
O'BRYAN DAM	DAVIESS		CURDSVILLE	2002		18	L
INDIAN LAKE DAM	HANCOCK	INDIAN CREEK	HAWESVILLE	1940	240	26	L
HANSON OIL COMPANY DAM	HANCOCK	TR-EAST FORK BRANCH	OAKS	1953	390	38	L
MCENROE OIL COMPANY DAM	HANCOCK	TR-SOUTH FORK PANTHER CREEK	EASTON-AREA	1950	340	34	L
HANCOCK CNTY FISH & GAME DAM	HANCOCK	BLACKFORD CREEK	SCYTHIA-AREA	1960	425	35	L
DE JARNETTE LAKE DAM	HANCOCK	TR- DRISKELL BRANCH	SCYTHIA AREA	1971	340	18	L
SHADWICK DAM	HANCOCK	TR-CANEY CREEK	SCYTHIA-AREA	1971	390	22	L
QUINN DAM	HANCOCK	TR-BLACKFORD CREEK	PATESVILLE	1952	420	26	H
VAST WOOD PARK DAM	HANCOCK	TR-LEAD CREEK	HAWESVILLE	1958	440	27	L
WINDWARD HEIGHTS LAKE DAM	HANCOCK	LEAD CREEK -OS	HAWESVILLE	1966	470	22	S
STROUP LAKE DAM	HANCOCK	TR- INDIAN CREEK	HAWESVILLE	1959	260	22	L
WAYNE SACKS LAKE DAM	HANCOCK	TR-BLACKFORD CREEK	SCYTHIA-AREA	1973	410	28	L
COLEMAN STATION POND	HANCOCK		TROY, INDIANA	1980	6400	33	S

GRADD DAMS

ALLEN E KENNEDY LAKE DAM	HANCOCK	LEAD CREEK	NO TOWN	1970	400	33	L
CANNELTON LOCKS & DAM	HANCOCK	OHIO RIVER	CANNELTON IND	1974	2280		S
SCENIC LAKE DAM	HENDERSON	OHIO RIVER	HENDERSON	1950	300	25	H
HENDERSON CNTY SPORTSMENS CLUB DAM	HENDERSON	GREEN RIVER	RANGERS LANDING	1955	550	19	L
BURBANKS LAKE DAM	HENDERSON	HIGHLAND CREEK	UNIONTOWN	1930	460	19	L
FULCHER LAKE DAM	HENDERSON	TRIB-BEAVERDAM CREEK	JONESBURG-AREA	1971	640	25	L
REID ASH POND	HENDERSON	GROVES CREEK	CURDSVILLE	1968	3118	41	S
DREW SCOTT LAKE DAM	HENDERSON	CANOE CREEK	HENDERSON	1976	700	26	L
GREEN BOTTOM ASH POND DAM	HENDERSON		NO TOWN	1979	3270	29	L
GREEN RIVER HILL SUBDIVISION DAM	HENDERSON	TR-GREEN RIVER	NO TOWN	1982	372	30	S
WOODTERRACE LAKE DAM	HENDERSON	TRIB-OHIO	HENDERSON	1987	150	18	S
GREEN RIVER LOCK & DAM 1	HENDERSON	GREEN RIVER	SPOTTSVILLE	1970	908		L
NEWBURGH LOCKS & DAM	HENDERSON	OHIO RIVER	NEWBURGH	1975	2660		S
CRYSTAL LAKE	MCLEAN	TRIB-GREEN RIVER	DELAWARE	1964	430	20	L
MCLEAN COUNTY FISH & GAME CLUB LAKE	MCLEAN	LONG FORK CREEK	GUFFIE	1956	750	19	H
GREEN RIVER LOCK & DAM 2	MCLEAN	GREEN RIVER	RUMSEY KENTUCKY	1956	615		L
LAKE WASHBURN	OHIO	ROUGH RIVER	HARTFORD	1950	840	26	L
FORDSVILLE LAKE DAM	OHIO	ADAMS FORK (WEST)	FORDSVILLE	1963	600	35	H
BARRETT HILL LAKE DAM	OHIO	ROUGH CREEK	LIVERMORE	1963	480	26	L
JOHN BARRETT LAKE	OHIO	TR-THREELICK FORK	BEAVER DAM-AREA	1965	315	30	L
GASLIGHT OIL COMPANY LAKE	OHIO	TR-SOUTH FORK PANTHER CREEK	REYNOLDS STATION-AREA	1950	440	32	L
ANDERSON LAKE DAM	OHIO	PANTHER CREEK	HAYNES STATION-AREA	1975	1840	29	L
SILVER BEACH LAKE DAM	OHIO		NO TOWN	1965	375	28	L
MAPLE LEAF DAM	OHIO	TR-BARNETT CREEK	NO TOWN	1953	470	30	H
WILLIAM RILEY LAKE DAM	OHIO		NO TOWN	1965	300	25	L
PEABODY CENTERTOWN DAM	OHIO	WEST FORK OF LEWIS CREEK	CENTERTOWN	1980	820	27	L
DES ISLET DAM	UNION	HIGHLAND CREEK	UNIONTOWN	1945	900	32	S
CYPRESS CREEK FRS NO 1	UNION	CYPRESS CREEK	STURGIS	1960	1080	21	L
CYPRESS CREEK LAKE FRS NO 3	UNION	CYPRESS CREEK	STURGIS	1965	800	31	L
STURGIS LAKE DAM	UNION	CYPRESS CREEK	STURGIS	1953	300	16	L

GRADD DAMS

CYPRESS CREEK FRS NO 2	UNION	DYSON CREEK	STURGIS	1960	600	20	L
MORGANFIELD CITY LAKE DAM	UNION	LOST CREEK	UNIONTOWN-VICINITY	1935	630	21	H
TWIN LAKES FARM LAKE	UNION	TR-CASEY CREEK	KING MILLS	1960	800	22	L
PEABODY CAMP #11 SLURRY I	UNION	MUDDY RUN	WAVERLY	1976	15	50	L
PEABODY CAMP #11 SLURRY II	UNION	MUDDY RUN	WAVERLY	1976	15	50	L
PEABODY CAMP #11 SLURRY III	UNION	MUDDY RUN	WAVERLY	1976	15	50	L
PEABODY CAMP #11 SLURRY IV	UNION	MUDDY RUN	WAVERLY	1976	15	40	L
PEABODY CAMP #11 FRESHWATER	UNION	MUDDY RUN	WAVERLY	1976	15	30	L
JOHN T. MYERS LOCKS & DAM	UNION	OHIO RIVER	CAVE IN ROCK	1975	3725		S
FRESHWATER LAKE	UNION		OLD SHAWNEETOWN, IL		550	28	L
SLURRY IMPOUNDMENT 04I	UNION		OLD SHAWNEETOWN, IL		3280	86	H
RIVER VIEW FRESH WATER LAKE 01I	UNION		OLD SHAWNEETOWN, IL		2400	13	L
RIVER VIEW SLURRY LAKE 02I	UNION		OLD SHAWNEETOWN, IL		6500	160	H
FRESHWATER LAKE	UNION		WAVERLY		2470	18	L
SLURRY LAKE III	UNION		WAVERLY		3180	21	L
SLURRY LAKE II	UNION		WAVERLY		3180	20	L
SLURRY IMPOUNDMENT 07I	UNION		OLD SHAWNEETOWN, IL		825	69	H
SLURRY LAKE IV	UNION		WAVERLY		9300	65	H
RIVER VIEW WEST SLURRY IMPOUNDMENT	UNION		OLD SHAWNEETOWN, IL		7600	90	H
WALKER DAM	WEBSTER	CRABORCHARD CREEK	FAIRMONT	1940	550	18	L
PROVIDENCE CITY DAM (OLD)	WEBSTER	OWENS CREEK	BELLVILLE	1930	440	29	L
PROVIDENCE CITY DAM (NEW)	WEBSTER	TRADEWATER RIVER	BELLVILLE	1945	830	30	S
DIXON CITY LAKE DAM	WEBSTER	LYNN FORK CRABORCHARD CREEK	FAIRMONT	1960	480	18	H
OWENS CREEK FRS F2	WEBSTER	OWENS CREEK	BELLVILLE	1968	790	34	L
TH WEIKEL LAKE DAM	WEBSTER	TR-SLOVER CREEK	FAIRMONT	1969	225	31	L
ROY EDGAR BILLINGS LAKE DAM	WEBSTER	TR-HAVANA CREEK	ORTIZ	1970	400	30	L
WATSON LAKE DAM	WEBSTER	CALDWELL CREEK	TILDEN	1936	275	27	L

GRADD DAMS

DEER CREEK LODGE DAM	WEBSTER	KNOBLICK CREEK	SEBREE	2007	600	20	L

Daviess County "Drought" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**9.200M**
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/15/1996	2:00	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/1998	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/1999	0:01	CST	Drought		0	0	0.00K	7.000M
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	10/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/1/2002	0:01	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/2002	0:00	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/22/2004	0:00	CST	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	6/10/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/3/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	2.200M
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/28/2008	13:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/3/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	6/3/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/10/2015	0:00	CST-6	Drought		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

Henderson County "Drought" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**9.200M**
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/15/1996	2:00	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/1998	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/1999	0:01	CST	Drought		0	0	0.00K	7.000M
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	10/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/1/2002	0:01	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/2002	0:00	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/22/2004	0:00	CST	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	6/10/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/3/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	2.200M
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/28/2008	13:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/3/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	5/12/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

McLean County "Drought" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**9.200M**
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/15/1996	2:00	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/1998	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/1999	0:01	CST	Drought		0	0	0.00K	7.000M
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	10/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	11/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/1/2002	0:01	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/2002	0:00	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/22/2004	0:00	CST	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	6/10/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/3/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	2.200M
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/28/2008	13:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/3/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	6/3/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/10/2015	0:00	CST-6	Drought		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

Union County "Drought" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**9.200M**
UNION (ZONE)	UNION (ZONE)	KY	8/15/1996	2:00	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/1998	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	8/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/1999	0:01	CST	Drought		0	0	0.00K	7.000M
UNION (ZONE)	UNION (ZONE)	KY	10/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	8/1/2002	0:01	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/2002	0:00	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/22/2004	0:00	CST	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	6/10/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	8/3/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	2.200M
UNION (ZONE)	UNION (ZONE)	KY	9/28/2008	13:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	8/3/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	5/12/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

Webster County "Drought" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**9.200M**
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/15/1996	2:00	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/1998	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/1999	0:01	CST	Drought		0	0	0.00K	7.000M
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	10/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	11/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/1/1999	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/1/2002	0:01	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/2002	0:00	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/22/2004	0:00	CST	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	6/10/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/3/2007	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/2007	0:00	CST-6	Drought		0	0	0.00K	2.200M
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/28/2008	13:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	10/1/2008	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/3/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	10/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	11/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/1/2010	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/1/2011	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	5/12/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	6/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	9/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	10/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	11/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/1/2012	0:00	CST-6	Drought		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	11/1/2016	0:00	CST-6	Drought		0	0	0.00K	0.00K

Daviess County "Extreme Temperature" Events 2000 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**29**	**0.00K**	**0.00K**
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/12/2000	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/1/2001	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/15/2009	6:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/3/2010	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/9/2010	10:00	CST-6	Excessive Heat		0	29	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/11/2011	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/19/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	8/3/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	6/28/2012	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/1/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/18/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/27/2015	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/21/2017	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	7/5/2018	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K

Henderson County "Extreme Temperature" Events 2000 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/12/2000	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/1/2001	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/15/2009	6:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/3/2010	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/9/2010	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/11/2011	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/19/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	8/3/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	6/28/2012	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/1/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/18/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/27/2015	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/21/2017	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	7/5/2018	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K

McLean County "Extreme Temperature" Events 2000 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/12/2000	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/1/2001	0:01	CST	Extreme Cold/wind Chill		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/15/2009	6:00	CST-6	Extreme Cold/wind Chill		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/3/2010	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/9/2010	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/11/2011	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/19/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	8/3/2011	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/1/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/18/2012	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/27/2015	12:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/21/2017	11:00	CST-6	Excessive Heat		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	7/5/2018	10:00	CST-6	Excessive Heat		0	0	0.00K	0.00K

Union County "Extreme Temperature" Events 2000 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 0.00K**	**0.00K**
UNION (ZO	UNION (ZONE)	KY	12/12/2000	0:01	CST	Extreme Cold/wind Ch			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	1/1/2001	0:01	CST	Extreme Cold/wind Ch			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	1/15/2009	6:00	CST-6	Extreme Cold/wind Ch			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	8/3/2010	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	8/9/2010	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/10/2011	12:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/19/2011	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	8/3/2011	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/1/2012	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/18/2012	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/27/2015	12:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/21/2017	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
UNION (ZO	UNION (ZONE)	KY	7/5/2018	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K

Webster County "Extreme Temperature" Events 2000 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 0.00K**	**0.00K**
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/12/2000	0:01	CST	Extreme Cold/wind Chill			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/1/2001	0:01	CST	Extreme Cold/wind Chill			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/15/2009	6:00	CST-6	Extreme Cold/wind Chill			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/3/2010	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/9/2010	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/11/2011	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/19/2011	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	8/3/2011	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/1/2012	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/18/2012	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/27/2015	12:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/21/2017	11:00	CST-6	Excessive Heat			0	0 0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	7/5/2018	10:00	CST-6	Excessive Heat			0	0 0.00K	0.00K

Daviess County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**1**	**0 10.592M**	**2.030M**
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/1/1997	13:00	CST	Flood			0	0 10.000M	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/2/1997	10:00	CST	Flood			0	0 0.00K	0.00K
MOSELEYVILLE	DAVIESS CO.	KY	3/3/1997	3:30	CST	Flash Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	4/19/1998	4:00	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	1/22/1999	17:00	CST	Flash Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/24/1999	8:00	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	1/3/2000	17:20	CST	Flash Flood			0	0 100.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/3/2000	21:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/21/2000	14:00	CST	Flood			0	0 0.00K	0.00K
MASONVILLE	DAVIESS CO.	KY	5/3/2000	16:45	CST	Flash Flood			0	0 0.00K	0.00K
UTICA	DAVIESS CO.	KY	7/29/2001	17:15	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	8/11/2001	10:15	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/29/2001	10:00	CST	Flood			0	0 2.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/16/2001	15:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/23/2002	23:15	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/22/2002	19:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	5/1/2002	0:01	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	12/18/2002	22:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/15/2003	14:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/1/2003	0:01	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	5/8/2003	18:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/6/2004	9:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/10/2004	7:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	5/30/2004	10:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	6/1/2004	0:00	CST	Flood			0	0 0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	9/22/2004	3:00	CST	Flood			0	0 0.00K	2.000M
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/7/2005	13:00	CST	Flood			0	0 30.00K	0.00K
PHILPOT	DAVIESS CO.	KY	8/28/2005	18:06	CST	Flash Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	3/9/2006	18:00	CST	Flood			0	0 10.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	7/21/2006	15:00	CST	Flash Flood			0	0 0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	9/22/2006	22:49	CST	Flash Flood			0	0 0.00K	0.00K

COUNTYWIDE	DAVIESS CO.	KY	9/23/2006	5:00	CST	Flood	0	0 0.00K	0.00K
STANLEY	DAVIESS CO.	KY	3/18/2008	13:00	CST-6	Flood	0	0 250.00K	0.00K
DOYLE	DAVIESS CO.	KY	4/2/2009	16:20	CST-6	Flash Flood	0	0 2.00K	0.00K
BOSTON	DAVIESS CO.	KY	5/2/2010	4:00	CST-6	Flood	0	0 0.00K	30.00K
OWENSBORO ARPT	DAVIESS CO.	KY	2/24/2011	19:00	CST-6	Flash Flood	0	0 10.00K	0.00K
ANDERSONVILLE	DAVIESS CO.	KY	4/24/2011	16:31	CST-6	Flash Flood	0	0 100.00K	0.00K
ANDERSONVILLE	DAVIESS CO.	KY	4/24/2011	21:00	CST-6	Flood	0	0 0.00K	0.00K
RED HILL	DAVIESS CO.	KY	5/1/2011	0:00	CST-6	Flood	0	0 30.00K	0.00K
OWENSBORO ARPT	DAVIESS CO.	KY	1/13/2013	2:10	CST-6	Flash Flood	0	0 3.00K	0.00K
STANLEY	DAVIESS CO.	KY	4/3/2014	12:29	CST-6	Flash Flood	0	0 0.00K	0.00K
STANLEY	DAVIESS CO.	KY	4/3/2014	15:03	CST-6	Flash Flood	0	0 0.00K	0.00K
MOSELEYVILLE	DAVIESS CO.	KY	7/3/2015	18:30	CST-6	Flash Flood	1	0 20.00K	0.00K
ANDERSONVILLE	DAVIESS CO.	KY	7/22/2016	18:50	CST-6	Flash Flood	0	0 0.00K	0.00K
RED HILL	DAVIESS CO.	KY	8/5/2016	14:00	CST-6	Flash Flood	0	0 0.00K	0.00K
SORGHO	DAVIESS CO.	KY	3/29/2018	12:00	CST-6	Flood	0	0 0.00K	0.00K
ROME	DAVIESS CO.	KY	5/18/2018	20:00	CST-6	Flood	0	0 5.00K	0.00K
BOSTON	DAVIESS CO.	KY	12/31/2018	14:00	CST-6	Flood	0	0 0.00K	0.00K
PETTIT	DAVIESS CO.	KY	2/6/2019	15:45	CST-6	Flood	0	0 0.00K	0.00K
SUTHERLAND	DAVIESS CO.	KY	2/11/2019	11:00	CST-6	Flood	0	0 0.00K	0.00K
CURDSVILLE	DAVIESS CO.	KY	2/12/2019	2:00	CST-6	Flood	0	0 0.00K	0.00K
CURDSVILLE	DAVIESS CO.	KY	3/1/2019	0:00	CST-6	Flood	0	0 0.00K	0.00K
UTICA	DAVIESS CO.	KY	6/6/2019	16:00	CST-6	Flood	0	0 0.00K	0.00K
ANDERSONVILLE	DAVIESS CO.	KY	6/23/2019	13:15	CST-6	Flash Flood	0	0 0.00K	0.00K
THURSTON	DAVIESS CO.	KY	2/15/2020	5:00	CST-6	Flood	0	0 0.00K	0.00K
OWENSBORO ARPT	DAVIESS CO.	KY	6/4/2020	16:25	CST-6	Flash Flood	0	0 30.00K	0.00K
MAPLE MT	DAVIESS CO.	KY	8/12/2020	15:03	CST-6	Flood	0	0 0.00K	0.00K
MAPLE MT	DAVIESS CO.	KY	8/13/2020	15:17	CST-6	Flood	0	0 0.00K	0.00K

City of Owensboro Flood and "Flash Flood" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**1**	**5.555M**	**3.00K**
OWENSBORO	DAVIESS CO.	KY	4/29/1996	15:00	CST	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/29/1996	12:00	CST	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/1/1997	9:30	CST	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/1/1997	17:15	CST	Flash Flood			0	0	40.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/8/1997	16:55	CST	Flash Flood			0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/14/1998	19:00	CST	Flash Flood			0	1	5.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/31/2000	14:30	CST	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/7/2001	13:35	CST	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/15/2002	13:00	CST	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/21/2003	10:15	CST	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/5/2004	12:40	CST	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	12/15/2007	12:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/20/2008	5:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/3/2008	20:30	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/4/2008	2:00	CST-6	Flood			0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/2/2008	14:50	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/20/2009	17:02	CST-6	Flash Flood			0	0	20.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/2/2010	1:38	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/7/2010	11:00	CST-6	Flood			0	0	0.00K	3.00K
OWENSBORO	DAVIESS CO.	KY	7/15/2010	22:34	CST-6	Flash Flood			0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/4/2011	8:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/14/2011	5:01	CST-6	Flood			0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/1/2011	0:00	CST-6	Flood			0	0	5.000M	0.00K
OWENSBORO	DAVIESS CO.	KY	12/5/2011	15:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/2/2012	18:43	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/14/2012	12:24	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/4/2014	1:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/4/2014	17:31	CST-6	Flash Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/9/2015	20:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/15/2015	17:00	CST-6	Flood			0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/21/2015	20:14	CST-6	Flash Flood			0	0	0.00K	0.00K

OWENSBORO	DAVIESS CO.	KY	12/30/2015	20:00	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	1/1/2016	0:00	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/27/2016	17:49	CST-6	Flash Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/10/2016	12:30	CST-6	Flash Flood	0	0	100.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/12/2016	9:30	CST-6	Flash Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/12/2016	13:00	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/17/2016	8:30	CST-6	Flash Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	2/19/2018	12:00	CST-6	Flood	0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	2/23/2018	6:30	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	2/24/2018	21:13	CST-6	Flash Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/1/2018	0:00	CST-6	Flood	0	0	100.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/4/2018	18:00	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/26/2018	18:50	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/5/2019	12:42	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	11/30/2019	11:25	CST-6	Flash Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/28/2020	7:45	CST-6	Flash Flood	0	0	100.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/13/2020	12:45	CST-6	Flood	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/3/2020	4:32	CST-6	Flash Flood	0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/3/2021	13:00	CST-6	Flood	0	0	10.00K	0.00K

City of Whitesville "Flood" and "Flash Flood" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**10.00K**	**0.00K**
WHITESVILLE	DAVIESS CO.	KY	7/25/2001	23:15	CST	Flash Flood		0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/26/2019	21:31	CST-6	Flash Flood		0	0	10.00K	0.00K

Hancock County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**200.00K**	**0.00K**
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/1/1996	0:00	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	3/1/1997	8:00	EST	Flash Flood		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/1/1997	10:00	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	3/1/1997	21:00	EST	Flash Flood		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/2/1997	23:00	EST	Flood		0	0	200.00K	0.00K
VARIOUS PARTS	HANCOCK CO.	KY	6/8/1997	3:00	EST	Flash Flood		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	4/24/1998	11:00	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	1/22/1999	19:00	EST	Flash Flood		0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	12/17/2001	4:30	EST	Flash Flood		0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	1/24/2002	2:20	EST	Flash Flood		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/7/2005	0:00	EST	Flood		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/7/2005	22:30	EST	Flood		0	0	0.00K	0.00K
WEBERSTOWN	HANCOCK CO.	KY	12/15/2007	16:30	CST-6	Flood		0	0	0.00K	0.00K
PATESVILLE	HANCOCK CO.	KY	3/19/2008	1:00	CST-6	Flash Flood		0	0	0.00K	0.00K
PETRIE	HANCOCK CO.	KY	5/14/2014	8:07	CST-6	Flash Flood		0	0	0.00K	0.00K
CHAMBERS	HANCOCK CO.	KY	3/1/2017	7:00	CST-6	Flash Flood		0	0	0.00K	0.00K
SKILLMAN	HANCOCK CO.	KY	8/14/2020	2:27	CST-6	Flash Flood		0	0	0.00K	0.00K
ADAIR	HANCOCK CO.	KY	8/14/2020	3:13	CST-6	Flash Flood		0	0	0.00K	0.00K
ADAIR	HANCOCK CO.	KY	8/14/2020	4:37	CST-6	Flash Flood		0	0	0.00K	0.00K
UTILITY	HANCOCK CO.	KY	9/3/2020	4:30	CST-6	Flash Flood		0	0	0.00K	0.00K
UTILITY	HANCOCK CO.	KY	9/3/2020	4:30	CST-6	Flash Flood		0	0	0.00K	0.00K

City of Hawesville "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
HAWESVILLE	HANCOCK CO.	KY	12/19/2002	18:00	EST	Flash Flood		0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	7/6/2017	10:37	CST-6	Flash Flood		0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	2/22/2018	10:06	CST-6	Flood		0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	2/24/2018	22:00	CST-6	Flash Flood		0	0	0.00K	0.00K

City of Lewisport "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
LEWISPORT	HANCOCK CO.	KY	6/20/2006	20:47	EST	Flash Flood		0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	9/22/2006	20:00	EST	Flash Flood		0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	4/12/2011	6:12	CST-6	Flood		0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	2/25/2018	8:00	CST-6	Flood		0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	8/14/2020	4:15	CST-6	Flash Flood		0	0	0.00K	0.00K

Henderson County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**1**	**0 32.454M**	**3.520M**
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/1/1996	0:01	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/1/1997	13:00	CST	Flood			0	0 5.000M	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/2/1997	10:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	4/19/1998	4:00	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	1/22/1999	17:00	CST	Flash Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/24/1999	8:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/1/1999	0:01	CST	Flood			0	0 2.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	1/3/2000	18:00	CST	Flash Flood			0	0 10.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/21/2000	14:00	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	8/11/2001	10:15	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/16/2001	15:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/22/2002	19:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	4/1/2002	0:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	5/1/2002	0:01	CST	Flood			0	0 2.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/15/2003	14:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/19/2003	18:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/1/2003	0:01	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/1/2003	0:01	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	5/8/2003	18:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/26/2003	8:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/6/2004	9:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/10/2004	7:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	5/30/2004	10:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	6/1/2004	0:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	9/22/2004	3:00	CST	Flood			0	0 0.00K	3.500M
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/7/2005	13:00	CST	Flood			0	0 450.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	11/15/2005	0:15	CST	Flash Flood			0	0 17.500M	0.00K
SMITH MILLS	HENDERSON CO.	KY	3/15/2006	3:00	CST	Flood			0	0 0.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	9/22/2006	21:00	CST	Flash Flood			0	0 20.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	9/23/2006	5:00	CST	Flood			0	0 80.00K	0.00K
ALZEY	HENDERSON CO.	KY	1/13/2007	9:00	CST-6	Flood			0	0 0.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	3/18/2008	13:00	CST-6	Flood			0	0 300.00K	0.00K
BASKETT	HENDERSON CO.	KY	3/19/2008	5:00	CST-6	Flood			0	0 0.00K	0.00K

CARLINBURG	HENDERSON CO.	KY	5/9/2009	18:00	CST-6	Flood	0	0	0.00K	20.00K
SMITH MILLS	HENDERSON CO.	KY	10/9/2009	11:00	CST-6	Flood	0	0	0.00K	0.00K
GENEVA	HENDERSON CO.	KY	5/2/2010	6:00	CST-6	Flood	0	0	0.00K	0.00K
WHITE CITY	HENDERSON CO.	KY	2/24/2011	19:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ALZEY	HENDERSON CO.	KY	4/14/2011	10:00	CST-6	Flood	0	0	0.00K	0.00K
ALZEY	HENDERSON CO.	KY	4/23/2011	5:15	CST-6	Flash Flood	0	0	0.00K	0.00K
ALZEY	HENDERSON CO.	KY	4/24/2011	21:00	CST-6	Flood	0	0	0.00K	0.00K
BASKETT	HENDERSON CO.	KY	5/1/2011	0:00	CST-6	Flood	0	0	6.000M	0.00K
ALZEY	HENDERSON CO.	KY	5/1/2011	0:00	CST-6	Flood	0	0	3.000M	0.00K
BASKETT	HENDERSON CO.	KY	3/22/2013	9:00	CST-6	Flood	1	0	20.00K	0.00K
WHITE CITY	HENDERSON CO.	KY	2/8/2014	6:00	CST-6	Flood	0	0	10.00K	0.00K
OHIORIVER ORDINANCE	HENDERSON CO.	KY	4/3/2014	9:00	CST-6	Flash Flood	0	0	0.00K	0.00K
BASKETT	HENDERSON CO.	KY	12/30/2015	20:00	CST-6	Flood	0	0	0.00K	0.00K
BASKETT	HENDERSON CO.	KY	1/1/2016	0:00	CST-6	Flood	0	0	0.00K	0.00K
OHIORIVER ORDINANCE	HENDERSON CO.	KY	10/10/2017	10:05	CST-6	Flood	0	0	0.00K	0.00K
SCUFFLETOWN	HENDERSON CO.	KY	2/19/2018	12:00	CST-6	Flood	0	0	0.00K	0.00K
SCUFFLETOWN	HENDERSON CO.	KY	3/1/2018	0:00	CST-6	Flood	0	0	30.00K	0.00K
BASKETT	HENDERSON CO.	KY	4/1/2018	10:00	CST-6	Flood	0	0	0.00K	0.00K
ANTHOSTON	HENDERSON CO.	KY	2/6/2019	15:57	CST-6	Flood	0	0	0.00K	0.00K
HEBBARDSVILLE	HENDERSON CO.	KY	2/12/2019	2:00	CST-6	Flood	0	0	0.00K	0.00K
CARLINBURG	HENDERSON CO.	KY	3/1/2019	0:00	CST-6	Flood	0	0	0.00K	0.00K
ALZEY	HENDERSON CO.	KY	2/15/2020	5:00	CST-6	Flood	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	9/3/2020	4:30	CST-6	Flood	0	0	0.00K	0.00K

City of Corydon "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 0.00K**	**0.00K**
CORYDON	HENDERSON CO.	KY	4/24/2011	2:00	CST-6	Flash Flood			0	0 0.00K	0.00K
CORYDON	HENDERSON CO.	KY	2/11/2019	11:00	CST-6	Flood			0	0 0.00K	0.00K

City of Henderson "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**1**	**2 360.00K**	**0.00K**
HENDERSON	HENDERSON CO.	KY	4/29/1996	15:00	CST	Flash Flood			0	0 50.00K	0.00K
HENDERSON	HENDERSON CO.	KY	8/26/1996	13:00	CST	Flood			0	0 8.00K	0.00K
HENDERSON	HENDERSON CO.	KY	11/7/1996	4:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/1/1997	17:15	CST	Flash Flood			0	1 40.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/2/1997	18:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	8/19/1997	16:00	CST	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/23/1998	21:10	CST	Flash Flood			0	1 50.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/17/2000	4:45	CST	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	10/24/2001	16:10	CST	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/24/2002	17:30	CST	Flash Flood			0	0 30.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/21/2006	14:30	CST	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	9/12/2006	14:00	CST	Flash Flood			0	0 2.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/4/2008	1:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/10/2008	22:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/30/2009	19:29	CST-6	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/4/2011	9:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	12/4/2011	20:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	8/2/2012	21:55	CST-6	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	12/21/2013	9:01	CST-6	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/4/2014	1:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/7/2015	23:00	CST-6	Flood			1	0 20.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/27/2016	17:01	CST-6	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/12/2016	12:00	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/29/2017	1:42	CST-6	Flash Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	2/20/2019	5:47	CST-6	Flood			0	0 0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/14/2019	7:21	CST-6	Flash Flood			0	0 10.00K	0.00K
HENDERSON	HENDERSON CO.	KY	11/30/2019	12:40	CST-6	Flash Flood			0	0 50.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/28/2020	7:00	CST-6	Flash Flood			0	0 100.00K	0.00K

McLean County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**4.719M**	**0.00K**
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/20/1996	5:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/1/1997	13:00	CST	Flood		0	0	4.500M	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	4/20/1998	3:00	CST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	1/22/1999	17:00	CST	Flash Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/23/1999	12:00	CST	Flood		0	0	25.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/1/1999	0:01	CST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	1/3/2000	17:20	CST	Flash Flood		0	0	15.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	8/11/2001	10:15	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	11/29/2001	10:00	CST	Flood		0	0	2.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/20/2002	4:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	4/1/2002	0:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	5/18/2002	16:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/15/2003	14:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/1/2003	0:01	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	6/1/2004	0:00	CST	Flood		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/3/2005	18:00	CST	Flood		0	0	0.00K	0.00K
BUEL	MCLEAN CO.	KY	12/13/2007	15:00	CST-6	Flood		0	0	10.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	3/18/2008	20:00	CST-6	Flood		0	0	49.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/3/2008	21:00	CST-6	Flash Flood		0	0	50.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/4/2008	2:30	CST-6	Flood		0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/24/2011	21:00	CST-6	Flood		0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	5/1/2011	0:00	CST-6	Flood		0	0	30.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	12/5/2011	15:00	CST-6	Flood		0	0	0.00K	0.00K
CLEOPATRA	MCLEAN CO.	KY	7/12/2016	9:30	CST-6	Flash Flood		0	0	8.00K	0.00K
RUMSEY	MCLEAN CO.	KY	4/1/2018	23:00	CST-6	Flood		0	0	0.00K	0.00K
RUMSEY	MCLEAN CO.	KY	3/1/2021	21:00	CST-6	Flood		0	0	30.00K	0.00K

City of Calhoun "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**1.141M**	**55.00K**
CALHOUN	MCLEAN CO.	KY	4/29/1996	15:00	CST	Flash Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/1/1997	9:30	CST	Flash Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/1/1997	17:15	CST	Flash Flood		0	0	800.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/7/2006	15:40	CST	Flash Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/9/2008	3:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/6/2008	19:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	4/4/2008	6:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	5/8/2009	13:00	CST-6	Flash Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	5/11/2009	12:00	CST-6	Flood		0	0	0.00K	5.00K
CALHOUN	MCLEAN CO.	KY	5/3/2010	9:00	CST-6	Flood		0	0	10.00K	30.00K
CALHOUN	MCLEAN CO.	KY	2/28/2011	12:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/1/2011	0:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	4/13/2011	9:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	12/2/2011	5:00	CST-6	Flood		0	0	1.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/8/2014	22:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	4/7/2014	6:45	CST-6	Flood		0	0	0.00K	20.00K
CALHOUN	MCLEAN CO.	KY	12/27/2015	12:00	CST-6	Flood		0	0	10.00K	0.00K
CALHOUN	MCLEAN CO.	KY	1/1/2016	0:00	CST-6	Flood		0	0	20.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/27/2016	6:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	7/12/2016	5:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/15/2018	5:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/1/2018	0:00	CST-6	Flood		0	0	50.00K	0.00K
CALHOUN	MCLEAN CO.	KY	4/22/2019	6:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/12/2020	18:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/20/2020	5:00	CST-6	Flood		0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/28/2020	7:41	CST-6	Flash Flood		0	0	250.00K	0.00K

City of Island "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
ISLAND	MCLEAN CO.	KY	3/6/2015	13:00	CST-6	Flood		0	0	0.00K	0.00K

City of Livermore "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**3.010M**	**0.00K**
LIVERMORE	MCLEAN CO.	KY	4/30/2004	18:29	CST	Flash Flood		0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	6/28/2007	17:15	CST-6	Flash Flood		0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/2/2010	7:00	CST-6	Flood		0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/1/2011	0:00	CST-6	Flood		0	0	3.000M	0.00K
LIVERMORE	MCLEAN CO.	KY	4/10/2015	3:00	CST-6	Flood		0	0	10.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	2/10/2019	12:00	CST-6	Flood		0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	2/20/2019	10:13	CST-6	Flood		0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	3/1/2019	0:00	CST-6	Flood		0	0	0.00K	0.00K

City of Sacramento "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
SACRAMENTO	MCLEAN CO.	KY	6/27/1999	5:35	CST	Flood		0	0	0.00K	0.00K

Ohio County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**535.00K**	**0.00K**
OHIO (ZONE)	OHIO (ZONE)	KY	3/1/1997	10:00	EST	Flood		0	0	350.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	3/1/1997	18:00	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/2/1997	5:00	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/19/1997	7:00	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	4/17/1998	18:00	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	1/22/1999	19:00	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/17/2000	7:30	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/16/2001	15:00	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	7/26/2001	1:30	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	11/29/2001	1:30	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	11/29/2001	10:00	EST	Flash Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	12/17/2001	8:50	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/17/2001	13:30	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/24/2002	23:30	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/20/2002	6:30	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/26/2002	15:30	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	9/26/2002	22:20	EST	Flash Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	12/19/2002	16:55	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/19/2002	21:40	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/20/2002	1:10	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/15/2003	12:00	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/22/2003	20:00	EST	Flood		0	0	0.00K	0.00K
ELLMITCH	OHIO CO.	KY	7/21/2003	12:05	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/2/2004	19:00	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	5/27/2004	10:50	EST	Flood		0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	6/1/2004	22:48	EST	Flash Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	6/2/2004	14:30	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/8/2005	23:00	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/28/2005	11:40	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	8/31/2005	6:10	EST	Flood		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	9/1/2005	0:00	EST	Flood		0	0	0.00K	0.00K

DUNDEE	OHIO CO.	KY	1/23/2006	13:10 EST	Flood	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	9/23/2006	14:21 EST	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	5/11/2007	15:35 CST-6	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	12/10/2007	13:10 CST-6	Flood	0	0	0.00K	0.00K
MATANZAS	OHIO CO.	KY	12/15/2007	16:30 CST-6	Flood	0	0	0.00K	0.00K
NARROWS	OHIO CO.	KY	2/6/2008	15:20 CST-6	Flood	0	0	0.00K	0.00K
NARROWS	OHIO CO.	KY	2/12/2008	17:55 CST-6	Flood	0	0	0.00K	0.00K
NARROWS	OHIO CO.	KY	2/22/2008	15:50 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/4/2008	8:00 CST-6	Flood	0	0	0.00K	0.00K
TAFFY	OHIO CO.	KY	3/19/2008	2:30 CST-6	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/19/2008	13:55 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/3/2008	23:15 CST-6	Flood	0	0	100.00K	0.00K
TAFFY	OHIO CO.	KY	4/4/2008	5:14 CST-6	Flood	0	0	0.00K	0.00K
DAN	OHIO CO.	KY	5/27/2009	14:03 CST-6	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	5/1/2010	23:20 CST-6	Flood	0	0	25.00K	0.00K
RALPH	OHIO CO.	KY	6/2/2010	13:40 CST-6	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/9/2011	14:15 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	4/12/2011	5:55 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/23/2011	19:45 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	5/1/2011	0:00 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	11/29/2011	2:45 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	12/5/2011	18:00 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	1/14/2013	1:50 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/19/2013	2:05 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	12/22/2013	20:15 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/3/2014	15:13 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/4/2014	2:10 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	3/4/2015	14:45 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	3/10/2015	17:35 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	3/14/2015	17:35 CST-6	Flood	0	0	0.00K	0.00K
BELLS RUN	OHIO CO.	KY	4/3/2015	8:48 CST-6	Flash Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	4/3/2015	19:40 CST-6	Flood	0	0	0.00K	0.00K
KELTNER	OHIO CO.	KY	4/5/2015	7:00 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	12/27/2015	21:15 CST-6	Flood	0	0	0.00K	0.00K

NARROWS	OHIO CO.	KY	2/3/2016	14:37 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/11/2016	8:30 CST-6	Flood	0	0	0.00K	0.00K
DAVIDSON	OHIO CO.	KY	12/27/2016	18:45 CST-6	Flood	0	0	0.00K	0.00K
WYSOX	OHIO CO.	KY	2/13/2018	12:42 CST-6	Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	2/22/2018	10:30 CST-6	Flood	0	0	0.00K	0.00K
EQUALITY	OHIO CO.	KY	5/18/2018	17:25 CST-6	Flash Flood	0	0	60.00K	0.00K
HAYNESVILLE	OHIO CO.	KY	6/26/2019	21:51 CST-6	Flash Flood	0	0	0.00K	0.00K
HORTON	OHIO CO.	KY	6/26/2019	21:58 CST-6	Flash Flood	0	0	0.00K	0.00K
ROB ROY	OHIO CO.	KY	6/26/2019	22:01 CST-6	Flash Flood	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	6/28/2020	7:41 CST-6	Flash Flood	0	0	0.00K	0.00K

City of Beaver Dam "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**60.00K**	**0.00K**
BEAVER DAM	OHIO CO.	KY	3/26/2002	3:00	EST	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	8/22/2003	19:05	EST	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/27/2009	14:10	CST-6	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	8/4/2009	19:21	CST-6	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	4/24/2010	17:15	CST-6	Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/2/2010	3:50	CST-6	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	4/12/2011	4:14	CST-6	Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/28/2011	0:00	CST-6	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	7/22/2016	19:16	CST-6	Flash Flood		0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/28/2020	9:00	CST-6	Flash Flood		0	0	50.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/28/2020	14:00	CST-6	Flash Flood		0	0	10.00K	0.00K

City of Hartford "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
HARTFORD	OHIO CO.	KY	9/3/2003	16:00	EST	Flash Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/20/2011	1:00	CST-6	Flash Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/3/2015	18:57	CST-6	Flash Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/27/2016	18:20	CST-6	Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/22/2016	19:45	CST-6	Flash Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	2/25/2018	8:00	CST-6	Flood		0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	2/23/2019	16:20	CST-6	Flash Flood		0	0	0.00K	0.00K

Union County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**1**	**0**	**941.00K**	**370.00K**
UNION (ZONE)	UNION (ZONE)	KY	2/1/1996	0:01	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/30/1996	3:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	6/1/1996	0:01	CST	Flood			0	0	0.00K	50.00K
UNION (ZONE)	UNION (ZONE)	KY	3/2/1997	10:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	6/6/1997	17:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/15/1998	1:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/19/1998	4:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	5/1/1998	0:01	CST	Flood			0	0	0.00K	0.00K
COUNTYWIDE	UNION CO.	KY	1/22/1999	13:30	CST	Flash Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/24/1999	8:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/1/1999	0:01	CST	Flood			0	0	2.00K	0.00K
COUNTYWIDE	UNION CO.	KY	6/2/1999	1:30	CST	Flash Flood			0	0	100.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/21/2000	14:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/1/2000	0:01	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/16/2001	15:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/22/2002	19:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/1/2002	0:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/26/2002	9:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	5/1/2002	0:01	CST	Flood			0	0	2.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/19/2003	18:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/1/2003	0:01	CST	Flood			0	0	0.00K	0.00K
COUNTYWIDE	UNION CO.	KY	5/7/2003	0:09	CST	Flash Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	5/8/2003	18:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/26/2003	8:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/6/2004	9:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/10/2004	7:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/11/2004	2:00	CST	Flood			0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	5/30/2004	10:00	CST	Flood			0	0	7.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	6/1/2004	0:00	CST	Flood			0	0	0.00K	300.00K
UNION (ZONE)	UNION (ZONE)	KY	1/7/2005	13:00	CST	Flood			0	0	250.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/4/2005	11:00	CST	Flood			0	0	0.00K	0.00K

COUNTYWIDE	UNION CO.	KY	11/14/2005	22:00 CST	Flash Flood	0	0	500.00K	0.00K
COUNTYWIDE	UNION CO.	KY	9/22/2006	21:00 CST	Flash Flood	0	0	0.00K	0.00K
COUNTYWIDE	UNION CO.	KY	9/23/2006	8:00 CST	Flood	0	0	0.00K	0.00K
CHAPMAN	UNION CO.	KY	10/9/2009	7:00 CST-6	Flood	0	0	0.00K	0.00K
CASEYVILLE	UNION CO.	KY	4/24/2011	12:00 CST-6	Flood	0	0	0.00K	0.00K
HAZEL BEND	UNION CO.	KY	5/1/2011	0:00 CST-6	Flood	0	0	30.00K	0.00K
DE KOVEN	UNION CO.	KY	2/17/2018	20:00 CST-6	Flood	0	0	0.00K	0.00K
HITESVILLE	UNION CO.	KY	2/24/2018	21:30 CST-6	Flash Flood	1	0	0.00K	0.00K
DE KOVEN	UNION CO.	KY	3/1/2018	0:00 CST-6	Flood	0	0	50.00K	0.00K
RALEIGH	UNION CO.	KY	2/1/2019	0:00 CST-6	Flood	0	0	0.00K	0.00K
RALEIGH	UNION CO.	KY	6/22/2019	11:00 CST-6	Flood	0	0	0.00K	20.00K
ARNOLD	UNION CO.	KY	11/30/2019	11:30 CST-6	Flood	0	0	0.00K	0.00K
DE KOVEN	UNION CO.	KY	2/12/2020	17:00 CST-6	Flood	0	0	0.00K	0.00K

City of Morganfield "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0**	**115.00K**	**0.00K**
MORGANFIELD	UNION CO.	KY	4/29/1996	15:00	CST	Flash Flood			0	0	0.00K	0.00K
MORGANFIELD	UNION CO.	KY	3/1/1997	9:30	CST	Flash Flood			0	0	0.00K	0.00K
MORGANFIELD	UNION CO.	KY	3/1/1997	17:15	CST	Flash Flood			0	0	100.00K	0.00K
MORGANFIELD	UNION CO.	KY	5/2/1997	21:00	CST	Flash Flood			0	0	5.00K	0.00K
MORGANFIELD	UNION CO.	KY	1/3/2000	11:15	CST	Flood			0	0	0.00K	0.00K
MORGANFIELD	UNION CO.	KY	11/10/2002	2:24	CST	Flash Flood			0	0	10.00K	0.00K
MORGANFIELD	UNION CO.	KY	2/11/2019	11:00	CST-6	Flood			0	0	0.00K	0.00K

City of Sturgis "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 0.00K**	**0.00K**
STURGIS	UNION CO.	KY	7/26/2001	19:30	CST	Flash Flood			0	0 0.00K	0.00K
STURGIS	UNION CO.	KY	4/24/2011	14:48	CST-6	Flash Flood			0	0 0.00K	0.00K
STURGIS	UNION CO.	KY	7/6/2016	20:40	CST-6	Flood			0	0 0.00K	0.00K
STURGIS	UNION CO.	KY	2/10/2019	9:00	CST-6	Flood			0	0 0.00K	0.00K
STURGIS	UNION CO.	KY	3/1/2019	0:00	CST-6	Flood			0	0 0.00K	0.00K

City of Uniontown "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**1**	**0 1.155M**	**80.00K**
UNIONTOWN	UNION CO.	KY	5/26/1996	0:30	CST	Flash Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/15/2006	3:00	CST	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	1/13/2007	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/6/2007	13:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	4/22/2007	8:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	12/17/2007	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	2/8/2008	14:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/18/2008	13:00	CST-6	Flood			0	0 153.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/18/2008	20:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	4/1/2008	0:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	4/4/2008	1:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	5/10/2009	18:00	CST-6	Flood			0	0 0.00K	20.00K
UNIONTOWN	UNION CO.	KY	1/30/2010	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	2/1/2010	0:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/20/2010	16:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	5/6/2010	4:00	CST-6	Flood			0	0 0.00K	10.00K
UNIONTOWN	UNION CO.	KY	2/28/2011	12:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/2/2011	0:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	4/17/2011	7:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	5/1/2011	0:00	CST-6	Flood			0	0 1.000M	0.00K
UNIONTOWN	UNION CO.	KY	11/30/2011	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	12/1/2011	0:00	CST-6	Flood			0	0 1.00K	0.00K
UNIONTOWN	UNION CO.	KY	12/4/2011	20:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	1/28/2012	16:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	2/1/2012	0:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	1/19/2013	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	2/6/2013	9:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	12/25/2013	7:45	CST-6	Flood			0	0 1.00K	0.00K
UNIONTOWN	UNION CO.	KY	1/1/2014	0:00	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	2/25/2014	16:30	CST-6	Flood			0	0 0.00K	0.00K
UNIONTOWN	UNION CO.	KY	3/1/2014	0:00	CST-6	Flood			0	0 0.00K	0.00K

UNIONTOWN	UNION CO.	KY	4/5/2014	17:15	CST-6	Flood		0	0 0.00K 10.00K
UNIONTOWN	UNION CO.	KY	3/8/2015	14:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	4/6/2015	3:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	7/15/2015	21:45	CST-6	Flood		0	0 0.00K 20.00K
UNIONTOWN	UNION CO.	KY	12/28/2015	23:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	1/1/2016	0:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	2/27/2016	5:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	3/1/2016	0:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	1/20/2017	7:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	5/7/2017	17:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	4/1/2018	10:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	4/20/2018	22:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	12/26/2018	1:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	1/1/2019	0:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	1/25/2019	6:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	3/13/2019	23:45	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	4/23/2019	8:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	7/1/2019	0:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	12/22/2019	9:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	3/21/2020	22:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	4/1/2020	0:00	CST-6	Flood		0	0 0.00K 0.00K
UNIONTOWN	UNION CO.	KY	5/24/2020	4:00	CST-6	Flood		0	0 0.00K 20.00K
UNIONTOWN	UNION CO.	KY	3/2/2021	9:45	CST-6	Flood		0	0 0.00K 0.00K

City of Waverly "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
WAVERLY	UNION CO.	KY	4/23/2011	18:00	CST-6	Flash Flood		0	0	0.00K	0.00K

Webster County "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0**	**1.540M**	**0.00K**
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/1/1996	0:01	CST	Flood			0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/29/1996	15:00	CST	Flash Flood			0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	3/1/1997	9:30	CST	Flash Flood			0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	3/1/1997	17:15	CST	Flash Flood			0	0	70.00K	0.00K
COUNTYWIDE	WEBSTER CO.	KY	1/22/1999	13:30	CST	Flash Flood			0	0	0.00K	0.00K
COUNTYWIDE	WEBSTER CO.	KY	1/3/2000	17:20	CST	Flash Flood			0	0	20.00K	0.00K
COUNTYWIDE	WEBSTER CO.	KY	8/11/2001	10:15	CST	Flood			0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/23/2002	22:15	CST	Flood			0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/15/2003	14:00	CST	Flood			0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	3/1/2003	0:01	CST	Flood			0	0	0.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	3/9/2006	20:00	CST	Flash Flood			1	0	20.00K	0.00K
COUNTYWIDE	WEBSTER CO.	KY	9/23/2006	8:00	CST	Flood			0	0	0.00K	0.00K
BLACKFORD	WEBSTER CO.	KY	3/18/2008	20:00	CST-6	Flood			0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/4/2008	2:30	CST-6	Flood			0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	5/2/2008	15:50	CST-6	Flash Flood			0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	5/2/2010	7:00	CST-6	Flood			0	0	10.00K	0.00K
CLAY	WEBSTER CO.	KY	2/24/2011	20:00	CST-6	Flash Flood			0	0	10.00K	0.00K
BELLVILLE	WEBSTER CO.	KY	4/24/2011	9:00	CST-6	Flood			0	0	0.00K	0.00K
BELLVILLE	WEBSTER CO.	KY	5/1/2011	0:00	CST-6	Flood			0	0	1.500M	0.00K
DIAMOND	WEBSTER CO.	KY	5/2/2011	5:00	CST-6	Flash Flood			0	0	20.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	12/5/2011	15:00	CST-6	Flood			0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	1/13/2013	4:00	CST-6	Flash Flood			0	0	20.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	3/4/2015	8:00	CST-6	Flood			0	0	0.00K	0.00K
FAIRMONT	WEBSTER CO.	KY	3/13/2015	15:00	CST-6	Flood			0	0	0.00K	0.00K
STANHOPE	WEBSTER CO.	KY	3/10/2016	14:00	CST-6	Flood			0	0	0.00K	0.00K
SEBREE	WEBSTER CO.	KY	4/27/2016	16:51	CST-6	Flash Flood			0	0	0.00K	0.00K
LISMAN	WEBSTER CO.	KY	7/6/2016	21:16	CST-6	Flash Flood			0	0	0.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	7/7/2016	14:12	CST-6	Flood			0	0	0.00K	0.00K
SEBREE	WEBSTER CO.	KY	7/12/2016	9:23	CST-6	Flash Flood			0	0	40.00K	0.00K
LUZON	WEBSTER CO.	KY	2/24/2018	22:38	CST-6	Flash Flood			0	0	0.00K	0.00K
DIAMOND	WEBSTER CO.	KY	2/11/2019	11:00	CST-6	Flood			0	0	0.00K	0.00K

BLACKFORD	WEBSTER CO.	KY	2/20/2019	6:00	CST-6	Flood	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	6/21/2019	17:30	CST-6	Flash Flood	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	6/22/2019	15:48	CST-6	Flash Flood	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	1/11/2020	9:00	CST-6	Flash Flood	0	0	0.00K	0.00K
ORTIZ	WEBSTER CO.	KY	7/8/2020	14:47	CST-6	Flash Flood	0	0	0.00K	0.00K

City of Clay "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**20.00K**	**0.00K**
CLAY	WEBSTER CO.	KY	5/2/2010	7:00	CST-6	Flood		0	0	10.00K	0.00K
CLAY	WEBSTER CO.	KY	2/24/2011	20:00	CST-6	Flash Flood		0	0	10.00K	0.00K

City of Dixon "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**70.00K**	**0.00K**
DIXON	WEBSTER CO.	KY	3/1/1997	17:15	CST	Flash Flood		0	0	70.00K	0.00K
DIXON	WEBSTER CO.	KY	5/2/2008	15:50	CST-6	Flash Flood		0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	6/22/2019	15:48	CST-6	Flash Flood		0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	1/11/2020	9:00	CST-6	Flash Flood		0	0	0.00K	0.00K

City of Providence "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**20.00K**	**0.00K**
PROVIDENCE	WEBSTER CO.	KY	4/29/1996	15:00	CST	Flash Flood		0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	3/1/1997	9:30	CST	Flash Flood		0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/4/2008	2:30	CST-6	Flood		0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	12/5/2011	15:00	CST-6	Flood		0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	1/13/2013	4:00	CST-6	Flash Flood		0	0	20.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	3/4/2015	8:00	CST-6	Flood		0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	6/21/2019	17:30	CST-6	Flash Flood		0	0	0.00K	0.00K

City of Sebree "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**40.00K**	**0.00K**
SEBREE	WEBSTER CO.	KY	4/27/2016	16:51	CST-6	Flash Flood		0	0	0.00K	0.00K
SEBREE	WEBSTER CO.	KY	7/12/2016	9:23	CST-6	Flash Flood		0	0	40.00K	0.00K

City of Slaughters "Flood" and "Flash Flood" Events 1996 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**1**	**0**	**20.00K**	**0.00K**
SLAUGHTERS	WEBSTER CO.	KY	3/9/2006	20:00	CST	Flash Flood		1	0	20.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	7/7/2016	14:12	CST-6	Flood		0	0	0.00K	0.00K

Landslide Events in the GRADD Region 2008 - 2020

County	Quadrangle (City)	Location	Date Observed	Date Failed	Lithology	Extent (Track Length)	Extent (Track Width)	Extent (Head Scarp Height)	Extent (Slip Surface Depth)	Impact (Damage Narrative)	Movement Rate
Daviess[1]	Maceo		3/3/2008		Silt; Clay						
Daviess	Owensboro	US 60: Rudy Hill area west of Owensboro near Ben Hawes State Park			Silt					Yes	
Daviess	Reed	Audubon Parkway	1/21/2009		Fill						
Daviess	Pleasant Ridge	US 231: Landslide at graveyard adjacent to intersections of US 231 and KY 764									
Daviess	Panther	KY 276									
Hancock	Cannelton	US 60: around milepoint 12.4									
Hancock	Cloverport	US 60		2019	Shale; Siltstone; Sandstone						
Henderson	Evansville (South)	US 41 North: Near Audubon State Park			Shale; Limestone					Yes	
Henderson	Spottsville	Spottsville Bluff City Road	6/30/2000		Shale; Sandstone; Coal; Limestone; Underclay					Yes: Slope area behind a church had been filled multiple times; slumping continued to occur	Continuous-Slow
Henderson	Reed	AU 9005: 3 Embankment landslide corrections on Audubon Parkway (KY 9005)									
Henderson	Spottsville	KY 416: Corner of Audubon Parkway Interchange									
Henderson	Spottsville	AU 9005: Embankment slope failures at KY 416 and Audubon Parkway Interchange	6/26/1984		Shale; Sandstone; Coal; Limestone; Underclay						
Henderson	Reed	AU 9005: Audubon Parkway W.B. Lane									
Henderson	Reed	AU 9005: Audubon Parkway W.B. Lane									
Henderson	Reed	AU 9005			Sandstone; Shale; Coal				15’ – 50’	Yes	
Henderson	Reed	AU 9005: Landslide correction on Audubon Parkway									
Henderson	Spottsville	KY 2243: Landslide correction on KY 2243									
Henderson	Spottsville	KY 416: Over Audubon Parkway									
Henderson	Spottsville	KY 2243									
Henderson	Reed	AU 9005		1/30/2012	Sandstone; Shale; Coal; Underclay						
Henderson	Reed	AU 9005			Sandstone; Shale; Coal; Underclay					Yes	Intermittent
Henderson	Spottsville	Spottsville Bluff City Road	6/30/2000		Sand; Silt; Clay; Gravel					Yes	Continuous-Slow
Henderson	Evansville South	Wolf Hill Road			Sand; Silt; Clay; Gravel					Yes	Continuous-Slow
McLean	Livermore										
McLean	Livermore	KY 1412		2019	Siltstone; Sandstone; Limestone; Coal						
Ohio	Utica	Heflin Road	4/16/2008		Sandstone; Shale; Siltstone; Coal; Limestone; Underclay	175’	525’				
Ohio	Paradise	Western Kentucky Parkway	7/6/2011		Sandstone; Siltstone; Shale; Coal; Underclay						
Ohio	Rosine	Western Kentucky Parkway			Sandstone; Siltstone; Shale; Coal						
Ohio	Paradise	Western Kentucky Parkway									
Ohio	Pleasant Ridge	WN 9007									
Ohio	Paradise	Western Kentucky Parkway									

Landslide Events in the GRADD Region 2008 - 2020

Ohio	Pleasant Ridge	WN 9007									
Ohio	Pleasant Ridge	WN 9007									
Ohio	Paradise	Western Kentucky Parkway									
Ohio	Paradise										
Ohio	Cromwell										
Ohio	Pleasant Ridge	KY 2668	4/6/2014		Sandstone; Siltstone; Shale; Coal; Limestone		30’	8’			
Ohio	Dundee	KY 69	4/5/2014		Sandstone; Siltstone; Shale; Coal; Limestone					Yes	
Ohio	Rosine	Western Kentucky Parkway		1/7/2017	Sandstone; Siltstone; Shale; Coal					Yes: Westbound Lane blocked	
Union	Sturgis	Bethel Church Road			Silt; Clay						
Union	Dekoven	Mt. Olive Road	2/27/2009		Sandstone; Siltstone; Shale; Limestone; Coal; Underclay					Yes: Large slide that damaged backyard of home	
Union	Grove Center	KY 871			Shale; Sandstone; Siltstone; Coal; Underclay						
Union	Grover Center	KY 871		4/15/2011	Siltstone; Shale; Sandstone; Limestone; Coal; Underclay						
Union	Grove Center	KY 667									
Webster[1]	Providence	KY 270	9/22/2015		Clay; Silt; Sand; Gravel					Yes	Continuous-Rapid
[1] The one Webster County landslide event includes the following information that counts as “extent”: The embankment failure was sudden and the movement was quick, i.e., occurring over days. Horizontal displacement at the toe of the landslide was between 30 and 50 feet with a raise in ground elevations at the toe of approximately 20 feet.											

Daviess County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
CURDSVILLE	DAVIESS CO.	KY	5/25/1996	23:07	CST	Thunderstorm Wind	52 kts.	0	0	5.00K	0.00K
KNOTTSVILLE	DAVIESS CO.	KY	5/27/1996	20:00	CST	Thunderstorm Wind		0	0	25.00K	0.00K
ANDERSONVILLE	DAVIESS CO.	KY	6/12/1996	14:47	CST	Hail	0.75 in.	0	0	0.00K	0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	7/2/1996	18:43	CST	Thunderstorm Wind		0	0	20.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	3/28/1997	19:30	CST	Hail	1.00 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	6/2/1998	21:06	CST	Hail	0.88 in.	0	0	0.00K	0.00K
MOSELEYVILLE	DAVIESS CO.	KY	6/14/1998	18:45	CST	Thunderstorm Wind	52 kts.	0	0	20.00K	0.00K
MACEO	DAVIESS CO.	KY	6/23/1998	15:55	CST	Hail	1.75 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	6/29/1998	20:41	CST	Hail	0.75 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	9/18/1998	17:05	CST	Hail	0.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	5/17/1999	16:44	CST	Thunderstorm Wind	50 kts.	0	0	10.00K	0.00K
STANLEY	DAVIESS CO.	KY	6/4/1999	20:20	CST	Thunderstorm Wind	55 kts.	0	0	40.00K	0.00K
UTICA	DAVIESS CO.	KY	6/4/1999	20:28	CST	Thunderstorm Wind	52 kts.	0	0	3.00K	0.00K
BROWNS VLY	DAVIESS CO.	KY	5/23/2000	8:10	CST	Hail	1.75 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	8/27/2000	1:58	CST	Thunderstorm Wind	50 kts. E	0	0	5.00K	0.00K
THURSTON	DAVIESS CO.	KY	8/27/2000	2:00	CST	Lightning		0	0	0.00K	0.00K
MASONVILLE	DAVIESS CO.	KY	11/9/2000	12:16	CST	Thunderstorm Wind	52 kts. E	0	0	0.00K	0.00K
PHILPOT	DAVIESS CO.	KY	11/9/2000	12:30	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
MACEO	DAVIESS CO.	KY	10/24/2001	1:22	CST	Thunderstorm Wind		0	0	4.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	10/24/2001	16:19	CST	Thunderstorm Wind	74 kts. E	0	0	5.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	10/24/2001	16:20	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
THURSTON	DAVIESS CO.	KY	10/24/2001	16:50	CST	Thunderstorm Wind	60 kts. E	0	0	25.00K	0.00K
STANLEY	DAVIESS CO.	KY	4/24/2002	16:46	CST	Hail	0.75 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	4/24/2002	17:57	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	5/25/2002	17:06	CST	Hail	0.88 in.	0	0	0.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	11/10/2002	15:15	CST	Hail	1.25 in.	0	0	0.00K	0.00K
STANLEY	DAVIESS CO.	KY	4/20/2003	16:35	CST	Hail	1.00 in.	0	0	5.00K	0.00K
YELVINGTON	DAVIESS CO.	KY	4/20/2003	16:52	CST	Hail	1.00 in.	0	0	3.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	4/20/2003	17:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	5/1/2003	13:13	CST	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K
RED HILL	DAVIESS CO.	KY	5/1/2003	13:45	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	5/4/2003	23:00	CST	Hail	1.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	DAVIESS CO.	KY	5/6/2003	23:30	CST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K

MACEO	DAVIESS CO.	KY	5/25/2004	18:02	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K 0.00K
STANLEY	DAVIESS CO.	KY	5/25/2004	21:30	CST	Lightning		0	0	10.00K 0.00K
UTICA	DAVIESS CO.	KY	5/26/2004	10:45	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K 0.00K
COUNTYWIDE	DAVIESS CO.	KY	5/27/2004	21:40	CST	Thunderstorm Wind	104 kts. EG	0	0	3.000M 0.00K
MOSELEYVILLE	DAVIESS CO.	KY	6/1/2004	19:19	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K 0.00K
COUNTYWIDE	DAVIESS CO.	KY	7/5/2004	12:00	CST	Thunderstorm Wind	55 kts. MG	0	0	70.00K 0.00K
STANLEY	DAVIESS CO.	KY	7/5/2004	12:05	CST	Hail	0.88 in.	0	0	0.00K 0.00K
COUNTYWIDE	DAVIESS CO.	KY	7/13/2004	18:07	CST	Thunderstorm Wind	52 kts. EG	0	0	50.00K 0.00K
UTICA	DAVIESS CO.	KY	7/22/2004	16:10	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K 0.00K
UTICA	DAVIESS CO.	KY	4/7/2006	12:24	CST	Hail	0.88 in.	0	0	0.00K 0.00K
KNOTTSVILLE	DAVIESS CO.	KY	4/7/2006	12:41	CST	Hail	1.00 in.	0	0	0.00K 0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	4/7/2006	13:06	CST	Hail	0.88 in.	0	0	0.00K 0.00K
UTICA	DAVIESS CO.	KY	4/20/2006	8:55	CST	Hail	1.75 in.	0	0	0.00K 0.00K
ST JOSEPH	DAVIESS CO.	KY	5/25/2006	17:14	CST	Hail	3.00 in.	0	0	25.00K 0.00K
PANTHER	DAVIESS CO.	KY	5/25/2006	17:15	CST	Thunderstorm Wind	52 kts. EG	0	0	8.00K 0.00K
MACEO	DAVIESS CO.	KY	5/25/2006	17:44	CST	Hail	1.00 in.	0	0	0.00K 0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	6/7/2006	14:40	CST	Hail	1.75 in.	0	0	0.00K 0.00K
YELVINGTON	DAVIESS CO.	KY	6/22/2006	16:50	CST	Hail	0.75 in.	0	0	0.00K 0.00K
COUNTYWIDE	DAVIESS CO.	KY	7/21/2006	13:59	CST	Thunderstorm Wind	56 kts. MG	0	0	0.00K 0.00K
PANTHER	DAVIESS CO.	KY	8/10/2006	15:19	CST	Thunderstorm Wind	50 kts. MG	0	0	6.00K 0.00K
ST JOSEPH	DAVIESS CO.	KY	9/22/2006	16:42	CST	Hail	0.75 in.	0	0	0.00K 0.00K
SORGHO	DAVIESS CO.	KY	9/27/2006	18:25	CST	Hail	1.00 in.	0	0	0.00K 0.00K
STANLEY	DAVIESS CO.	KY	4/11/2007	14:48	CST-6	Thunderstorm Wind	65 kts. EG	0	0	50.00K 0.00K
MACEO	DAVIESS CO.	KY	5/15/2007	17:25	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K 0.00K
MASONVILLE	DAVIESS CO.	KY	10/18/2007	2:14	CST-6	Thunderstorm Wind	50 kts. EG	0	2	20.00K 0.00K
SORGHO	DAVIESS CO.	KY	10/18/2007	16:46	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
ROME	DAVIESS CO.	KY	10/18/2007	17:20	CST-6	Hail	1.75 in.	0	0	0.00K 0.00K
UTICA	DAVIESS CO.	KY	2/5/2008	21:22	CST-6	Thunderstorm Wind	74 kts. EG	0	0	25.00K 0.00K
(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	6/11/2009	15:21	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
STANLEY	DAVIESS CO.	KY	6/11/2009	16:05	CST-6	Hail	1.75 in.	0	0	0.00K 0.00K
(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	4/7/2010	19:49	CST-6	Thunderstorm Wind	63 kts. MG	0	0	0.00K 0.00K
PHILPOT	DAVIESS CO.	KY	4/24/2010	15:36	CST-6	Thunderstorm Wind	54 kts. MG	0	0	0.00K 0.00K
DOYLE	DAVIESS CO.	KY	5/27/2010	12:25	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
BIRK CITY	DAVIESS CO.	KY	7/19/2010	16:04	CST-6	Thunderstorm Wind	56 kts. MG	0	0	2.00K 0.00K
STANLEY	DAVIESS CO.	KY	10/26/2010	7:47	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K

DOYLE	DAVIESS CO.	KY	3/23/2011	13:10	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
MOSELEYVILLE	DAVIESS CO.	KY	3/23/2011	13:42	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	4/26/2011	16:00	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
UTICA	DAVIESS CO.	KY	4/26/2011	21:14	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	4/28/2011	18:08	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
BIRK CITY	DAVIESS CO.	KY	5/25/2011	19:46	CST-6	Thunderstorm Wind	53 kts. MG	0	0	30.00K 0.00K
DELAWARE	DAVIESS CO.	KY	6/5/2011	10:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K 0.00K
MACEO	DAVIESS CO.	KY	6/26/2011	1:07	CST-6	Thunderstorm Wind	87 kts. EG	0	0	10.00K 0.00K
PANTHER	DAVIESS CO.	KY	1/22/2012	23:56	CST-6	Thunderstorm Wind	74 kts. EG	0	1	80.00K 0.00K
HABIT	DAVIESS CO.	KY	1/23/2012	0:05	CST-6	Thunderstorm Wind	61 kts. EG	0	0	20.00K 0.00K
BROWNWOOD MANOR	DAVIESS CO.	KY	1/23/2012	0:06	CST-6	Thunderstorm Wind	56 kts. EG	0	0	25.00K 0.00K
DOYLE	DAVIESS CO.	KY	3/2/2012	13:25	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
DOYLE	DAVIESS CO.	KY	3/2/2012	14:25	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
ANDERSONVILLE	DAVIESS CO.	KY	5/5/2012	1:40	CST-6	Hail	0.75 in.	0	0	0.00K 0.00K
YELVINGTON	DAVIESS CO.	KY	5/31/2012	15:00	CST-6	Hail	1.75 in.	0	0	0.00K 0.00K
GATEWOOD	DAVIESS CO.	KY	5/31/2012	15:13	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
YELVINGTON	DAVIESS CO.	KY	5/31/2012	15:49	CST-6	Thunderstorm Wind	56 kts. EG	0	0	4.00K 0.00K
DELAWARE	DAVIESS CO.	KY	7/31/2012	19:46	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	6/17/2013	14:20	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	7/23/2013	18:09	CST-6	Hail	1.00 in.	0	0	0.00K 0.00K
PANTHER	DAVIESS CO.	KY	8/31/2013	23:30	CST-6	Thunderstorm Wind	61 kts. EG	0	0	50.00K 0.00K
KNOTTSVILLE	DAVIESS CO.	KY	10/31/2013	20:35	CST-6	Thunderstorm Wind	56 kts. MG	0	0	4.00K 0.00K
KNOTTSVILLE	DAVIESS CO.	KY	12/21/2013	18:50	CST-6	Thunderstorm Wind	65 kts. EG	0	0	50.00K 0.00K
STANLEY	DAVIESS CO.	KY	5/10/2014	12:02	CST-6	Thunderstorm Wind	65 kts. EG	0	0	20.00K 0.00K
PHILPOT	DAVIESS CO.	KY	7/10/2015	7:30	CST-6	Thunderstorm Wind	56 kts. EG	0	0	5.00K 0.00K
DELAWARE	DAVIESS CO.	KY	12/23/2015	15:30	CST-6	Hail	0.88 in.	0	0	0.00K 0.00K
MASONVILLE	DAVIESS CO.	KY	3/31/2016	13:06	CST-6	Thunderstorm Wind	78 kts. EG	0	0	225.00K 0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	5/10/2016	11:50	CST-6	Hail	2.00 in.	0	0	250.00K 0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	6/15/2016	12:45	CST-6	Thunderstorm Wind	56 kts. EG	0	0	6.00K 0.00K
PANTHER	DAVIESS CO.	KY	6/23/2016	21:19	CST-6	Thunderstorm Wind	52 kts. EG	0	0	22.00K 0.00K
UTICA	DAVIESS CO.	KY	7/7/2016	13:15	CST-6	Thunderstorm Wind	56 kts. EG	0	0	5.00K 0.00K
UTICA	DAVIESS CO.	KY	7/7/2016	13:15	CST-6	Lightning		0	0	5.00K 0.00K
CURDSVILLE	DAVIESS CO.	KY	7/8/2016	7:00	CST-6	Thunderstorm Wind	56 kts. EG	0	0	50.00K 0.00K
UTICA	DAVIESS CO.	KY	7/8/2016	7:08	CST-6	Hail	0.75 in.	0	0	0.00K 0.00K
MOSELEYVILLE	DAVIESS CO.	KY	7/14/2016	8:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K 0.00K

(OWB)OWENSBORO ARPT	DAVIESS CO.	KY	3/1/2017	0:41	CST-6	Thunderstorm Wind	61 kts. EG	0	0	35.00K	0.00K
BIRK CITY	DAVIESS CO.	KY	5/10/2018	17:17	CST-6	Thunderstorm Wind	61 kts. EG	0	0	15.00K	0.00K
STANLEY	DAVIESS CO.	KY	5/10/2018	17:18	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
KNOTTSVILLE	DAVIESS CO.	KY	5/31/2018	11:45	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
STANLEY	DAVIESS CO.	KY	6/13/2018	21:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	6.00K	0.00K
STANLEY	DAVIESS CO.	KY	6/26/2018	10:05	CST-6	Thunderstorm Wind	61 kts. EG	0	0	15.00K	0.00K
WEST LOUISVILLE	DAVIESS CO.	KY	6/26/2018	18:10	CST-6	Thunderstorm Wind	61 kts. EG	0	0	5.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	8/15/2018	16:26	CST-6	Thunderstorm Wind	52 kts. EG	0	0	18.00K	0.00K
STANLEY	DAVIESS CO.	KY	3/14/2019	12:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	50.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	5/26/2019	14:30	CST-6	Thunderstorm Wind	78 kts. EG	0	0	200.00K	0.00K
STANLEY	DAVIESS CO.	KY	5/29/2019	9:30	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
THURSTON	DAVIESS CO.	KY	10/26/2019	15:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K
SORGHO	DAVIESS CO.	KY	3/28/2020	19:31	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K

City of Owensboro "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**408.50K**	**0.00K**
OWENSBORO	DAVIESS CO.	KY	5/5/1996	15:15	CST	Thunderstorm Wind		0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/26/1996	13:56	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	10/17/1996	20:30	CST	Thunderstorm Wind		0	0	6.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/14/1997	17:47	CST	Thunderstorm Wind	52 kts.	0	0	20.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/17/1997	14:20	CST	Thunderstorm Wind	52 kts.	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/15/1998	8:08	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/30/1998	17:38	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/23/1998	21:40	CST	Thunderstorm Wind	54 kts.	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/5/1999	17:55	CST	Thunderstorm Wind	52 kts.	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	2/18/2000	15:33	CST	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/23/2000	7:55	CST	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/14/2000	19:45	CST	Thunderstorm Wind		0	0	5.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/31/2000	14:30	CST	Lightning		0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/23/2001	14:54	CST	Thunderstorm Wind	52 kts. E	0	0	2.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/24/2002	18:17	CST	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	11/10/2002	15:30	CST	Thunderstorm Wind	65 kts. E	0	0	150.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/20/2003	17:35	CST	Hail	2.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/20/2003	18:40	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/15/2003	11:26	CST	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/15/2003	11:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/21/2003	9:10	CST	Hail	1.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/4/2003	17:15	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/27/2003	18:00	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/27/2003	18:04	CST	Lightning		0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/20/2004	10:53	CST	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/30/2004	18:01	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/30/2004	20:01	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/22/2005	15:26	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/22/2005	1:55	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/14/2005	17:45	CST	Thunderstorm Wind	56 kts. EG	0	0	5.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	11/6/2005	2:45	CST	Thunderstorm Wind	55 kts. EG	0	0	1.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	11/15/2005	16:06	CST	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K

OWENSBORO	DAVIESS CO.	KY	4/2/2006	19:00	CST	Thunderstorm Wind	78 kts. EG	0	0	200.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/2/2006	19:00	CST	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/7/2006	13:22	CST	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/25/2006	16:10	CST	Hail	1.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/25/2006	17:27	CST	Hail	2.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/25/2006	18:04	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/25/2006	18:50	CST	Lightning		0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/22/2006	17:15	CST	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/22/2006	18:28	CST	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/22/2006	18:28	CST	Lightning		0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/22/2006	22:03	CST	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/11/2007	14:58	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/23/2007	15:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/19/2007	17:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/19/2007	18:00	CST-6	Lightning		0	0	5.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	10/18/2007	17:02	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	11/5/2007	8:44	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	1/29/2008	18:00	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/2/2008	9:47	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/13/2008	15:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/13/2008	15:53	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/27/2008	19:54	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/28/2009	17:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/3/2009	13:15	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/11/2009	16:25	CST-6	Hail	2.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/11/2009	16:34	CST-6	Thunderstorm Wind	77 kts. MG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/17/2009	15:02	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/12/2009	16:19	CST-6	Thunderstorm Wind	52 kts. EG	0	0	20.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	10/6/2009	8:45	CST-6	Lightning		0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	10/26/2010	8:13	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/19/2011	21:25	CST-6	Thunderstorm Wind	65 kts. EG	0	0	25.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/19/2011	21:45	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/23/2011	1:11	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/5/2011	10:11	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/19/2011	4:55	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K

OWENSBORO	DAVIESS CO.	KY	6/27/2011	11:50	CST-6	Thunderstorm Wind	53 kts. MG	0	0	3.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	9/25/2011	14:25	CST-6	Lightning		0	0	30.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/2/2012	13:21	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/2/2012	13:25	CST-6	Thunderstorm Wind	66 kts. MG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/2/2012	14:10	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/2/2012	14:21	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/2/2012	14:25	CST-6	Thunderstorm Wind	66 kts. MG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	3/15/2012	14:54	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/30/2013	17:16	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/17/2013	14:05	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/17/2013	14:37	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/31/2013	23:34	CST-6	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	12/21/2013	18:38	CST-6	Thunderstorm Wind	50 kts. MG	0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/27/2014	17:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	7/7/2014	16:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	30.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/21/2015	19:26	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	4/26/2016	17:44	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/10/2016	12:00	CST-6	Thunderstorm Wind	56 kts. EG	0	0	6.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/10/2016	12:03	CST-6	Hail	2.00 in.	0	0	1.000M	0.00K
OWENSBORO	DAVIESS CO.	KY	7/7/2016	13:12	CST-6	Thunderstorm Wind	61 kts. EG	0	0	30.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/10/2018	17:42	CST-6	Thunderstorm Wind	52 kts. MG	0	0	40.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/10/2018	17:49	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	5/26/2019	14:27	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/21/2019	16:21	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/21/2019	16:23	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/23/2019	13:13	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	6/30/2019	19:05	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	8/20/2019	13:50	CST-6	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K

City of Whitesville "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**91.00K**	**4.00K**
WHITESVILLE	DAVIESS CO.	KY	9/5/1996	16:20	CST	Lightning		0	0	25.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	11/9/2000	13:00	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	5/25/2002	17:40	CST	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	5/26/2004	22:00	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	3/9/2006	20:56	CST	Thunderstorm Wind	52 kts. EG	0	0	4.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/11/2006	15:15	CST	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/20/2006	20:04	CST	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/20/2006	20:10	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	5/15/2007	17:48	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	4/7/2010	20:07	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	7/19/2010	17:00	CST-6	Lightning		0	0	10.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	4/28/2011	18:38	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/15/2011	15:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	7/12/2011	12:45	CST-6	Thunderstorm Wind	56 kts. EG	0	0	30.00K	4.00K
WHITESVILLE	DAVIESS CO.	KY	9/7/2012	21:02	CST-6	Thunderstorm Wind	61 kts. MG	0	0	10.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	10/18/2012	12:23	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	5/10/2016	12:28	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	5/10/2016	12:28	CST-6	Thunderstorm Wind	56 kts. EG	0	0	7.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	4/5/2017	13:20	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
WHITESVILLE	DAVIESS CO.	KY	6/10/2018	9:54	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K

Hancock County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
WEBERSTOWN	HANCOCK CO.	KY	4/23/1996	7:00	EST	Thunderstorm Wind	50 kts.	0	0	2.00K	0.00K
PELLVILLE	HANCOCK CO.	KY	5/5/1999	18:52	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
CHAMBERS	HANCOCK CO.	KY	5/17/1999	18:00	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
CENTRAL PORTION	HANCOCK CO.	KY	1/3/2000	17:30	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	10/24/2001	17:45	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	4/20/2003	19:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	5/7/2003	1:15	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
EASTON	HANCOCK CO.	KY	5/15/2003	11:11	EST	Hail	1.00 in.	0	0	0.00K	0.00K
PATESVILLE	HANCOCK CO.	KY	5/17/2003	16:45	EST	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
LYONIA	HANCOCK CO.	KY	5/27/2004	23:12	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	7/6/2004	14:45	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	7/13/2004	19:40	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	4/22/2005	17:20	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	HANCOCK CO.	KY	3/9/2006	22:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LYONIA	HANCOCK CO.	KY	5/25/2006	17:30	EST	Hail	1.75 in.	0	0	0.00K	0.00K
WEBERSTOWN	HANCOCK CO.	KY	9/22/2006	23:30	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PELLVILLE	HANCOCK CO.	KY	6/13/2008	10:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PELLVILLE	HANCOCK CO.	KY	6/13/2008	14:46	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ADAIR	HANCOCK CO.	KY	7/8/2008	19:09	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PATESVILLE	HANCOCK CO.	KY	4/7/2010	20:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ADAIR	HANCOCK CO.	KY	7/19/2010	16:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PATESVILLE	HANCOCK CO.	KY	6/19/2011	5:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WAITMAN	HANCOCK CO.	KY	6/26/2011	1:16	CST-6	Thunderstorm Wind	91 kts. EG	0	0	100.00K	0.00K
UTILITY	HANCOCK CO.	KY	9/7/2012	20:52	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
DUKES	HANCOCK CO.	KY	10/31/2013	21:04	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GOERING	HANCOCK CO.	KY	12/21/2013	18:50	CST-6	Thunderstorm Wind	61 kts. EG	0	0	20.00K	0.00K
SKILLMAN	HANCOCK CO.	KY	7/20/2015	20:56	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
SUNNY CORNER	HANCOCK CO.	KY	12/23/2015	17:08	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
PATESVILLE	HANCOCK CO.	KY	3/31/2016	13:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
VICTORIA XRDS	HANCOCK CO.	KY	8/5/2016	13:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
UTILITY	HANCOCK CO.	KY	4/5/2017	13:45	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
UTILITY	HANCOCK CO.	KY	7/7/2017	21:10	CST-6	Thunderstorm Wind	53 kts. EG	0	0	20.00K	0.00K

UTILITY	HANCOCK CO.	KY	5/31/2018	11:43 CST-6	Thunderstorm Wind	53 kts. EG	0	0	0.00K	0.00K
VICTORIA XRDS	HANCOCK CO.	KY	6/21/2019	16:54 CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PETRIE	HANCOCK CO.	KY	6/23/2019	13:33 CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K

City of Hawesville "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**82.00K**	**0.00K**
HAWESVILLE	HANCOCK CO.	KY	3/28/1997	21:30	EST	Hail	1.75 in.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	6/14/1998	20:40	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	6/23/1998	0:30	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	1/17/1999	21:59	EST	Thunderstorm Wind		0	0	22.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	5/23/2000	9:30	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	6/14/2000	21:20	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	11/9/2000	13:33	EST	Thunderstorm Wind	70 kts. E	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	4/28/2002	3:13	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	4/20/2003	18:30	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	5/25/2004	19:20	EST	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	5/30/2004	21:50	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	7/5/2004	13:25	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	4/2/2006	20:20	EST	Thunderstorm Wind	65 kts. EG	0	0	10.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	4/20/2006	10:44	EST	Hail	0.88 in.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	7/21/2006	15:48	EST	Thunderstorm Wind	70 kts. EG	0	0	25.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	1/29/2008	18:39	CST-6	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	3/15/2012	15:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	5/31/2012	15:33	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	9/7/2012	20:56	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	9/7/2012	21:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	4/7/2015	14:14	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	12/23/2015	17:01	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	7/8/2016	7:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	6/11/2018	16:09	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HAWESVILLE	HANCOCK CO.	KY	6/23/2019	17:58	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

City of Lewisport "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**87.00K**	**0.00K**
LEWISPORT	HANCOCK CO.	KY	5/20/1998	14:45	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	5/20/1998	14:45	EST	Hail	1.75 in.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/23/1998	17:15	EST	Hail	0.75 in.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/29/1998	21:30	EST	Hail	0.75 in.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/13/2004	19:21	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	4/22/2005	16:43	EST	Thunderstorm Wind	55 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	8/7/2005	15:58	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	11/6/2005	4:20	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	5/24/2006	23:52	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/20/2006	20:20	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/22/2006	18:11	EST	Hail	0.75 in.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/22/2006	18:11	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	9/22/2006	20:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	9/27/2006	19:18	EST	Hail	1.00 in.	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/8/2008	18:41	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/19/2010	15:57	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	4/19/2011	22:03	CST-6	Thunderstorm Wind	57 kts. MG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/15/2011	17:46	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	1/23/2012	0:14	CST-6	Thunderstorm Wind	56 kts. EG	0	0	5.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	1/23/2012	0:14	CST-6	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	6/26/2013	19:33	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	4/26/2016	17:49	CST-6	Thunderstorm Wind	52 kts. EG	0	0	30.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	5/29/2016	15:58	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/7/2016	13:28	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/8/2016	7:22	CST-6	Thunderstorm Wind	52 kts. EG	0	0	15.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/7/2017	21:03	CST-6	Thunderstorm Wind	53 kts. EG	0	0	25.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	7/7/2017	21:12	CST-6	Thunderstorm Wind	53 kts. EG	0	0	5.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	3/14/2019	12:57	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	10/26/2019	15:23	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K
LEWISPORT	HANCOCK CO.	KY	10/26/2019	15:24	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K

Henderson County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
CAIRO	HENDERSON CO.	KY	1/17/1999	18:30	CST	Thunderstorm Wind	52 kts.	0	0	10.00K	0.00K
HEBBARDSVILLE	HENDERSON CO.	KY	5/5/1999	17:10	CST	Thunderstorm Wind		0	0	3.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	5/17/1999	16:10	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
CAIRO	HENDERSON CO.	KY	1/3/2000	11:45	CST	Thunderstorm Wind	52 kts. E	0	0	5.00K	0.00K
DIXIE	HENDERSON CO.	KY	2/18/2000	14:40	CST	Thunderstorm Wind		0	0	8.00K	0.00K
ZION	HENDERSON CO.	KY	9/20/2000	15:45	CST	Thunderstorm Wind	50 kts. E	0	0	2.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	8/29/2001	16:41	CST	Hail	1.00 in.	0	0	0.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	10/24/2001	16:06	CST	Thunderstorm Wind	52 kts. E	0	0	6.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	4/21/2002	17:00	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
CAIRO	HENDERSON CO.	KY	4/24/2002	16:30	CST	Hail	0.88 in.	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	4/24/2002	16:38	CST	Hail	1.00 in.	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	4/24/2002	17:51	CST	Hail	0.88 in.	0	0	0.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	5/4/2003	14:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	7/9/2003	14:37	CST	Hail	0.75 in.	0	0	0.00K	0.00K
GENEVA	HENDERSON CO.	KY	7/21/2003	6:00	CST	Thunderstorm Wind	50 kts. EG	0	0	6.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	5/25/2004	17:20	CST	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	5/27/2004	21:20	CST	Thunderstorm Wind	65 kts. EG	0	0	90.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	5/30/2004	19:40	CST	Thunderstorm Wind	78 kts. EG	0	0	50.00K	0.00K
ZION	HENDERSON CO.	KY	6/1/2004	17:23	CST	Hail	1.00 in.	0	0	0.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	7/5/2004	11:35	CST	Thunderstorm Wind	55 kts. EG	0	0	40.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	7/13/2004	18:15	CST	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	5/19/2005	14:10	CST	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
HEBBARDSVILLE	HENDERSON CO.	KY	7/14/2006	16:55	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
COUNTYWIDE	HENDERSON CO.	KY	7/21/2006	13:30	CST	Thunderstorm Wind	61 kts. EG	0	1	100.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	8/10/2006	15:05	CST	Thunderstorm Wind	53 kts. EG	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	9/27/2006	17:58	CST	Hail	0.75 in.	0	0	0.00K	0.00K
GENEVA	HENDERSON CO.	KY	3/28/2009	15:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON ARPT	HENDERSON CO.	KY	6/20/2009	17:50	CST-6	Thunderstorm Wind	54 kts. MG	0	0	2.00K	0.00K
REED	HENDERSON CO.	KY	10/8/2009	20:44	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
NIAGARA	HENDERSON CO.	KY	3/23/2011	12:20	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON ARPT	HENDERSON CO.	KY	4/19/2011	20:55	CST-6	Thunderstorm Wind	59 kts. MG	0	0	15.00K	0.00K
ZION	HENDERSON CO.	KY	9/25/2011	17:50	CST-6	Thunderstorm Wind	74 kts. EG	0	0	50.00K	0.00K
BASKETT	HENDERSON CO.	KY	11/14/2011	19:08	CST-6	Lightning		0	0	10.00K	0.00K

ZION	HENDERSON CO.	KY	2/29/2012	6:03	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ZION	HENDERSON CO.	KY	2/29/2012	6:03	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
WILSON	HENDERSON CO.	KY	3/2/2012	13:55	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	7/5/2012	17:50	CST-6	Thunderstorm Wind	65 kts. EG	0	0	100.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	4/16/2013	16:29	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CORAVILLE	HENDERSON CO.	KY	4/16/2013	16:33	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	5/10/2014	11:38	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON ARPT	HENDERSON CO.	KY	7/7/2014	16:10	CST-6	Thunderstorm Wind	53 kts. MG	0	0	2.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	4/25/2015	16:20	CST-6	Thunderstorm Wind	87 kts. EG	0	1	210.00K	0.00K
HEBBARDSVILLE	HENDERSON CO.	KY	5/1/2016	17:13	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
GENEVA	HENDERSON CO.	KY	6/15/2016	11:55	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
HENDERSON ARPT	HENDERSON CO.	KY	7/23/2017	3:10	CST-6	Thunderstorm Wind	61 kts. MG	0	0	5.00K	0.00K
HEBBARDSVILLE	HENDERSON CO.	KY	6/26/2018	18:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
REED	HENDERSON CO.	KY	6/23/2019	12:40	CST-6	Thunderstorm Wind	61 kts. EG	0	0	5.00K	0.00K
TUNNEL HILL	HENDERSON CO.	KY	10/26/2019	14:45	CST-6	Thunderstorm Wind	56 kts. EG	0	0	3.00K	0.00K
ZION	HENDERSON CO.	KY	10/26/2019	15:00	CST-6	Thunderstorm Wind	57 kts. MG	0	0	1.00K	0.00K
BASKETT	HENDERSON CO.	KY	3/28/2020	19:10	CST-6	Thunderstorm Wind	78 kts. MG	0	0	0.00K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	7/27/2020	14:49	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K

City of Corydon "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 104.00K**	**0.00K**
CORYDON	HENDERSON CO.	KY	4/3/1999	16:20	CST	Hail	1.00 in.	0	0	0.00K	0.00K
CORYDON	HENDERSON CO.	KY	5/25/2002	15:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CORYDON	HENDERSON CO.	KY	4/20/2003	16:15	CST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CORYDON	HENDERSON CO.	KY	3/4/2005	19:35	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CORYDON	HENDERSON CO.	KY	5/15/2007	16:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	50.00K	0.00K
CORYDON	HENDERSON CO.	KY	6/15/2010	16:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	15.00K	0.00K
CORYDON	HENDERSON CO.	KY	7/23/2013	18:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
CORYDON	HENDERSON CO.	KY	6/21/2019	15:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K

City of Henderson "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
HENDERSON	HENDERSON CO.	KY	5/25/1996	22:45	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/13/1997	12:15	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/14/1997	18:06	CST	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/8/1998	19:09	CST	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/23/1998	21:15	CST	Thunderstorm Wind	52 kts.	0	0	15.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/12/1998	21:18	CST	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/12/1998	21:25	CST	Thunderstorm Wind	52 kts.	0	0	35.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/14/1998	18:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/14/1998	18:15	CST	Thunderstorm Wind	50 kts.	0	0	10.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/4/1999	20:05	CST	Thunderstorm Wind	52 kts.	0	0	6.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/23/2000	7:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/2/2000	14:36	CST	Thunderstorm Wind	50 kts. E	0	0	7.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/28/2000	3:00	CST	Lightning		0	0	10.00K	0.00K
HENDERSON	HENDERSON CO.	KY	9/11/2000	10:30	CST	Thunderstorm Wind	50 kts. E	0	0	8.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/24/2002	18:00	CST	Lightning		0	0	1.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/25/2002	15:15	CST	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/29/2002	16:45	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	11/10/2002	0:10	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	11/10/2002	1:06	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/4/2003	21:14	CST	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/1/2003	12:33	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/9/2003	14:45	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	8/1/2003	23:00	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	8/11/2003	13:05	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/20/2004	10:38	CST	Hail	1.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/30/2004	17:20	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/26/2004	21:14	CST	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/27/2004	21:25	CST	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/22/2004	15:40	CST	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/22/2005	14:45	CST	Thunderstorm Wind	50 kts. EG	0	0	30.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/9/2006	20:39	CST	Thunderstorm Wind	55 kts. MG	0	0	20.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/11/2006	4:39	CST	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/2/2006	18:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K

HENDERSON	HENDERSON CO.	KY	4/7/2006	13:10	CST	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/7/2006	17:15	CST	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/25/2006	17:15	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/25/2006	18:40	CST	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/20/2006	14:30	CST	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/20/2006	15:00	CST	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/20/2006	15:19	CST	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	9/22/2006	17:58	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/3/2007	16:29	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/15/2007	16:55	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	1/29/2008	17:30	CST-6	Thunderstorm Wind	61 kts. EG	0	0	40.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/10/2008	21:00	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/10/2008	21:21	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/5/2009	17:55	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/14/2009	2:53	CST-6	Thunderstorm Wind	59 kts. MG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/15/2010	16:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	60.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/19/2010	15:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	25.00K	0.00K
HENDERSON	HENDERSON CO.	KY	10/26/2010	7:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/26/2011	0:45	CST-6	Thunderstorm Wind	62 kts. MG	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/28/2011	18:04	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/25/2011	19:29	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/2/2012	13:59	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/2/2012	14:00	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/2/2012	14:02	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/17/2012	14:17	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/30/2012	21:15	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/16/2013	16:10	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	4/16/2013	16:16	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	10/31/2013	20:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	30.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/7/2014	16:15	CST-6	Thunderstorm Wind	56 kts. EG	0	0	40.00K	0.00K
HENDERSON	HENDERSON CO.	KY	10/13/2014	16:45	CST-6	Thunderstorm Wind	70 kts. EG	0	0	100.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/21/2015	19:23	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/7/2016	18:19	CST-6	Thunderstorm Wind	56 kts. EG	0	0	6.00K	0.00K
HENDERSON	HENDERSON CO.	KY	7/7/2016	12:46	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/10/2018	16:40	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K

HENDERSON	HENDERSON CO.	KY	5/31/2018	10:35	CST-6	Thunderstorm Wind	56 kts. EG	0	0	8.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/26/2018	9:43	CST-6	Thunderstorm Wind	56 kts. EG	0	0	30.00K	0.00K
HENDERSON	HENDERSON CO.	KY	6/26/2018	17:48	CST-6	Thunderstorm Wind	56 kts. EG	0	2	20.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/14/2019	10:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K
HENDERSON	HENDERSON CO.	KY	5/26/2019	13:54	CST-6	Thunderstorm Wind	52 kts. EG	0	0	4.00K	0.00K
HENDERSON	HENDERSON CO.	KY	10/26/2019	14:49	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/28/2020	19:10	CST-6	Thunderstorm Wind	56 kts. EG	0	0	3.00K	0.00K
HENDERSON	HENDERSON CO.	KY	3/28/2020	19:13	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K

City of Robards "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**66.00K**	**0.50K**
ROBARDS	HENDERSON CO.	KY	8/4/2003	16:15	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROBARDS	HENDERSON CO.	KY	6/20/2006	15:50	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ROBARDS	HENDERSON CO.	KY	6/23/2019	17:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K
ROBARDS	HENDERSON CO.	KY	8/6/2019	15:57	CST-6	Thunderstorm Wind	56 kts. EG	0	0	5.00K	0.00K
ROBARDS	HENDERSON CO.	KY	4/8/2020	20:00	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K

McLean County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
BEECH GROVE	MCLEAN CO.	KY	5/5/1996	14:45	CST	Thunderstorm Wind		0	0	5.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	3/28/1997	19:45	CST	Hail	0.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	5/17/1999	16:39	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	11/9/2000	12:07	CST	Thunderstorm Wind	50 kts. E	0	0	5.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	10/24/2001	16:30	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	11/10/2002	15:12	CST	Hail	1.75 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/20/2003	18:00	CST	Hail	1.00 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	8/22/2003	15:23	CST	Hail	1.00 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	5/27/2004	21:40	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	5/30/2004	19:45	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	7/13/2004	18:35	CST	Thunderstorm Wind	50 kts. EG	0	0	7.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	11/6/2005	2:35	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	3/9/2006	20:00	CST	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/2/2006	18:55	CST	Hail	1.00 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	5/30/2006	10:55	CST	Hail	0.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	MCLEAN CO.	KY	7/21/2006	13:50	CST	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	8/19/2006	18:30	CST	Lightning		0	0	10.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	3/1/2007	1:33	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/19/2011	21:35	CST-6	Thunderstorm Wind	56 kts. EG	0	0	3.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	5/25/2011	19:45	CST-6	Thunderstorm Wind	53 kts. MG	0	0	7.00K	0.00K
POVERTY	MCLEAN CO.	KY	1/22/2012	23:45	CST-6	Thunderstorm Wind	61 kts. EG	0	0	60.00K	0.00K
GUFFIE	MCLEAN CO.	KY	1/22/2012	23:47	CST-6	Thunderstorm Wind	74 kts. EG	0	0	100.00K	0.00K
ELBA	MCLEAN CO.	KY	3/2/2012	14:25	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	7/23/2013	19:13	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/27/2014	13:05	CST-6	Thunderstorm Wind	53 kts. MG	0	0	0.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	4/27/2016	16:19	CST-6	Thunderstorm Wind	56 kts. EG	0	0	40.00K	0.00K
BEECH GROVE	MCLEAN CO.	KY	7/14/2016	8:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
GUFFIE	MCLEAN CO.	KY	6/26/2018	9:56	CST-6	Thunderstorm Wind	61 kts. EG	0	0	40.00K	0.00K
LIVIA	MCLEAN CO.	KY	12/31/2018	13:22	CST-6	Thunderstorm Wind	74 kts. EG	0	0	40.00K	0.00K

City of Calhoun "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 122.00K**	**0.00K**
CALHOUN	MCLEAN CO.	KY	7/2/1996	19:30	CST	Thunderstorm Wind		0	0	10.00K	0.00K
CALHOUN	MCLEAN CO.	KY	9/18/1998	16:05	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	5/2/2002	7:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/1/2004	21:20	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	7/14/2004	3:48	CST	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
CALHOUN	MCLEAN CO.	KY	5/25/2006	17:15	CST	Thunderstorm Wind	50 kts. EG	0	0	5.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/7/2006	15:25	CST	Hail	1.75 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/7/2006	15:40	CST	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/1/2007	1:49	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	2/5/2008	22:40	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	3/28/2009	16:36	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	8/31/2013	23:40	CST-6	Thunderstorm Wind	50 kts. MG	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	12/21/2013	18:30	CST-6	Thunderstorm Wind	65 kts. EG	0	0	80.00K	0.00K
CALHOUN	MCLEAN CO.	KY	10/6/2014	16:40	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
CALHOUN	MCLEAN CO.	KY	6/23/2016	21:49	CST-6	Thunderstorm Wind	61 kts. EG	0	0	15.00K	0.00K

City of Island "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**5.00K**	**0.00K**
ISLAND	MCLEAN CO.	KY	11/25/1998	17:25	CST	Hail	0.75 in.	0	0	0.00K	0.00K
ISLAND	MCLEAN CO.	KY	5/4/2003	14:43	CST	Hail	0.88 in.	0	0	0.00K	0.00K
ISLAND	MCLEAN CO.	KY	8/14/2005	15:09	CST	Hail	0.88 in.	0	0	0.00K	0.00K
ISLAND	MCLEAN CO.	KY	8/14/2005	15:09	CST	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
ISLAND	MCLEAN CO.	KY	5/25/2006	20:28	CST	Hail	0.88 in.	0	0	0.00K	0.00K
ISLAND	MCLEAN CO.	KY	4/10/2009	11:08	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

City of Livermore "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 134.00K**	**0.00K**
LIVERMORE	MCLEAN CO.	KY	5/23/2000	22:49	CST	Thunderstorm Wind	52 kts. E	0	0	2.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	4/10/2001	17:08	CST	Thunderstorm Wind	70 kts. E	0	0	125.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	7/4/2001	9:45	CST	Lightning		0	0	2.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	4/24/2002	17:02	CST	Hail	0.75 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/4/2003	22:45	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/10/2004	20:25	CST	Hail	0.88 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/10/2004	20:41	CST	Hail	0.88 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	7/22/2004	16:37	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/19/2005	16:45	CST	Hail	1.75 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	4/7/2006	17:53	CST	Hail	1.00 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	5/25/2006	19:06	CST	Hail	0.88 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	4/26/2011	20:57	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	4/25/2015	17:12	CST-6	Thunderstorm Wind	56 kts. MG	0	0	0.00K	0.00K
LIVERMORE	MCLEAN CO.	KY	6/23/2019	17:23	CST-6	Thunderstorm Wind	61 kts. EG	0	0	5.00K	0.00K

City of Sacramento "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
SACREMENTO	MCLEAN CO.	KY	6/4/2001	3:45	CST	Hail	1.00 in.	0	0	0.00K	0.00K
SACREMENTO	MCLEAN CO.	KY	9/23/2001	17:07	CST	Thunderstorm Wind	56 kts. M	0	0	0.00K	0.00K
SACREMENTO	MCLEAN CO.	KY	4/28/2002	2:34	CST	Thunderstorm Wind	60 kts. E	0	0	40.00K	0.00K
SACRAMENTO	MCLEAN CO.	KY	2/27/2009	1:50	CST-6	Thunderstorm Wind	70 kts. EG	0	0	150.00K	0.00K
SACRAMENTO	MCLEAN CO.	KY	4/26/2011	20:35	CST-6	Hail	1.75 in.	0	0	100.00K	0.00K
SACRAMENTO	MCLEAN CO.	KY	3/27/2017	13:05	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

Ohio County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
BEDA	OHIO CO.	KY	7/2/1996	20:08	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	3/28/1997	21:15	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HORSE BRANCH	OHIO CO.	KY	4/30/1997	20:30	EST	Thunderstorm Wind	50 kts.	0	0	0.50K	0.00K
COUNTYWIDE	OHIO CO.	KY	1/3/2000	20:00	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
PLEASANT RIDGE	OHIO CO.	KY	5/23/2000	9:30	EST	Hail	1.00 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	5/23/2000	9:50	EST	Hail	1.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	5/24/2000	0:05	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	8/27/2000	3:00	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	11/9/2000	13:15	EST	Thunderstorm Wind	70 kts. E	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	9/8/2001	17:25	EST	Hail	0.75 in.	0	0	0.00K	0.00K
ECHOLS	OHIO CO.	KY	10/24/2001	18:00	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	4/24/2002	18:15	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
MAGAN	OHIO CO.	KY	4/24/2002	19:25	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/24/2002	19:25	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
PRENTISS	OHIO CO.	KY	6/5/2002	16:25	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
JINGO	OHIO CO.	KY	9/15/2002	14:20	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
BUFORD	OHIO CO.	KY	5/11/2003	1:35	EST	Thunderstorm Wind	60 kts. EG	0	0	50.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	7/21/2003	12:05	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	7/22/2004	17:50	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEDA	OHIO CO.	KY	5/19/2005	17:58	EST	Hail	1.75 in.	0	0	0.00K	0.00K
OLATON	OHIO CO.	KY	8/14/2005	19:40	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	3/9/2006	21:35	EST	Thunderstorm Wind	60 kts. EG	0	0	10.00K	0.00K
DEANEFIELD	OHIO CO.	KY	5/25/2006	19:00	EST	Hail	1.00 in.	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	7/21/2006	15:10	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
COUNTYWIDE	OHIO CO.	KY	8/10/2006	16:50	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HEFLIN	OHIO CO.	KY	10/18/2007	19:34	CST-6	Thunderstorm Wind	60 kts. EG	0	0	5.00K	0.00K
JINGO	OHIO CO.	KY	10/18/2007	19:48	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
HORSE BRANCH	OHIO CO.	KY	3/8/2009	14:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CROMWELL	OHIO CO.	KY	9/26/2009	16:45	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ELLMITCH	OHIO CO.	KY	6/2/2010	13:49	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HORTON	OHIO CO.	KY	6/2/2010	14:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
NARROWS	OHIO CO.	KY	8/14/2010	14:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

DEANEFIELD	OHIO CO.	KY	10/26/2010	8:34	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
PRENTISS	OHIO CO.	KY	4/4/2011	11:13	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DEANEFIELD	OHIO CO.	KY	4/19/2011	22:14	CST-6	Thunderstorm Wind	51 kts. MG	0	0	0.00K	0.00K
OLATON	OHIO CO.	KY	4/19/2011	22:21	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
MATANZAS	OHIO CO.	KY	4/23/2011	15:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DUKEHURST	OHIO CO.	KY	4/26/2011	17:01	CST-6	Hail	2.75 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/26/2011	17:09	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	4/26/2011	17:12	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DUKEHURST	OHIO CO.	KY	6/5/2011	10:53	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DEANEFIELD	OHIO CO.	KY	6/15/2011	15:22	CST-6	Hail	1.25 in.	0	0	0.00K	0.00K
BAIZETOWN	OHIO CO.	KY	6/15/2011	16:03	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HAYNESVILLE	OHIO CO.	KY	1/23/2012	0:19	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HORTON	OHIO CO.	KY	3/2/2012	15:05	CST-6	Thunderstorm Wind	70 kts. MG	0	0	0.00K	0.00K
ARNOLD	OHIO CO.	KY	3/2/2012	15:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
RALPH	OHIO CO.	KY	5/1/2012	12:23	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
MAGAN	OHIO CO.	KY	5/5/2012	1:28	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROSINE	OHIO CO.	KY	5/31/2012	16:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CROMWELL	OHIO CO.	KY	7/2/2012	13:59	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BEDA	OHIO CO.	KY	7/19/2012	17:00	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	7/19/2012	17:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
WYSOX	OHIO CO.	KY	1/30/2013	2:18	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ROSINE	OHIO CO.	KY	2/20/2014	21:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
AETNAVILLE	OHIO CO.	KY	7/7/2014	17:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TAFFY	OHIO CO.	KY	10/6/2014	17:04	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
JINGO	OHIO CO.	KY	10/6/2014	17:15	CST-6	Hail	1.50 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	10/6/2014	17:21	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	10/6/2014	17:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FLINT SPGS	OHIO CO.	KY	4/8/2015	14:13	CST-6	Hail	2.00 in.	0	0	0.00K	0.00K
HEFLIN	OHIO CO.	KY	6/26/2015	13:37	CST-6	Thunderstorm Wind	52 kts. EG	0	0	15.00K	0.00K
HAYNESVILLE	OHIO CO.	KY	6/26/2015	14:04	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
RENDER	OHIO CO.	KY	12/23/2015	17:40	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
ROSINE	OHIO CO.	KY	12/23/2015	17:51	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BEDA	OHIO CO.	KY	4/26/2016	18:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	5.00K	0.00K
ROSINE	OHIO CO.	KY	4/27/2016	17:50	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

DUNDEE	OHIO CO.	KY	6/15/2016	13:39	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ECHOLS	OHIO CO.	KY	6/16/2016	16:33	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
ECHOLS	OHIO CO.	KY	6/16/2016	16:34	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
RALPH	OHIO CO.	KY	7/3/2016	17:03	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
JINGO	OHIO CO.	KY	7/7/2016	13:35	CST-6	Thunderstorm Wind	52 kts. MG	0	0	0.00K	0.00K
HORSE BRANCH	OHIO CO.	KY	4/5/2017	14:28	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
DUNDEE	OHIO CO.	KY	5/27/2017	17:20	CST-6	Thunderstorm Wind	53 kts. EG	0	0	0.00K	0.00K
BEDA	OHIO CO.	KY	10/7/2017	19:25	CST-6	Thunderstorm Wind	53 kts. EG	0	0	0.00K	0.00K
SUNNYDALE	OHIO CO.	KY	10/7/2017	19:40	CST-6	Thunderstorm Wind	53 kts. EG	0	0	30.00K	0.00K
TAFFY	OHIO CO.	KY	11/18/2017	15:26	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
JINGO	OHIO CO.	KY	4/3/2018	17:10	CST-6	Thunderstorm Wind	60 kts. MG	0	0	0.00K	0.00K
HAYNESVILLE	OHIO CO.	KY	5/2/2019	18:46	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEDA	OHIO CO.	KY	6/21/2019	16:49	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K
SHULTZTOWN	OHIO CO.	KY	6/21/2019	17:32	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
ROSINE	OHIO CO.	KY	6/26/2019	19:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CROMWELL	OHIO CO.	KY	6/26/2019	19:06	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
AETNAVILLE	OHIO CO.	KY	6/30/2019	19:10	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
TAFFY	OHIO CO.	KY	6/30/2019	19:27	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K
OLATON	OHIO CO.	KY	7/3/2019	14:17	CST-6	Thunderstorm Wind	53 kts. EG	0	0	0.00K	0.00K
DUKEHURST	OHIO CO.	KY	8/6/2019	16:21	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
MAGAN	OHIO CO.	KY	10/26/2019	15:05	CST-6	Thunderstorm Wind	51 kts. EG	0	0	0.00K	0.00K

City of Beaver Dam "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**1**	**120.00K**	**0.00K**
BEAVER DAM	OHIO CO.	KY	5/26/1996	1:25	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	7/14/1997	19:30	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/17/1999	18:20	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/4/2003	16:02	EST	Hail	0.75 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	8/2/2003	1:09	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/30/2004	21:22	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/1/2004	19:14	EST	Hail	1.00 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/1/2004	21:20	EST	Thunderstorm Wind	50 kts. EG	0	0	25.00K	0.00K
BEAVER DAM	OHIO CO.	KY	7/13/2004	19:40	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	4/22/2005	17:53	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/20/2006	22:00	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	6/20/2006	22:09	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	10/18/2007	20:57	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/15/2010	13:53	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/15/2010	14:13	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	4/23/2011	15:57	CST-6	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	4/26/2011	21:34	CST-6	Lightning		0	1	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	3/2/2012	15:12	CST-6	Thunderstorm Wind	56 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	3/15/2012	14:48	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	7/20/2015	22:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	3/27/2017	14:48	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	11/18/2017	15:25	CST-6	Thunderstorm Wind	53 kts. EG	0	0	25.00K	0.00K
BEAVER DAM	OHIO CO.	KY	10/31/2018	15:30	CST-6	Thunderstorm Wind	53 kts. EG	0	0	30.00K	0.00K
BEAVER DAM	OHIO CO.	KY	5/2/2019	17:57	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BEAVER DAM	OHIO CO.	KY	8/20/2019	14:45	CST-6	Thunderstorm Wind	53 kts. EG	0	0	40.00K	0.00K

City of Centertown "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**12**	**70.00K**	**0.00K**
CENTERTOWN	OHIO CO.	KY	6/14/1998	20:10	EST	Thunderstorm Wind	60 kts.	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	6/24/2000	22:10	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	9/23/2001	18:30	EST	Thunderstorm Wind	70 kts. E	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	5/11/2003	1:35	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	4/7/2006	19:02	EST	Thunderstorm Wind	60 kts. EG	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	4/7/2006	19:18	EST	Hail	1.00 in.	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	1/29/2008	18:44	CST-6	Thunderstorm Wind	56 kts. EG	0	0	50.00K	0.00K
CENTERTOWN	OHIO CO.	KY	3/28/2009	17:18	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	10/26/2010	8:46	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	5/25/2011	20:41	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
CENTERTOWN	OHIO CO.	KY	2/29/2012	7:08	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	3/2/2012	14:56	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	7/26/2012	17:52	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
CENTERTOWN	OHIO CO.	KY	12/23/2015	17:38	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CENTERTOWN	OHIO CO.	KY	6/16/2016	15:22	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

City of Fordsville "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**10.00K**	**0.00K**
FORDSVILLE	OHIO CO.	KY	6/14/1996	23:15	EST	Hail	1.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	5/23/2000	9:54	EST	Hail	1.00 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	5/25/2002	18:46	EST	Hail	0.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	5/24/2004	16:00	EST	Hail	0.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	4/7/2006	13:10	EST	Hail	1.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	4/7/2006	13:17	EST	Hail	1.00 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	6/11/2006	16:40	EST	Thunderstorm Wind	65 kts. EG	0	0	10.00K	0.00K
FORDSVILLE	OHIO CO.	KY	6/11/2006	16:42	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	6/11/2006	16:43	EST	Hail	1.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	5/15/2007	18:25	CST-6	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	4/7/2010	20:14	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	6/11/2010	7:35	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	6/15/2010	17:52	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	10/26/2010	9:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	4/26/2011	17:24	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	5/25/2011	20:46	CST-6	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	4/27/2016	17:55	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	7/3/2016	17:15	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	7/3/2016	17:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
FORDSVILLE	OHIO CO.	KY	3/27/2017	13:30	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

City of Hartford "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**125.00K**	**0.00K**
HARTFORD	OHIO CO.	KY	9/5/1996	18:15	EST	Thunderstorm Wind	60 kts.	0	0	5.00K	0.00K
HARTFORD	OHIO CO.	KY	4/8/1998	12:45	EST	Hail	0.75 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/29/1998	22:10	EST	Hail	0.75 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/29/1998	22:10	EST	Thunderstorm Wind	60 kts.	0	0	20.00K	0.00K
HARTFORD	OHIO CO.	KY	1/17/1999	21:10	EST	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/23/2000	23:58	EST	Thunderstorm Wind	54 kts. M	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/24/2000	0:05	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/4/2001	13:25	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	9/8/2001	17:20	EST	Thunderstorm Wind	70 kts. E	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	1/24/2002	0:15	EST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	9/15/2002	14:20	EST	Thunderstorm Wind	60 kts. E	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/27/2004	23:07	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/5/2004	13:30	EST	Thunderstorm Wind	61 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/5/2004	13:42	EST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/2/2006	20:37	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/2/2006	20:37	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/7/2006	12:55	EST	Hail	1.75 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/7/2006	12:55	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/7/2006	19:18	EST	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/20/2006	21:54	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/22/2006	12:16	EST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	10/18/2007	21:15	CST-6	Thunderstorm Wind	61 kts. EG	0	0	20.00K	0.00K
HARTFORD	OHIO CO.	KY	2/5/2008	20:30	CST-6	Thunderstorm Wind	61 kts. EG	0	0	30.00K	0.00K
HARTFORD	OHIO CO.	KY	6/22/2009	17:15	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/1/2010	22:32	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/23/2011	16:01	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	3/2/2012	15:00	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/19/2012	17:02	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/21/2015	20:22	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	7/20/2015	22:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	4/27/2016	16:56	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K

HARTFORD	OHIO CO.	KY	4/27/2016	17:25	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/10/2016	16:50	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/10/2016	16:50	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/10/2016	16:50	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/15/2016	13:46	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	8/5/2016	13:50	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	5/19/2017	15:07	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	10/7/2017	19:25	CST-6	Thunderstorm Wind	60 kts. EG	0	0	20.00K	0.00K
HARTFORD	OHIO CO.	KY	5/2/2019	18:05	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
HARTFORD	OHIO CO.	KY	6/23/2019	17:35	CST-6	Thunderstorm Wind	54 kts. EG	0	0	20.00K	0.00K

City of Rockport "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
ROCKPORT	OHIO CO.	KY	5/15/2010	13:58	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
ROCKPORT	OHIO CO.	KY	8/6/2019	16:22	CST-6	Thunderstorm Wind	54 kts. EG	0	0	0.00K	0.00K

Union County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zo	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
HENSHAV	UNION CC	KY	5/21/1998	15:30	CST	Thundersto	50 kts.		0	1 4.00K	0.00K
COUNTYV	UNION CC	KY	6/4/1999	20:00	CST	Thundersto	52 kts.		0	0 8.00K	0.00K
COUNTYV	UNION CC	KY	10/5/2000	17:11	CST	Thunderstorm Wind			0	0 25.00K	0.00K
SULLIVAI	UNION CC	KY	5/2/2002	6:35	CST	Hail	1.00 in.		0	0 0.00K	0.00K
COUNTYV	UNION CC	KY	11/10/2002	0:02	CST	Thundersto	50 kts. E		0	0 10.00K	0.00K
HENSHAV	UNION CC	KY	5/14/2003	23:45	CST	Hail	0.75 in.		0	0 0.00K	0.00K
COUNTYV	UNION CC	KY	5/27/2004	21:15	CST	Thundersto	65 kts. EG		0	0 75.00K	0.00K
COUNTYV	UNION CC	KY	5/30/2004	19:00	CST	Thundersto	53 kts. EG		0	0 0.00K	0.00K
HENSHAV	UNION CC	KY	11/15/2005	14:30	CST	Thundersto	55 kts. EG		0	0 3.00K	0.00K
PRIDE	UNION CC	KY	6/3/2006	19:32	CST	Hail	0.88 in.		0	0 0.00K	0.00K
HENSHAV	UNION CC	KY	3/28/2009	15:13	CST-6	Hail	1.00 in.		0	0 0.00K	0.00K
PRIDE	UNION CC	KY	3/28/2009	15:25	CST-6	Hail	2.75 in.		0	0 50.00K	0.00K
CULLEN	UNION CC	KY	7/23/2013	19:25	CST-6	Thundersto	52 kts. EG		0	0 10.00K	0.00K
ARNOLD	UNION CC	KY	6/4/2014	17:20	CST-6	Thundersto	61 kts. EG		0	0 5.00K	0.00K
SULLIVAI	UNION CC	KY	6/4/2014	17:24	CST-6	Thundersto	83 kts. EG		0	0 10.00K	0.00K
PRIDE	UNION CC	KY	8/6/2019	16:18	CST-6	Thundersto	50 kts. EG		0	0 1.00K	0.00K
MORGAN	UNION CC	KY	3/28/2020	18:54	CST-6	Thundersto	54 kts. MG		0	0 0.00K	0.00K

City of Morganfield "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zo	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
MORGAN	UNION CO	KY	7/2/1996	18:58	CST	Thunderstо	52 kts.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	6/13/1997	11:49	CST	Thunderstо	50 kts.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	7/14/1997	18:15	CST	Thunderstо	50 kts.		0	0 2.00K	0.00K
MORGAN	UNION CO	KY	6/14/1998	18:10	CST	Thunderstо	52 kts.		0	0 4.00K	0.00K
MORGAN	UNION CO	KY	6/29/1998	20:37	CST	Thunderstо	52 kts.		0	0 5.00K	0.00K
MORGAN	UNION CO	KY	4/10/1999	18:10	CST	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	10/24/2001	15:45	CST	Thunderstо	52 kts. E		0	0 20.00K	0.00K
MORGAN	UNION CO	KY	5/25/2002	16:15	CST	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	11/10/2002	0:45	CST	Thunderstо	50 kts. E		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	4/20/2003	16:00	CST	Hail	1.00 in.		0	0 2.00K	0.00K
MORGAN	UNION CO	KY	4/20/2003	16:05	CST	Thunderstо	55 kts. EG		0	0 10.00K	0.00K
MORGAN	UNION CO	KY	5/1/2003	12:13	CST	Hail	1.00 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	6/1/2004	16:40	CST	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	6/1/2004	18:30	CST	Hail	1.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	6/1/2004	19:57	CST	Thunderstо	50 kts. EG		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	5/19/2005	13:55	CST	Thunderstо	50 kts. EG		0	0 4.00K	0.00K
MORGAN	UNION CO	KY	5/25/2006	16:15	CST	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	5/25/2006	17:54	CST	Hail	1.00 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	5/25/2006	17:54	CST	Thunderstо	50 kts. EG		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	4/3/2007	16:22	CST-6	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	5/8/2009	13:38	CST-6	Thunderstо	50 kts. EG		0	0 10.00K	0.00K
MORGAN	UNION CO	KY	6/18/2009	2:05	CST-6	Hail	1.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	6/22/2009	18:40	CST-6	Thunderstо	65 kts. EG		0	0 200.00K	10.00K
MORGAN	UNION CO	KY	6/15/2010	15:55	CST-6	Thunderstо	52 kts. EG		0	0 10.00K	0.00K
MORGAN	UNION CO	KY	3/23/2011	12:30	CST-6	Hail	1.00 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	3/2/2012	13:40	CST-6	Hail	1.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	7/23/2013	19:25	CST-6	Thunderstо	74 kts. EG		0	0 75.00K	100.00K
MORGAN	UNION CO	KY	6/4/2014	16:39	CST-6	Hail	0.75 in.		0	0 0.00K	0.00K
MORGAN	UNION CO	KY	10/13/2014	16:02	CST-6	Thunderstо	52 kts. EG		0	0 10.00K	0.00K
MORGAN	UNION CO	KY	5/30/2015	15:10	CST-6	Lightning			0	0 5.00K	0.00K

MORGAN	UNION CO	KY	7/27/2015	16:30	CST-6	Thundersto	83 kts.	EG	0	0	50.00K	20.00K
MORGAN	UNION CO	KY	5/31/2018	10:10	CST-6	Thundersto	52 kts.	EG	0	0	2.00K	0.00K
MORGAN	UNION CO	KY	3/14/2019	10:25	CST-6	Hail	1.00 in.		0	0	0.00K	0.00K
MORGAN	UNION CO	KY	7/20/2020	11:02	CST-6	Thundersto	56 kts.	EG	0	0	15.00K	0.00K

City of Sturgis "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zo	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
STURGIS	UNION CC	KY	6/14/1998	17:47	CST	Thundersto	60 kts.		0	0	100.00K	0.00K
STURGIS	UNION CC	KY	5/17/1999	15:55	CST	Hail	0.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	10/5/2000	17:00	CST	Hail	1.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	8/29/2001	18:20	CST	Hail	0.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	3/9/2006	19:50	CST	Thundersto	52 kts. EG		0	0	2.00K	0.00K
STURGIS	UNION CC	KY	3/11/2006	4:30	CST	Hail	0.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	7/19/2007	17:26	CST-6	Thundersto	50 kts. EG		0	0	5.00K	0.00K
STURGIS	UNION CC	KY	4/10/2009	10:45	CST-6	Thundersto	61 kts. EG		0	0	10.00K	0.00K
STURGIS	UNION CC	KY	6/15/2010	15:42	CST-6	Thundersto	50 kts. EG		0	0	8.00K	0.00K
STURGIS	UNION CC	KY	10/12/2010	15:00	CST-6	Hail	0.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	3/23/2012	12:43	CST-6	Hail	0.75 in.		0	0	0.00K	0.00K
STURGIS	UNION CC	KY	7/1/2012	16:10	CST-6	Thundersto	65 kts. EG		0	0	30.00K	0.00K
STURGIS	UNION CC	KY	6/4/2014	17:15	CST-6	Thundersto	83 kts. EG		0	0	40.00K	0.00K
STURGIS	UNION CC	KY	12/31/2018	12:34	CST-6	Thundersto	43 kts. EG		0	0	5.00K	0.00K
STURGIS	UNION CC	KY	3/14/2019	10:52	CST-6	Hail	1.00 in.		0	0	0.00K	0.00K

City of Uniontown "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zo	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**1 35.05K**	**0.00K**
UNIONTO	UNION CC	KY	4/8/1998	18:30	CST	Thundersto	50 kts.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	6/12/1998	21:06	CST	Thundersto	52 kts.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	9/20/2000	15:56	CST	Thundersto	50 kts. E		0	0 10.00K	0.00K
UNIONTO	UNION CC	KY	4/7/2006	17:20	CST	Hail	0.75 in.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	7/21/2006	13:10	CST	Thundersto	52 kts. EG		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	6/18/2007	16:03	CST-6	Hail	0.75 in.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	5/25/2011	18:55	CST-6	Thundersto	52 kts. MG		0	0 20.00K	0.00K
UNIONTO	UNION CC	KY	11/21/2011	0:10	CST-6	Hail	1.00 in.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	4/26/2012	1:48	CST-6	Hail	1.00 in.		0	0 0.00K	0.00K
UNIONTO	UNION CC	KY	4/25/2015	16:09	CST-6	Hail	1.00 in.		0	0 0.00K	0.00K

City of Waverly "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zo	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0 3.00K**	**0.00K**
WAVERLY	UNION CO	KY	11/15/2005	14:40	CST	Thunderstо	56 kts.	EG	0	0 3.00K	0.00K

Webster County "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
ONTON	WEBSTER CO.	KY	7/22/1997	10:30	CST	Thunderstorm Wind	52 kts.	0	0	25.00K	0.00K
TILDEN	WEBSTER CO.	KY	6/10/1998	15:30	CST	Thunderstorm Wind	52 kts.	0	0	5.00K	0.00K
POOLE	WEBSTER CO.	KY	6/5/2002	14:00	CST	Thunderstorm Wind	55 kts. E	0	0	10.00K	0.00K
POOLE	WEBSTER CO.	KY	6/5/2002	14:00	CST	Hail	0.75 in.	0	0	0.00K	0.00K
POOLE	WEBSTER CO.	KY	5/6/2003	23:25	CST	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
BLACKFORD	WEBSTER CO.	KY	4/16/2006	6:35	CST	Hail	0.88 in.	0	0	0.00K	0.00K
POOLE	WEBSTER CO.	KY	6/20/2006	16:05	CST	Hail	1.00 in.	0	0	0.00K	0.00K
TILDEN	WEBSTER CO.	KY	7/21/2006	13:30	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
POOLE	WEBSTER CO.	KY	10/18/2007	16:05	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DERBY	WEBSTER CO.	KY	1/29/2008	17:35	CST-6	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
SHELTON	WEBSTER CO.	KY	4/22/2011	22:02	CST-6	Lightning		0	1	0.00K	0.00K
ELMWOOD	WEBSTER CO.	KY	5/25/2011	19:34	CST-6	Thunderstorm Wind	70 kts. EG	0	0	90.00K	0.00K
ONTON	WEBSTER CO.	KY	5/25/2011	19:45	CST-6	Thunderstorm Wind	74 kts. EG	0	0	1.000M	0.00K
WEBSTER CO ARPT	WEBSTER CO.	KY	7/2/2012	21:08	CST-6	Lightning		0	0	80.00K	0.00K
POOLE	WEBSTER CO.	KY	6/1/2013	2:05	CST-6	Thunderstorm Wind	52 kts. EG	0	0	10.00K	0.00K
ONTON	WEBSTER CO.	KY	6/1/2013	2:15	CST-6	Thunderstorm Wind	61 kts. EG	0	0	40.00K	0.00K
CATESVILLE	WEBSTER CO.	KY	12/23/2015	16:05	CST-6	Thunderstorm Wind	61 kts. EG	0	0	75.00K	0.00K
PRATT	WEBSTER CO.	KY	3/14/2019	11:20	CST-6	Thunderstorm Wind	56 kts. EG	0	0	3.00K	0.00K

City of Clay "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**144.00K**	**0.00K**
CLAY	WEBSTER CO.	KY	6/14/1998	18:00	CST	Thunderstorm Wind	60 kts.	0	0	25.00K	0.00K
CLAY	WEBSTER CO.	KY	10/5/2000	17:20	CST	Hail	1.75 in.	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	6/3/2006	19:53	CST	Hail	0.75 in.	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	6/23/2007	14:41	CST-6	Thunderstorm Wind	61 kts. EG	0	0	15.00K	0.00K
CLAY	WEBSTER CO.	KY	7/19/2007	17:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CLAY	WEBSTER CO.	KY	6/11/2009	16:01	CST-6	Thunderstorm Wind	52 kts. EG	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	3/2/2012	14:08	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	6/4/2014	17:45	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
CLAY	WEBSTER CO.	KY	7/6/2016	13:50	CST-6	Thunderstorm Wind	56 kts. EG	0	0	40.00K	0.00K
CLAY	WEBSTER CO.	KY	3/1/2017	5:32	CST-6	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
CLAY	WEBSTER CO.	KY	11/5/2017	20:50	CST-6	Thunderstorm Wind	65 kts. EG	0	0	30.00K	0.00K
CLAY	WEBSTER CO.	KY	6/24/2018	14:07	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	6/24/2018	14:10	CST-6	Thunderstorm Wind	61 kts. EG	0	0	10.00K	0.00K
CLAY	WEBSTER CO.	KY	3/14/2019	11:00	CST-6	Thunderstorm Wind	56 kts. EG	0	0	10.00K	0.00K
CLAY	WEBSTER CO.	KY	3/12/2020	14:55	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K

City of Dixon "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**335.00K**	**0.00K**
DIXON	WEBSTER CO.	KY	7/2/1996	19:25	CST	Thunderstorm Wind	52 kts.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	3/28/1997	19:10	CST	Hail	1.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	7/14/1997	18:30	CST	Thunderstorm Wind	50 kts.	0	0	5.00K	0.00K
DIXON	WEBSTER CO.	KY	6/11/1998	19:15	CST	Thunderstorm Wind	50 kts.	0	0	3.00K	0.00K
DIXON	WEBSTER CO.	KY	6/29/1998	20:55	CST	Thunderstorm Wind	55 kts.	0	0	10.00K	0.00K
DIXON	WEBSTER CO.	KY	5/2/2002	6:50	CST	Hail	1.00 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	5/25/2002	17:15	CST	Hail	0.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	8/22/2003	15:37	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	11/6/2005	2:20	CST	Thunderstorm Wind	56 kts. MG	0	0	250.00K	0.00K
DIXON	WEBSTER CO.	KY	3/9/2006	19:43	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	4/2/2006	18:40	CST	Thunderstorm Wind	52 kts. EG	0	0	4.00K	0.00K
DIXON	WEBSTER CO.	KY	4/7/2006	13:04	CST	Hail	1.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	10/18/2007	16:44	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	2/5/2008	22:05	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	10/6/2009	4:40	CST-6	Lightning		0	0	20.00K	0.00K
DIXON	WEBSTER CO.	KY	5/31/2012	15:11	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	4/16/2013	17:31	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	4/2/2014	17:34	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
DIXON	WEBSTER CO.	KY	5/29/2016	14:45	CST-6	Thunderstorm Wind	65 kts. EG	0	0	38.00K	0.00K

City of Providence "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**566.00K**	**0.00K**
PROVIDENCE	WEBSTER CO.	KY	5/5/1996	14:45	CST	Thunderstorm Wind		0	0	50.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/31/1998	19:15	CST	Hail	0.88 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	10/24/2001	16:15	CST	Thunderstorm Wind	50 kts. E	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/4/2003	13:55	CST	Hail	0.88 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/10/2003	23:45	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/26/2004	11:21	CST	Hail	1.00 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	7/6/2004	16:49	CST	Thunderstorm Wind	50 kts. EG	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	7/13/2004	20:17	CST	Hail	0.88 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/25/2006	20:15	CST	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/26/2011	0:12	CST-6	Thunderstorm Wind	56 kts. EG	0	0	20.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/26/2011	15:47	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	6/15/2011	15:53	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	2/22/2012	22:58	CST-6	Hail	0.88 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	12/23/2015	15:03	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/10/2016	15:20	CST-6	Hail	1.50 in.	0	0	10.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/27/2017	16:30	CST-6	Thunderstorm Wind	52 kts. EG	0	0	3.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	11/18/2017	14:27	CST-6	Thunderstorm Wind	65 kts. EG	0	0	450.00K	0.00K
PROVIDENCE	WEBSTER CO.	KY	6/23/2019	16:41	CST-6	Thunderstorm Wind	65 kts. EG	0	0	30.00K	0.00K

City of Slaughters "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**1.00K**	**0.00K**
SLAUGHTERS	WEBSTER CO.	KY	5/25/2006	20:02	CST	Hail	0.88 in.	0	0	0.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	3/2/2012	14:39	CST-6	Hail	1.75 in.	0	0	0.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	12/23/2015	16:18	CST-6	Hail	1.00 in.	0	0	0.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	3/31/2016	12:42	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	8/19/2017	8:15	CST-6	Hail	0.75 in.	0	0	0.00K	0.00K

City of Wheatcroft "Thunderstorm Wind, Hail, Lightning" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**38.00K**	**0.00K**
WHEATCROFT	WEBSTER CO.	KY	6/14/2000	18:42	CST	Thunderstorm Wind		0	0	5.00K	0.00K
WHEATCROFT	WEBSTER CO.	KY	10/5/2000	17:20	CST	Thunderstorm Wind		0	0	30.00K	0.00K
WHEATCROFT	WEBSTER CO.	KY	5/15/2007	16:45	CST-6	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
WHEATCROFT	WEBSTER CO.	KY	6/4/2014	17:35	CST-6	Thunderstorm Wind	65 kts. EG	0	0	0.00K	0.00K
WHEATCROFT	WEBSTER CO.	KY	5/27/2017	16:20	CST-6	Thunderstorm Wind	52 kts. EG	0	0	1.00K	0.00K

Daviess County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**28**	**68.284M**	**225.00K**
DAVIESS CO.	DAVIESS CO.	KY	12/9/1952	15:00	CST	Tornado	F3	0	3	0.00K	0.00K
DAVIESS CO.	DAVIESS CO.	KY	4/24/1958	4:20	CST	Tornado	F1	0	0	0.03K	0.00K
DAVIESS CO.	DAVIESS CO.	KY	5/31/1982	17:28	CST	Tornado	F2	0	0	2.500M	0.00K
DAVIESS CO.	DAVIESS CO.	KY	3/15/1984	18:20	CST	Tornado	F0	0	0	25.00K	0.00K
DAVIESS CO.	DAVIESS CO.	KY	5/5/1989	12:27	CST	Tornado	F2	0	1	250.00K	0.00K
DAVIESS CO.	DAVIESS CO.	KY	5/19/1989	18:23	CST	Tornado	F2	0	0	250.00K	0.00K
DAVIESS CO.	DAVIESS CO.	KY	5/19/1989	20:30	CST	Tornado	F2	0	0	250.00K	0.00K
ROME	DAVIESS CO.	KY	1/3/2000	16:06	CST	Tornado	F3	0	18	64.000M	0.00K
ST JOSEPH	DAVIESS CO.	KY	5/4/2003	22:45	CST	Tornado	F2	0	2	75.00K	0.00K
MASONVILLE	DAVIESS CO.	KY	5/30/2004	14:12	CST	Tornado	F0	0	0	0.00K	0.00K
UTICA	DAVIESS CO.	KY	11/15/2005	16:12	CST	Tornado	F0	0	0	0.00K	0.00K
THURSTON	DAVIESS CO.	KY	10/18/2007	17:10	CST-6	Tornado	EF2	0	0	50.00K	0.00K
GATEWOOD	DAVIESS CO.	KY	10/18/2007	17:15	CST-6	Tornado	EF0	0	0	3.00K	0.00K
ST JOSEPH	DAVIESS CO.	KY	10/18/2007	18:44	CST-6	Tornado	EF2	0	4	500.00K	200.00K
NEWMAN	DAVIESS CO.	KY	6/11/2009	16:04	CST-6	Tornado	EF0	0	0	0.00K	10.00K
THURSTON	DAVIESS CO.	KY	6/11/2009	16:36	CST-6	Tornado	EF0	0	0	0.00K	0.00K
STANLEY	DAVIESS CO.	KY	4/22/2011	22:27	CST-6	Tornado	EF0	0	0	3.00K	0.00K
BROWNWOOD MANOR	DAVIESS CO.	KY	3/2/2012	14:22	CST-6	Tornado	EF0	0	0	0.00K	0.00K
SUTHERLAND	DAVIESS CO.	KY	3/31/2016	13:02	CST-6	Tornado	EF1	0	0	100.00K	0.00K
PETTIT	DAVIESS CO.	KY	4/27/2016	17:22	CST-6	Tornado	EF0	0	0	100.00K	0.00K
DOYLE	DAVIESS CO.	KY	4/27/2016	17:36	CST-6	Tornado	EF1	0	0	75.00K	0.00K
STANLEY	DAVIESS CO.	KY	9/8/2018	14:51	CST-6	Tornado	EF1	0	0	100.00K	10.00K
SORGHO	DAVIESS CO.	KY	9/8/2018	15:00	CST-6	Tornado	EF0	0	0	0.00K	5.00K
YELVINGTON	DAVIESS CO.	KY	9/8/2018	15:30	CST-6	Tornado	EF1	0	0	3.00K	0.00K

City of Owensboro "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**8**	**11.550M**	**0.00K**
OWENSBORO	DAVIESS CO.	KY	10/18/2007	17:07	CST-6	Tornado	EF1	0	0	50.00K	0.00K
OWENSBORO	DAVIESS CO.	KY	10/18/2007	19:09	CST-6	Tornado	EF3	0	8	11.500M	0.00K
OWENSBORO	DAVIESS CO.	KY	3/28/2009	16:38	CST-6	Tornado	EF0	0	0	0.00K	0.00K

City of Whitesville "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**75.00K**	**0.00K**
WHITESVILLE	DAVIESS CO.	KY	9/22/2006	18:38	CST	Tornado	F1	0	0	75.00K	0.00K

Hancock County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**220.00K**	**50.00K**
HANCOCK CO.	HANCOCK CO.	KY	12/9/1952	15:30	CST	Tornado	F3	0	0	0.00K	0.00K
HANCOCK CO.	HANCOCK CO.	KY	6/13/1970	6:45	CST	Tornado	F1	0	0	2.50K	0.00K
HANCOCK CO.	HANCOCK CO.	KY	6/16/1987	18:15	EST	Tornado	F0	0	0	2.50K	0.00K
HANCOCK CO.	HANCOCK CO.	KY	6/6/1990	14:15	CST	Tornado	F0	0	0	25.00K	0.00K
HANCOCK CO.	HANCOCK CO.	KY	6/23/1992	19:05	CST	Tornado	F0	0	0	0.00K	0.00K
UTILITY	HANCOCK CO.	KY	10/18/2007	17:18	CST-6	Tornado	EF1	0	0	150.00K	50.00K
CHAMBERS	HANCOCK CO.	KY	3/2/2012	14:38	CST-6	Tornado	EF1	0	0	40.00K	0.00K

City of Lewisport "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**6.00K**	**0.00K**
LEWISPORT	HANCOCK CO.	KY	9/8/2018	16:42	CST-6	Tornado	EF0	0	0	6.00K	0.00K

Henderson County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**13**	**3.800M**	**5.00K**
HENDERSON CO.	HENDERSON CO.	KY	4/3/1956	16:30	CST	Tornado	F3	0	0	25.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	6/28/1960	23:45	CST	Tornado	F3	0	0	0.25K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	7/6/1966	14:20	CST	Tornado	F1	0	0	25.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	12/11/1967	14:30	CST	Tornado	F2	0	0	0.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	12/15/1971	3:30	CST	Tornado	F2	0	0	25.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	6/20/1973	17:00	CST	Tornado	F1	0	0	25.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	4/11/1979	20:40	CST	Tornado	F2	0	5	0.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	5/31/1982	17:17	CST	Tornado	F2	0	4	2.500M	0.00K
HENDERSON CO.	HENDERSON CO.	KY	5/19/1989	18:05	CST	Tornado	F1	0	0	25.00K	0.00K
HENDERSON CO.	HENDERSON CO.	KY	6/6/1990	13:07	CST	Tornado	F0	0	0	2.50K	0.00K
SPOTTSVILLE	HENDERSON CO.	KY	5/27/2004	21:32	CST	Tornado	F1	0	0	45.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	11/6/2005	1:39	CST	Tornado	F3	0	0	100.00K	0.00K
KINGS MILLS	HENDERSON CO.	KY	3/28/2009	15:44	CST-6	Tornado	EF3	0	2	500.00K	0.00K
CARLINBURG	HENDERSON CO.	KY	6/11/2009	16:02	CST-6	Tornado	EF0	0	0	0.00K	0.00K
TUNNEL HILL	HENDERSON CO.	KY	4/22/2011	22:00	CST-6	Tornado	EF2	0	0	80.00K	0.00K
WHITE CITY	HENDERSON CO.	KY	2/29/2012	5:57	CST-6	Tornado	EF1	0	2	80.00K	0.00K
ROCK SPGS	HENDERSON CO.	KY	3/2/2012	13:55	CST-6	Tornado	EF0	0	0	50.00K	0.00K
KINGS MILLS	HENDERSON CO.	KY	11/17/2013	14:55	CST-6	Tornado	EF2	0	0	250.00K	0.00K
NIAGARA	HENDERSON CO.	KY	8/17/2014	15:33	CST-6	Tornado	EF1	0	0	40.00K	5.00K
DIXIE	HENDERSON CO.	KY	4/25/2015	16:24	CST-6	Tornado	EF0	0	0	20.00K	0.00K
SMITH MILLS	HENDERSON CO.	KY	3/14/2019	10:14	CST-6	Tornado	EF0	0	0	4.00K	0.00K
WELLS STORE	HENDERSON CO.	KY	3/28/2020	19:18	CST-6	Tornado	EF1	0	0	3.00K	0.00K

City of Corydon "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**21**	**850.00K**	**0.00K**
CORYDON	HENDERSON CO.	KY	5/6/2003	23:00	CST	Tornado	F1	0	0	350.00K	0.00K
CORYDON	HENDERSON CO.	KY	3/28/2020	18:58	CST-6	Tornado	EF2	0	0	500.00K	0.00K

City of Henderson "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**21**	**7.000M**	**0.00K**
HENDERSON	HENDERSON CO.	KY	11/6/2005	1:50	CST	Tornado	F3	0	8	7.000M	0.00K

City of Robards "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**21**	**5.00K**	**0.00K**
ROBARDS	HENDERSON CO.	KY	2/7/2019	11:57	CST-6	Tornado	EF1	0	0	5.00K	0.00K
ROBARDS	HENDERSON CO.	KY	3/14/2019	11:43	CST-6	Tornado	EF0	0	0	0.00K	0.00K

McLean County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**400.00K**	**0.00K**
BEECH GROVE	MCLEAN CO.	KY	10/18/2007	18:32	CST-6	Tornado	EF2	0	0	400.00K	0.00K

City of Calhoun "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**1.003M**	**0.00K**
CALHOUN	MCLEAN CO.	KY	1/23/2002	22:27	CST	Tornado	F2	0	0	1.000M	0.00K
CALHOUN	MCLEAN CO.	KY	11/15/2005	16:04	CST	Tornado	F1	0	0	3.00K	0.00K

City of Livermore "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:									**0**	**0**	**0.00K**	**0.00K**
LIVERMORE	MCLEAN CO.	KY	3/1/1997	18:01	CST	Tornado	F0		0	0	0.00K	0.00K

City of Sacramento "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**2**	**400.00K**	**0.00K**
SACRAMENTO	MCLEAN CO.	KY	5/11/2003	0:18	CST	Tornado	F3	0	2	400.00K	0.00K

Ohio County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**1**	**8.077M**	**0.00K**
OHIO CO.	OHIO CO.	KY	5/2/1954	12:00	CST	Tornado	F1	0	0	2.50K	0.00K
OHIO CO.	OHIO CO.	KY	5/7/1961	9:48	CST	Tornado	F3	0	0	2.500M	0.00K
OHIO CO.	OHIO CO.	KY	5/7/1961	9:56	CST	Tornado	F3	0	0	2.500M	0.00K
OHIO CO.	OHIO CO.	KY	8/13/1966	17:25	CST	Tornado	F2	0	0	25.00K	0.00K
OHIO CO.	OHIO CO.	KY	11/19/1970	22:25	CST	Tornado	F2	0	0	0.00K	0.00K
OHIO CO.	OHIO CO.	KY	4/27/1971	18:10	CST	Tornado	F3	0	0	2.500M	0.00K
TAYLOR MINES	OHIO CO.	KY	11/18/2017	15:20	CST-6	Tornado	EF1	0	1	250.00K	0.00K
RENDER	OHIO CO.	KY	6/25/2018	9:50	CST-6	Tornado	EF1	0	0	300.00K	0.00K
ROSINE	OHIO CO.	KY	3/25/2021	19:32	CST-6	Tornado	EF0	0	0	0.00K	0.00K

City of Centertown " Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**500.00k**	**0.00K**
CENTERTOWN	OHIO CO.	KY	4/28/2002	3:40	EST	Tornado	F1	0	0	500.00K	0.00K

City of Hartford " Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**150.00K**	**0.00K**
HARTFORD	OHIO CO.	KY	5/10/2016	17:06	CST-6	Tornado	EF2	0	0	150.00K	0.00K

Union County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**15**	**4.0165M**	**0.00K**
UNION CO.	UNION CO.	KY	4/3/1956	17:30	CST	Tornado	F0	0	1	2.50K	0.00K
UNION CO.	UNION CO.	KY	2/10/1959	6:15	CST	Tornado	F1	0	0	25.00K	0.00K
UNION CO.	UNION CO.	KY	6/28/1960	23:30	CST	Tornado	F3	0	12	2.500M	0.00K
UNION CO.	UNION CO.	KY	5/26/1962	15:25	CST	Tornado	F0	0	0	0.00K	0.00K
UNION CO.	UNION CO.	KY	4/19/1973	16:30	CST	Tornado	F2	0	0	25.00K	0.00K
UNION CO.	UNION CO.	KY	6/2/1973	18:30	CST	Tornado	F1	0	0	25.00K	0.00K
UNION CO.	UNION CO.	KY	3/29/1985	19:45	CST	Tornado	F0	0	0	25.00K	0.00K
UNION CO.	UNION CO.	KY	3/29/1985	19:55	CST	Tornado	F0	0	0	25.00K	0.00K
BOXVILLE	UNION CO.	KY	5/6/2003	22:52	CST	Tornado	F1	0	0	400.00K	0.00K
YUBA	UNION CO.	KY	3/28/2009	15:23	CST-6	Tornado	EF1	0	0	60.00K	0.00K
BOXVILLE	UNION CO.	KY	3/28/2009	15:40	CST-6	Tornado	EF3	0	0	40.00K	0.00K
YUBA	UNION CO.	KY	4/22/2011	21:50	CST-6	Tornado	EF2	0	0	300.00K	0.00K
CHAPMAN	UNION CO.	KY	3/2/2012	13:38	CST-6	Tornado	EF2	0	1	0.00K	0.00K
CHAPMAN	UNION CO.	KY	11/17/2013	14:41	CST-6	Tornado	EF3	0	0	500.00K	0.00K
SULLIVAN	UNION CO.	KY	6/4/2014	17:30	CST-6	Tornado	EF1	0	0	4.00K	0.00K
SPRING GROVE	UNION CO.	KY	5/10/2016	17:06	CST-6	Tornado	EF1	0	0	25.00K	0.00K
HENSHAW	UNION CO.	KY	3/14/2019	9:10	CST-6	Tornado	EF1	0	1	60.00K	0.00K

City of Morganfield "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**2**	**200.00K**	**0.00K**
MORGANFIELD	UNION CO.	KY	2/27/1999	16:00	CST	Tornado	F1	0	2	200.00K	0.00K

City of Sturgis "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**20.00K**	**0.00K**
STURGIS	UNION CO.	KY	6/4/2014	17:16	CST-6	Tornado	EF1	0	0	20.00K	0.00K

Webster County "Tornado" Events 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**1**	**39**	**24.989M**	**0.00K**
WEBSTER CO.	WEBSTER CO.	KY	4/3/1956	16:00	CST	Tornado	F3	1	2	25.00K	0.00K
WEBSTER CO.	WEBSTER CO.	KY	5/6/1967	21:15	CST	Tornado	F2	0	2	250.00K	0.00K
WEBSTER CO.	WEBSTER CO.	KY	4/11/1979	20:20	CST	Tornado	F2	0	0	0.00K	0.00K
WEBSTER CO.	WEBSTER CO.	KY	4/3/1989	20:00	CST	Tornado	F2	0	1	2.500M	0.00K
DIAMOND	WEBSTER CO.	KY	1/3/2000	15:23	CST	Tornado	F3	0	0	2.400M	0.00K
PROVIDENCE	WEBSTER CO.	KY	4/28/2002	1:50	CST	Tornado	F3	0	26	15.000M	0.00K
CLAY	WEBSTER CO.	KY	5/4/2003	21:53	CST	Tornado	F1	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	5/4/2003	21:56	CST	Tornado	F1	0	0	350.00K	0.00K
CLAY	WEBSTER CO.	KY	5/4/2003	21:58	CST	Tornado	F2	0	1	1.000M	0.00K
PROVIDENCE	WEBSTER CO.	KY	5/30/2004	19:30	CST	Tornado	F1	0	0	150.00K	0.00K
BLACKFORD	WEBSTER CO.	KY	11/6/2005	1:55	CST	Tornado	F2	0	0	75.00K	0.00K
DIXON	WEBSTER CO.	KY	9/22/2006	16:17	CST	Tornado	F1	0	0	150.00K	0.00K
DIXON	WEBSTER CO.	KY	10/18/2007	18:09	CST-6	Tornado	EF2	0	5	2.500M	0.00K
DIXON	WEBSTER CO.	KY	3/8/2009	13:45	CST-6	Tornado	EF1	0	0	40.00K	0.00K
TILDEN	WEBSTER CO.	KY	4/22/2011	21:54	CST-6	Tornado	EF2	0	2	500.00K	0.00K
DIXON	WEBSTER CO.	KY	3/2/2012	14:06	CST-6	Tornado	EF0	0	0	0.00K	0.00K
WHEATCROFT	WEBSTER CO.	KY	2/20/2014	18:42	CST-6	Tornado	EF0	0	0	30.00K	0.00K
ROCK SPG	WEBSTER CO.	KY	6/4/2014	17:32	CST-6	Tornado	EF1	0	0	10.00K	0.00K
SEBREE	WEBSTER CO.	KY	7/5/2015	14:26	CST-6	Tornado	EF0	0	0	0.00K	0.00K
ELMWOOD	WEBSTER CO.	KY	4/27/2016	16:15	CST-6	Tornado	EF0	0	0	0.00K	0.00K
PRATT	WEBSTER CO.	KY	3/14/2019	11:42	CST-6	Tornado	EF0	0	0	8.00K	0.00K
SLAUGHTERS	WEBSTER CO.	KY	3/14/2019	12:15	CST-6	Tornado	EF0	0	0	1.00K	0.00K

City of Clay "Tornado" Events, 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**1**	**1.350M**	**0.00K**
CLAY	WEBSTER CO.	KY	5/4/2003	21:53	CST	Tornado	F1	0	0	0.00K	0.00K
CLAY	WEBSTER CO.	KY	5/4/2003	21:56	CST	Tornado	F1	0	0	350.00K	0.00K
CLAY	WEBSTER CO.	KY	5/4/2003	21:58	CST	Tornado	F2	0	1	1.000M	0.00K

City of Dixon "Tornado" Events, 1950- 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**5**	**2.540M**	**0.00K**
DIXON	WEBSTER CO.	KY	9/22/2006	16:17	CST	Tornado	F1	0	0	150.00K	0.00K
DIXON	WEBSTER CO.	KY	10/18/2007	18:09	CST-6	Tornado	EF2	0	5	2.500M	0.00K
DIXON	WEBSTER CO.	KY	3/8/2009	13:45	CST-6	Tornado	EF1	0	0	40.00K	0.00K
DIXON	WEBSTER CO.	KY	3/2/2012	14:06	CST-6	Tornado	EF0	0	0	0.00K	0.00K

City of Sebree "Tornado" Events, 1950 - 2020

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
SEBREE	WEBSTER CO.	KY	7/5/2015	14:26	CST-6	Tornado	EF0	0	0	0.00K	0.00K

Wildfire Occurences 2013-2018				
County	**Year**	**# of Fires**	**# Acres Burned**	**# Acres Vulnerable**
Daviess	2013	1	3.5	46,880
	2014	1	4	
	2017	1	35	
Hancock	2013	2	15	34,130
	2014	1	8	
	2016	2	108	
	2019	1	0.5	
Henderson	2013	2	68.1	21,600
	2014	2	122	
	2015	1	25	
	2017	4	27	
McLean	2013	1	30	33,460
	2019	1	10	
Ohio	2014	4	122.4	139,270
	2015	1	65	
	2016	1	5	
	2017	3	9.5	
	2020	3	7.5	
Union	2013	1	9	21,340
	2015	1	3	
	2017	2	24	
	2019	1	8	
Webster	2013	2	29	43,290
	2014	1	25	
	2015	1	20	
	2016	2	2.1	
	2019	1	7	

Daviess County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**17.375M**	**0.00K**
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/19/1996	7:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/8/1997	15:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/15/1997	4:00	CST	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/30/1997	14:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/4/1998	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/1/1999	20:00	CST	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/8/1999	5:00	CST	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/22/2000	8:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/2/2000	16:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/13/2000	16:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/16/2000	18:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/26/2000	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/12/2001	3:00	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/21/2001	21:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/19/2002	0:15	CST	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/4/2002	8:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/15/2003	23:00	CST	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/25/2004	5:00	CST	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/22/2004	3:00	CST	Winter Storm		0	0	40.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/11/2008	12:00	CST-6	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/21/2008	6:00	CST-6	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/7/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/15/2008	15:00	CST-6	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/26/2009	22:00	CST-6	Ice Storm		0	0	17.200M	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/29/2010	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/8/2010	20:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/14/2010	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/15/2010	22:00	CST-6	Ice Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/20/2011	9:00	CST-6	Winter Storm		0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/25/2011	18:00	CST-6	Heavy Snow		0	0	0.00K	0.00K

DAVIESS (ZONE)	DAVIESS (ZONE)	KY	12/5/2013	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/2/2014	14:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/4/2014	13:00	CST-6	Winter Storm	0	0	20.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/2/2014	8:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/16/2014	18:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/20/2015	16:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/4/2015	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/22/2016	5:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/12/2018	2:00	CST-6	Winter Storm	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	1/15/2018	10:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	3/11/2018	17:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	11/14/2018	17:00	CST-6	Winter Storm	0	0	15.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/10/2021	3:00	CST-6	Winter Storm	0	0	100.00K	0.00K
DAVIESS (ZONE)	DAVIESS (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K

Hancock County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/6/1996	15:00	EST	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/19/1996	5:00	EST	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/3/1998	19:00	EST	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/7/1999	21:00	EST	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/15/2003	16:00	EST	Ice Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	12/22/2004	5:40	EST	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/11/2008	16:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/21/2008	10:00	EST-5	Ice Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/7/2008	7:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	12/15/2008	23:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/27/2009	0:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/29/2010	21:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/8/2010	23:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/14/2010	23:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/20/2011	11:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	12/6/2013	10:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/2/2014	16:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/4/2014	16:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/2/2014	15:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/16/2015	2:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/4/2015	17:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/20/2016	7:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/22/2016	8:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/12/2018	9:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	1/15/2018	20:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	3/11/2018	20:00	EST-5	Winter Storm		0	0	0.00K	0.00K
HANCOCK (ZONE)	HANCOCK (ZONE)	KY	2/10/2021	1:00	EST-5	Ice Storm		0	0	0.00K	0.00K

Henderson County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**11.275M**	**0.00K**
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/19/1996	7:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/16/1996	19:30	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/8/1997	15:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/15/1997	4:00	CST	Ice Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/30/1997	14:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/4/1998	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/1/1999	20:00	CST	Ice Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/8/1999	5:00	CST	Ice Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/22/2000	8:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/2/2000	16:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/13/2000	11:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/16/2000	18:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/26/2000	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/12/2001	3:00	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/21/2001	21:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/19/2002	0:15	CST	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/4/2002	8:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/23/2002	22:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/15/2003	23:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/25/2004	5:00	CST	Ice Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/22/2004	3:00	CST	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/11/2008	12:00	CST-6	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/21/2008	6:00	CST-6	Ice Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/7/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/15/2008	15:00	CST-6	Winter Storm		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/26/2009	22:00	CST-6	Ice Storm		0	0	11.200M	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/29/2010	18:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/8/2010	20:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/14/2010	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K

HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/15/2010	22:00	CST-6	Ice Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/26/2012	2:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	12/5/2013	20:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/2/2014	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/4/2014	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/2/2014	6:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	11/16/2014	18:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/20/2015	16:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	3/4/2015	12:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/22/2016	4:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	1/12/2018	1:00	CST-6	Winter Storm	0	0	0.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/10/2021	3:00	CST-6	Winter Storm	0	0	75.00K	0.00K
HENDERSON (ZONE)	HENDERSON (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K

McLean County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**11.465M**	**0.00K**
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/19/1996	7:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/8/1997	15:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/30/1997	14:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/4/1998	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/1/1999	20:00	CST	Ice Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/8/1999	5:00	CST	Ice Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/22/2000	8:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/2/2000	16:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/13/2000	16:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/16/2000	18:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/26/2000	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/12/2001	3:00	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/21/2001	21:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/19/2002	0:15	CST	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/4/2002	8:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/15/2003	23:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/25/2004	5:00	CST	Ice Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/22/2004	3:00	CST	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/11/2008	12:00	CST-6	Winter Storm		0	0	500.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/7/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/15/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/26/2009	22:00	CST-6	Ice Storm		0	0	10.900M	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/29/2010	17:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/8/2010	20:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/15/2010	22:00	CST-6	Ice Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/20/2011	9:00	CST-6	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/25/2011	18:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	12/5/2013	23:00	CST-6	Winter Storm		0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/2/2014	14:00	CST-6	Winter Storm		0	0	0.00K	0.00K

MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/4/2014	13:00	CST-6	Winter Storm	0	0	50.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/2/2014	8:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/20/2015	16:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/4/2015	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/22/2016	3:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/14/2016	10:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/12/2018	2:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	1/15/2018	13:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	3/11/2018	17:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	11/14/2018	16:00	CST-6	Winter Storm	0	0	15.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/10/2021	3:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K
MCLEAN (ZONE)	MCLEAN (ZONE)	KY	2/17/2021	18:00	CST-6	Winter Storm	0	0	0.00K	0.00K

Ohio County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**0.00K**	**0.00K**
OHIO (ZONE)	OHIO (ZONE)	KY	1/6/1996	15:00	EST	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/19/1996	5:00	EST	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/3/1998	19:00	EST	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/15/2003	16:00	EST	Ice Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/22/2004	8:45	EST	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/21/2008	10:00	CST-6	Ice Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/7/2008	7:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/15/2008	23:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/27/2009	0:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/29/2010	21:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/25/2011	22:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	12/6/2013	10:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/2/2014	20:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/4/2014	15:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/2/2014	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/4/2015	18:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/20/2016	6:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/22/2016	6:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/14/2016	11:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/12/2018	9:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	1/15/2018	22:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	3/11/2018	20:00	CST-6	Winter Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	11/14/2018	22:37	CST-6	Ice Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/10/2021	1:00	CST-6	Ice Storm		0	0	0.00K	0.00K
OHIO (ZONE)	OHIO (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm		0	0	0.00K	0.00K

Union County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**9.260M**	**0.00K**
UNION (ZONE)	UNION (ZONE)	KY	3/19/1996	7:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/16/1996	19:30	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/8/1997	15:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/15/1997	4:00	CST	Ice Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	4/10/1997	7:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/30/1997	14:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/4/1998	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/1/1999	20:00	CST	Ice Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/8/1999	5:00	CST	Ice Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/22/2000	8:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/2/2000	16:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/13/2000	11:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/16/2000	18:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/26/2000	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/21/2001	21:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/19/2002	0:15	CST	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/4/2002	8:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/23/2002	22:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/15/2003	23:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/25/2004	5:00	CST	Ice Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/22/2004	3:00	CST	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/11/2008	11:00	CST-6	Winter Storm		0	0	500.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/21/2008	6:00	CST-6	Ice Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/7/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/15/2008	14:00	CST-6	Winter Storm		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/26/2009	22:00	CST-6	Ice Storm		0	0	8.700M	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/29/2010	17:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/8/2010	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	12/26/2012	0:00	CST-6	Winter Storm		0	0	0.00K	0.00K

UNION (ZONE)	UNION (ZONE)	KY	12/5/2013	20:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/2/2014	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/4/2014	12:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/2/2014	6:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	11/16/2014	18:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/20/2015	16:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/4/2015	12:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/22/2016	3:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	1/12/2018	1:00	CST-6	Winter Storm	0	0	0.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	3/11/2018	15:00	CST-6	Heavy Snow	0	0	10.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/10/2021	3:00	CST-6	Winter Storm	0	0	50.00K	0.00K
UNION (ZONE)	UNION (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K

Webster County "Winter Weather" Events 1996 - Present

Location	County/Zone	St.	Date	Time	T.Z.	Type	Mag	Dth	Inj	PrD	CrD
Totals:								**0**	**0**	**11.700M**	**0.00K**
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	3/19/1996	7:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/16/1996	19:30	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/8/1997	15:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/15/1997	4:00	CST	Ice Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	4/10/1997	7:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/30/1997	14:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/4/1998	12:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/1/1999	20:00	CST	Ice Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/8/1999	5:00	CST	Ice Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/22/2000	8:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/2/2000	16:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/13/2000	11:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/16/2000	18:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/26/2000	15:00	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/21/2001	21:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/19/2002	0:15	CST	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/4/2002	8:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/15/2003	23:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/25/2004	5:00	CST	Ice Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/22/2004	3:00	CST	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/11/2008	11:00	CST-6	Winter Storm		0	0	500.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/21/2008	6:00	CST-6	Ice Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	3/7/2008	16:00	CST-6	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/15/2008	15:00	CST-6	Winter Storm		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/26/2009	22:00	CST-6	Ice Storm		0	0	11.200M	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/29/2010	17:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/8/2010	19:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/25/2011	18:00	CST-6	Heavy Snow		0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/26/2012	2:00	CST-6	Winter Storm		0	0	0.00K	0.00K

WEBSTER (ZONE)	WEBSTER (ZONE)	KY	12/5/2013	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/2/2014	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/4/2014	12:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	3/2/2014	7:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	11/16/2014	18:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/16/2015	2:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/20/2015	16:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	3/4/2015	13:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/22/2016	2:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/12/2018	2:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	1/15/2018	11:00	CST-6	Heavy Snow	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/10/2021	3:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/14/2021	22:00	CST-6	Winter Storm	0	0	0.00K	0.00K
WEBSTER (ZONE)	WEBSTER (ZONE)	KY	2/17/2021	18:00	CST-6	Winter Storm	0	0	0.00K	0.00K

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	A&C Property Rentals	Vulnerable Pop	Housing	Apartment Building	711	Kentucky Pkwy	Owensboro
Daviess	A&C Property Rentals	Vulnerable Pop	Housing	Apartment Building	4635	Marlboro Dr	Owensboro
Daviess	Academy of Learning	Vulnerable Pop	School	Preschool	3220	Bold Forbes Way	Owensboro
Daviess	Academy of Learning	Vulnerable Pop	School	Preschool	730	Harvard Dr	Owensboro
Daviess	Active Day	Vulnerable Pop	Special Needs	Adult Daycare	1035	Frederica St	Owensboro
Daviess	Adams Village	Vulnerable Pop	Elderly Housing	Assisted Living	519	Dieterle Dr	Owensboro
Daviess	Air Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.734777	-87.157879
Daviess	Airport Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.748742	-87.161804
Daviess	Alorica	Economic	Call Center	Major Employer	234	Frederica St	Owensboro
Daviess	AMR Ambulance Service	Emergency Services	Ambulance	Ambulance	1101	Alsop Ln	Owensboro
Daviess	Animal Crackers Nursery	Vulnerable Pop	Childcare	Daycare	1304	St Ann St	Owensboro
Daviess	Apartment Building	Vulnerable Pop	Housing	Apartment Building	520	Plum St	Owensboro
Daviess	Apollo Ct Apartments	Vulnerable Pop	Housing	Apartment Building	2529	Carter Rd	Owensboro
Daviess	Apollo High School+	Vulnerable Pop	School	High School	2280	Tamarack Rd	Owensboro
Daviess	AT&T Call Center	Economic	Call Center	Major Employer	720	Frederica St	Owensboro
Daviess	Atmos Energy	Infrastructure	Natural Gas	Gas	3275	Highland Pointe Dr	Owensboro
Daviess	Audubon Area Community Services	Vulnerable Pop	Center	Community Services	1700	W 5th St	Owensboro
Daviess	Audubon Area Head Start	Vulnerable Pop	School	Preschool	1733	Tamarack Rd	Owensboro
Daviess	Audubon Elementary After School	Vulnerable Pop	Childcare	After School	300	Worthington Rd	Owensboro
Daviess	Audubon Elementary School+	Vulnerable Pop	School	Elementary School	300	Worthington Rd	Owensboro
Daviess	Audubon Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.774983	-87.173372
Daviess	Audubon Lincolnshire Apartments	Vulnerable Pop	Housing	Apartment Building	1000	Pennbrooke Ave	Owensboro
Daviess	Audubon Plaza	Commerce	Retail	Shopping Center			Owensboro
Daviess	Avondale Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.747858	-87.094961
Daviess	Baker Drive Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	2161	E 19th St	Owensboro
Daviess	Barron Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.739674	-87.143662
Daviess	Bates Hollow Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.751184	-86.762133
Daviess	BB&T	Commerce	Bank	Bank	2800	Frederica St	Owensboro
Daviess	Bellevue Baptist Church*	Vulnerable Pop	Church	Religious	4950	KY 56	Owensboro
Daviess	Ben Hawes Golf Course and Park	Vulnerable Pop	Recreation	Park	400	Booth Field Rd	Owensboro
Daviess	Ben Hawes Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.793174	-87.186373
Daviess	Blessed Mother Catholic Church*	Vulnerable Pop	Church	Religious	601	E 23rd St	Owensboro
Daviess	Boardwalk Pipeline Partners	Infrastructure	Natural Gas	Gas Supply	610	W 2nd St	Owensboro
Daviess	Bon Harbor Broadband Tower	Emergency	Broadband Tower			37.792615	-87.2022
Daviess	Bon Harbor Tank	Infrastructure	Water/Waste Water	Water Tank		37.7858	-87.180245
Daviess	Booster Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.729612	-86.965453
Daviess	Boulware Mission	Vulnerable Pop	Homeless Shelter	Homeless	609	Wing Ave	Owensboro
Daviess	Bowling Chapel Tank	Infrastructure	Water/Waste Water	Water Tank		37.7554	-86.715618
Daviess	Brentwood Apartments	Vulnerable Pop	Housing	Apartment Building	4110	Brentwood Dr	Owensboro
Daviess	Brescia University	Vulnerable Pop	School	College Campus	717	Frederica St	Owensboro
Daviess	Brey's Early Learning School	Vulnerable Pop	School	Preschool	1945	Tamarack Rd	Owensboro
Daviess	Brushwood Apartments	Vulnerable Pop	Housing	Apartment Building	3424	New Hartford Rd	Owensboro
Daviess	Bryant Chapel	Vulnerable Pop	Church	Religious		Jefferson St	Whitesville
Daviess	Buena Vista Christian Learning Center	Vulnerable Pop	School	Preschool	100	W 23rd St	Owensboro
Daviess	Burns Elementary School+	Vulnerable Pop	School	Elementary School	4514	Goetz Dr	Owensboro
Daviess	Burns Middle School+	Vulnerable Pop	School	Middle School	4610	Goetz Dr	Owensboro
Daviess	Cabot Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.724192	-86.673732
Daviess	Cabot Tank	Infrastructure	Water/Waste Water	Water Tank		37.6937	-86.655364
Daviess	Canteen Services	Economic	Food Supply	Major Employer	712	Industrial Dr	Owensboro
Daviess	Carmel Nursing Home	Vulnerable Pop	Elderly Housing	Nursing Home	2501	Old Hartford Rd	Owensboro
Daviess	Carter Road Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.725159	-87.156848
Daviess	Castlen Welding	Economic	Industry	Major Employer	4565	KY 2830	Owensboro
Daviess	Cathedral Preschool	Vulnerable Pop	School	Preschool	600	Locust St	Owensboro
Daviess	Center Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.778069	-87.129257
Daviess	Charlotte's Web Preschool and Nursery	Vulnerable Pop	Childcare	Daycare	4129	Vincent Station Rd	Owensboro
Daviess	Chautauqua Park	Vulnerable Pop	Recreation	Park	1301	Bluff Ave	Owensboro
Daviess	Chestnut Grove Tank	Infrastructure	Water/Waste Water	Water Tank		37.8935	-86.964544
Daviess	Chickasaw Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.734733	-87.134178
Daviess	Church Alive*	Vulnerable Pop	Church	Religious	325	Carter Rd	Owensboro
Daviess	College Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.715891	-87.087519
Daviess	College View Middle School+	Vulnerable Pop	School	Middle School	5061	New Hartford Rd	Owensboro
Daviess	Collegeview Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.71567	-87.072597
Daviess	Consolidated Mechanical	Economic	Industry	Major Employer	2900	Airpark Dr	Owensboro
Daviess	Coppage Rentals	Vulnerable Pop	Housing	Apartment Building	4002	Carpenter Dr	Owensboro
Daviess	Coppage Rentals	Vulnerable Pop	Housing	Apartment Building	2301	Carter Rd	Owensboro
Daviess	Coppage Rentals	Vulnerable Pop	Housing	Apartment Building	725	Scherm Rd	Owensboro

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Coppage Rentals	Vulnerable Pop	Housing	Apartment Building	602	W 11th St	Owensboro
Daviess	Coppage Rentals	Vulnerable Pop	Housing	Apartment Building	1001	W Parrish Ave	Owensboro
Daviess	Country Heights After School	Vulnerable Pop	Childcare	After School	4961	KY 54	Owensboro
Daviess	Country Heights Elementary School+	Vulnerable Pop	School	Elementary School	4961	KY 54	Owensboro
Daviess	Countryside Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.742016	-87.021893
Daviess	Cravens Elementary School	Vulnerable Pop	School	Elementary School	2741	Cravens Ave	Owensboro
Daviess	CrossRoads	Vulnerable Pop	Homeless Shelter	Homeless	1631	Breckenridge St	Owensboro
Daviess	CRS One Source	Economic	Food Supply	Major Employer	2803	Tamarack Rd	Owensboro
Daviess	DAC Properties	Vulnerable Pop	Housing	Apartment Building	59	Dublin Ln	Owensboro
Daviess	Daniel Pitino Homeless Shelter	Vulnerable Pop	Homeless Shelter	Homeless	501	Walnut St	Owensboro
Daviess	Daniels Lane Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.783438	-87.062969
Daviess	Daramic	Economic	Industry	Major Employer	5525	KY 2830	Owensboro
Daviess	Dart Polymers	Economic	Industry	Major Employer	2400	Harbor Rd	Owensboro
Daviess	Davco Rest Home	Vulnerable Pop	Elderly Housing	Nursing Home	2526	W 10th St	Owensboro
Daviess	Daviess County 911 Dispatch - backup	Emergency Services	911 Dispatch	911 Dispatch	121	St Ann St	Owensboro
Daviess	Daviess County Bus Garage	Vulnerable Pop	School	Bus Garage	1621	Southtown Blvd	Owensboro
Daviess	Daviess County Courthouse	Government	Building	Courthouse	212	St Ann St	Owensboro
Daviess	Daviess County Detention Center	Government	Correctional	Jail	3337	KY 144	Owensboro
Daviess	Daviess County Emergency Dispatch - Backup	Emergency Services	911 Backup	911 - Backup	2516	Lancaster St	Owensboro
Daviess	Daviess County EOC	Government	Building	EOC	212	St Ann St	Owensboro
Daviess	Daviess County EOC - Alternate	Government	Building	EOC Alternate	4800	New Hartford Rd	Owensboro
Daviess	Daviess County Fairgrounds	Vulnerable Pop	Recreation	Entertainment			Owensboro
Daviess	Daviess County FDAirport Station+	Emergency Services	Fire Dept.	Fire Dept.	2410	Airport Rd	Owensboro
Daviess	Daviess County FDEast Station+	Emergency Services	Fire Dept.	Fire Dept.	5005	KY 54 E	Sutherland
Daviess	Daviess County FDKnottsville	Emergency Services	Fire Dept.	Fire Dept.	9436	KY 144	Knottsville
Daviess	Daviess County FDMasonville	Emergency Services	Fire Dept.	Fire Dept.	6551	US 231	Owensboro
Daviess	Daviess County FDMoseleyville	Emergency Services	Fire Dept.	Fire Dept.	3741	Ashbyburg Rd	Owensboro
Daviess	Daviess County FDPleasant Ridge	Emergency Services	Fire Dept.	Fire Dept.	10344	US 231	Pleasant Ridge
Daviess	Daviess County FDSaint Joseph	Emergency Services	Fire Dept.	Fire Dept.	11011	St Joseph Ln	Curdsville
Daviess	Daviess County FDSorgho	Emergency Services	Fire Dept.	Fire Dept.	6724	KY 56	Owensboro
Daviess	Daviess County FDStanley	Emergency Services	Fire Dept.	Fire Dept.	159	KY 1554	Owensboro
Daviess	Daviess County FDThruston Philpot 1	Emergency Services	Fire Dept.	Fire Dept.	2592	Reid Rd	Owensboro
Daviess	Daviess County FDThruston Philpot 2	Emergency Services	Fire Dept.	Fire Dept.	4215	KY 142	Philpot
Daviess	Daviess County FDUtica	Emergency Services	Fire Dept.	Fire Dept.	146	KY 140	Utica
Daviess	Daviess County FDWhitesville	Emergency Services	Fire Dept.	Fire Dept.	10291	KY 54	Whitesville
Daviess	Daviess County FDYelvington	Emergency Services	Fire Dept.	Fire Dept.	1124	Yelvington Knottsville Rd	Yelvington
Daviess	Daviess County High School+	Vulnerable Pop	School	High School	4255	New Hartford Rd	Owensboro
Daviess	Daviess County Judicial Center	Government	Building	Judicial Center	100	E 2nd St	Owensboro
Daviess	Daviess County Middle School+	Vulnerable Pop	School	Middle School	1415	E 4th St	Owensboro
Daviess	Daviess County Operation Center	Government	Building	Operations Center	2620	KY 81	Owensboro
Daviess	Daviess County Public Schools District Office	Vulnerable Pop	School	District Office	1622	Southeastern Pkwy	Owensboro
Daviess	Daviess County Sheriff's Department	Emergency Services	Police	Police	212	St Ann St	Owensboro
Daviess	Daymar College	Vulnerable Pop	School	College Campus	3361	Buckland Sq	Owensboro
Daviess	De-Am-Ron Building Systems	Economic	Industry	Major Employer	6137	US 60 E	Owensboro
Daviess	Deer Park Elementary School+	Vulnerable Pop	School	Elementary School	4959	New Hartford Rd	Owensboro
Daviess	Deer Valley Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.691	-87.062633
Daviess	Dentention Center Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.787134	-87.072901
Daviess	Diamond Lake Resort	Vulnerable Pop	Recreation	Entertainment			Owensboro
Daviess	Dismas House Charities	Emergency Services	Correctional	Jail	530	Carlton Dr	Owensboro
Daviess	Dollar General	Commerce	Retail	Supply	10133	KY 54	Whitesville
Daviess	Domtar Paper	Economic	Industry	Major Employer	1500	Ragu Dr	Owensboro
Daviess	Downs Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.765263	-87.051451
Daviess	Dublin Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.77901	-87.13283
Daviess	Eagle Place	Vulnerable Pop	Housing	Apartment Building	703	Scherm Rd	Owensboro
Daviess	East View After School	Vulnerable Pop	Childcare	After School	6104	KY 405	Owensboro
Daviess	East View Elementary School+	Vulnerable Pop	School	Elementary School	6104	KY 405	Owensboro
Daviess	Eastview Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.807751	-87.021045
Daviess	Echo Lake Foods	Economic	Food Supply	Major Employer	1017	Locust St	Owensboro
Daviess	Emerson Academy	Vulnerable Pop	School	High School	1335	W 11th St	Owensboro
Daviess	English Park	Vulnerable Pop	Recreation	Park	2	Woodford Ave	Owensboro
Daviess	English Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.776149	-87.116111
Daviess	Ernie Davis & Sons	Business	Mechanical	Contractor	1518	E 11th St	Owensboro
Daviess	Estes Elementary School	Vulnerable Pop	School	Elementary School	1675	Leitchfield Rd	Owensboro
Daviess	Estes Family Resource Center Childcare	Vulnerable Pop	Childcare	Daycare	1675	Leitchfield Rd	Owensboro
Daviess	FBI Office	Emergency Services	Police	Police	401	W 4th St	Owensboro
Daviess	Federal District Court	Government	Building	Judicial Center	423	Frederica St	Owensboro

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Fern Terra of Owensboro	Vulnerable Pop	Elderly Housing	Assisted Living	1405	W 1st St	Owensboro
Daviess	Fern Terrace Lodge	Vulnerable Pop	Elderly Housing	Assisted Living	45	Woodford Ave	Owensboro
Daviess	Fern Terrace Suites	Vulnerable Pop	Elderly Housing	Assisted Living	1405	W 1st St	Owensboro
Daviess	First Baptist Church*	Vulnerable Pop	Church	Religious	230	JR Miller Blvd	Owensboro
Daviess	First Christian Church*	Vulnerable Pop	Church	Religious	700	JR Miller Blvd	Owensboro
Daviess	First Free Will Baptist*	Vulnerable Pop	Church	Religious	4314	W 5th Street Rd	Owensboro
Daviess	Fisher Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.762397	-87.158536
Daviess	Flat Lick Broadband Tower	Emergency	Broadband Tower			37.687717	-87.2174
Daviess	Fourth Street Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.776505	-87.0944
Daviess	Foust Elementary School	Vulnerable Pop	School	Elementary School	601	Foust Ave	Owensboro
Daviess	Frederica St Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7299	-87.12463
Daviess	Friendly Village 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.67967	-87.194657
Daviess	Friendly Village 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.680897	-87.195733
Daviess	Friendship Road Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.660806	-86.763915
Daviess	Garden Grace Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	2401	Friendship Dr	Owensboro
Daviess	Gardenside 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.767236	-87.196231
Daviess	Gardenside 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.767171	-87.1932
Daviess	Gateway Commons	Commerce	Retail	Shopping Center			Owensboro
Daviess	Glenmore Distillery	Economic	Industry	Major Employer	2201	E 4th St	Owensboro
Daviess	Glenmore Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.778104	-87.086107
Daviess	Golfview Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.731775	-87.107487
Daviess	Good Shepherd Church*	Vulnerable Pop	Church	Religious	3031	Bittel Rd	Owensboro
Daviess	GRADD	Government	Building	Service	300	GRADD Way	Owensboro
Daviess	Green River District Health Department	Government	Building	Health Dept	1600	Breckinridge St	Owensboro
Daviess	Greentree Apartments	Vulnerable Pop	Housing	Apartment Building	602	Orchard St	Owensboro
Daviess	Greentree Apartments	Vulnerable Pop	Housing	Apartment Building	610	Plum St	Owensboro
Daviess	Greentree Apartments	Vulnerable Pop	Housing	Apartment Building	1200	W 7th St	Owensboro
Daviess	GRITS	Infrastructure	Transportation	Public Transit	222	St Elizabeth St	Owensboro
Daviess	GTE Wireless Tower	Emergency	Cellular Tower			37.7858	-87.18
Daviess	GTE Wireless Tower	Emergency	Cellular Tower			37.7275	-87.0539
Daviess	GTE Wireless Tower	Emergency	Cellular Tower			37.7633	-87.0886
Daviess	Habit Broadband Tower	Emergency	Broadband Tower			37.697245	-86.9911
Daviess	Habit Tank	Infrastructure	Water/Waste Water	Water Tank		37.7012	-86.997504
Daviess	Hager Preschool	Vulnerable Pop	School	Preschool	1701	W 7th St	Owensboro
Daviess	Harry Smith Homes	Vulnerable Pop	Housing	Apartment Building	316	Hale Ave	Owensboro
Daviess	Hartz Contracting	Economic	Industry	Major Employer	1855	Old Calhoun Rd	Owensboro
Daviess	Hausner Hard-Chrome	Economic	Industry	Major Employer	3094	Medley Rd	Owensboro
Daviess	Hazelwood Apartments	Vulnerable Pop	Housing	Apartment Building	2507	Carter Rd	Owensboro
Daviess	Heartland Crossing	Commerce	Retail	Shopping Center			Owensboro
Daviess	Helen Sears Child Dev't Canter	Vulnerable Pop	Childcare	Daycare	2225	E 18th St	Owensboro
Daviess	Hendrick Screen	Economic	Industry	Major Employer	3074	Medley Rd	Owensboro
Daviess	Here We Grow	Vulnerable Pop	Childcare	Daycare	4101	Carter Rd	Owensboro
Daviess	Heritage Baptist Church*	Vulnerable Pop	Church	Religious	3585	Thruston Dermont Rd	Owensboro
Daviess	Heritage Park High School+	Vulnerable Pop	School	High School	3361	Buckland Sq	Owensboro
Daviess	Heritage Park Preschool and Nursery	Vulnerable Pop	School	Preschool	3802	Legacy Run	Owensboro
Daviess	Heritage Place	Vulnerable Pop	Elderly Housing	Assisted Living	3362	Buckland Sq	Owensboro
Daviess	Hermitage Nursing & Rehab Center	Vulnerable Pop	Elderly Housing	Nursing Home	1614	W Parrish Ave	Owensboro
Daviess	Hidden Hills Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.740046	-87.033459
Daviess	Highland Broadband Tower	Emergency	Broadband Tower			37.75904	-87.0648
Daviess	Highland Elementary After School	Vulnerable Pop	Childcare	After School	2909	KY 54	Owensboro
Daviess	Highland Elementary School+	Vulnerable Pop	School	Elementary School	2909	KY 54	Owensboro
Daviess	Highland Pointe Plaza	Commerce	Retail	Shopping Center			Owensboro
Daviess	Highway 81 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.739483	-87.177049
Daviess	Hillcrest Health Care Center	Vulnerable Pop	Elderly Housing	Nursing Home	3740	Old Hartford Rd	Owensboro
Daviess	Hillcrest Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.729844	-87.078548
Daviess	Hillcrest Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7297	-87.078517
Daviess	Hines Center*	Vulnerable Pop	Center	Community	1	Wellness Pl	Owensboro
Daviess	Hines Group	Economic	Industry	Major Employer	5680	Old KY 54	Owensboro
Daviess	HIS Church*	Vulnerable Pop	Church	Religious	4810	Frederica St	Owensboro
Daviess	Horn Community Center*	Vulnerable Pop	Religious	Community Center	10534	Main Cross St	Whitesville
Daviess	Horse Fork Creek Park	Vulnerable Pop	Recreation	Park	3005	Fairview Dr	Owensboro
Daviess	Horsefork Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.726345	-87.099866
Daviess	Hospice	Emergency Services	Healthcare	Hospice	3419	Wathen's Crossing	Owensboro
Daviess	Hunter Douglas Plastics	Economic	Industry	Major Employer	1600	Ragu Dr	Owensboro
Daviess	Hunters Ridge Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.729855	-87.058623
Daviess	IGA Grocery	Commerce	Retail	Supply	10035	KY 54	Whitesville

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Immaculate Catholic Church*	Vulnerable Pop	Church	Religious	2516	Christie Pl	Owensboro
Daviess	Indian Hill Broadband Tower	Emergency	Broadband Tower			37.795635	-86.8496
Daviess	J&S Rentals	Vulnerable Pop	Housing	Apartment Building	2608	Veach Rd	Owensboro
Daviess	Jack C. Fisher Park	Vulnerable Pop	Recreation	Park			Owensboro
Daviess	Jones Road Tank	Infrastructure	Water/Waste Water	Water Tank		37.7861	-87.010776
Daviess	Kassinger Apartments	Vulnerable Pop	Housing	Apartment Building	90	Fielden Ave	Owensboro
Daviess	Kassinger Apartments	Vulnerable Pop	Housing	Apartment Building	2755	McFarland Ave	Owensboro
Daviess	KB's Kids Zone	Vulnerable Pop	Childcare	Daycare	3045	Burlew Blvd	Owensboro
Daviess	KCTCS Downtown Campus	Vulnerable Pop	School	College Campus	1501	Frederica St	Owensboro
Daviess	KCTCS Main Campus	Vulnerable Pop	School	College Campus	4800	New Hartford Rd	Owensboro
Daviess	KCTCS Southeast Campus	Vulnerable Pop	School	College Campus	1901	Southeastern Pkwy	Owensboro
Daviess	Kendall-Perkins Park	Vulnerable Pop	Recreation	Park	1201	W 5th St	Owensboro
Daviess	Kenergy Corporation	Infrastructure	Electric	Electric Utility	3111	Fairview Dr	Owensboro
Daviess	Ken-tron Manufacturing	Economic	Industry	Major Employer	610	Industrial Dr	Owensboro
Daviess	Kentucky BioProcessing*	Economic	Industry	Major Employer	3700	Airpark Dr	Owensboro
Daviess	Kentucky Motor Speedway	Vulnerable Pop	Recreation	Entertainment			Owensboro
Daviess	Kentucky National Guard*	Government	Militaty	National Guard	3300	Tamarack Rd	Owensboro
Daviess	Kentucky Wesleyan College	Vulnerable Pop	School	College Campus	3000	Frederica St	Sutherland
Daviess	Killian Child Dev't Center	Vulnerable Pop	Childcare	Daycare	900	Walnut St	Owensboro
Daviess	Kimberly-Clark*	Economic	Industry	Major Employer	301	Innovation Way	Owensboro
Daviess	Knotsville Broadband Tower	Emergency	Broadband Tower			37.775361	-86.9152
Daviess	Knottsville Tank	Infrastructure	Water/Waste Water	Water Tank		37.7754	-86.915176
Daviess	KY 1389 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.86325	-86.841854
Daviess	Lafayette Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.73731	-87.11839
Daviess	Lambert Schoolhouse Road Tank/1389	Infrastructure	Water/Waste Water	Water Tank		37.878	-86.798999
Daviess	Lamplite Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.827621	-87.027547
Daviess	Lee Manor	Vulnerable Pop	Elderly Housing	Assisted Living	1651	W 4th St	Owensboro
Daviess	Legacy Villas	Vulnerable Pop	Housing	Apartment Building	10300	Jefferson St	Whitesville
Daviess	Legion Park	Vulnerable Pop	Recreation	Park	3047	Legion Park Dr	Owensboro
Daviess	Legion Park Apartments	Vulnerable Pop	Housing	Apartment Building	405	W Legion Blvd	Owensboro
Daviess	Leola Hayden Child Dev't Center	Vulnerable Pop	Childcare	Daycare	1306	E 8th St	Owensboro
Daviess	Lewis Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.740709	-87.132379
Daviess	Lewisport Broadband Tower	Emergency	Broadband Tower			37.892848	-86.9647
Daviess	Little Einsteins	Vulnerable Pop	School	Preschool	3940	Old Hartford Rd	Owensboro
Daviess	Little Einsteins Too	Vulnerable Pop	School	Preschool	2724	New Hartford Rd	Owensboro
Daviess	Little Ones Academy	Vulnerable Pop	School	Preschool	714	E 3rd St	Owensboro
Daviess	Locust Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.776402	-87.102122
Daviess	Lourdes Daycare	Vulnerable Pop	Childcare	Daycare	4005	Frederica St	Owensboro
Daviess	M & W Rentals	Vulnerable Pop	Housing	Apartment Building	1612	Robin Rd	Owensboro
Daviess	Macedonia Baptist Church*	Vulnerable Pop	Church	Religious	4839	Millers Mill Rd	Owensboro
Daviess	Maceo Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.87624	-86.98797
Daviess	Main Street Family Care	Emergency Services	Healthcare	Clinic	10015	Main St	Whitesville
Daviess	Mall Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.722635	-87.128866
Daviess	Mary Carrico Catholic School	Vulnerable Pop	School	Elementary School	9546	KY 144	Owensboro
Daviess	Mary Kendall Home	Vulnerable Pop	Special Needs	Special Needs	201	Phillips Ct	Owensboro
Daviess	Masonic Broadband Tower	Emergency	Broadband Tower			37.774046	-87.112
Daviess	Maximillian Montessori	Vulnerable Pop	School	Elementary School	1401	Spring Bank Dr	Owensboro
Daviess	Meadow Lands After School	Vulnerable Pop	Childcare	After School	3500	Hayden Rd	Owensboro
Daviess	Meadow Lands Elementary School+	Vulnerable Pop	School	Elementary School	3500	Hayden Rd	Owensboro
Daviess	Messenger-Inquirer	Economic	Media	Major Employer	1401	Frederica St	Owensboro
Daviess	Metulsa	Economic	Industry	Major Employer	4010	Airpark Dr	Owensboro
Daviess	Mission Vision	Vulnerable Pop	Church	Religious	10743	KY 764	Whitesville
Daviess	Mississippi Apartments	Vulnerable Pop	Housing	Apartment Building	4610	Towne Square Ct	Owensboro
Daviess	Mitchell Memorial Cancer Center	Emergency Services	Healthcare	Medical Center	1020	Breckinridge St	Owensboro
Daviess	Mizcan	Economic	Industry	Major Employer	1901	Ragu Dr	Owensboro
Daviess	Modern Welding	Economic	Industry	Major Employer	1450	E Parrish Ave	Owensboro
Daviess	Money Investments	Vulnerable Pop	Housing	Apartment Building	2901	Lewis Ln	Owensboro
Daviess	Moreland Park	Vulnerable Pop	Recreation	Park			Owensboro
Daviess	Moreland Park	Vulnerable Pop	Recreation	Park	1215	Hickman Ave	Owensboro
Daviess	Mount Saint Joseph Conference and Retreat Center	Vulnerable Pop	Church	Religious	8001	Cummings Rd	Curdsville
Daviess	MPD Inc	Economic	Industry	Major Employer	316	E 9th St	Owensboro
Daviess	MPH Industries	Economic	Industry	Major Employer	316	E 9th St	Owensboro
Daviess	Nannie Locke Apartments	Vulnerable Pop	Housing	Apartment Building	805	Jackson St	Owensboro
Daviess	New Cingular Wireless Tower	Emergency	Cellular Tower			37.8928	-86.9644
Daviess	New Cingular Wireless Tower	Emergency	Cellular Tower			37.7794	-87.1925
Daviess	New Cingular Wireless Tower	Emergency	Cellular Tower			37.6567	-86.9494

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	New Cingular Wireless Tower	Emergency	Cellular Tower			37.6508	-87.1205
Daviess	New Cingular Wireless Tower	Emergency	Cellular Tower			37.6669	-87.2089
Daviess	Newton Parrish Elementary School	Vulnerable Pop	School	Elementary School	510	W Byers Ave	Sutherland
Daviess	Nicholas Pavlas Apartments	Vulnerable Pop	Housing	Apartment Building	1302	W 2nd St	Owensboro
Daviess	Nicky Hayden Apartments	Vulnerable Pop	Housing	Apartment Building	503	Elm St	Owensboro
Daviess	Nicky Hayden Apartments	Vulnerable Pop	Housing	Apartment Building	712	W 5th St	Owensboro
Daviess	Nilkanthrupa Apartments	Vulnerable Pop	Housing	Apartment Building	2725	McFarland Ave	Owensboro
Daviess	Norman King Electric	Business	Electric	Contractor	3450	Airpark Dr	Owensboro
Daviess	Normandy Heights Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.755215	-87.041284
Daviess	Nutrien Ag Solutions*	Economic	Industry	Major Employer	6054	KY 405	Owensboro
Daviess	O Z Tyler Distillery*	Economic	Industry	Major Employer	10	Distillery Rd	Owensboro
Daviess	Oak Brooke Apartments	Vulnerable Pop	Housing	Apartment Building	2600	W Parrish Ave	Owensboro
Daviess	Oasis Women's Shelter	Vulnerable Pop	Homeless Shelter	Homeless	2160	E 19th St	Owensboro
Daviess	Omico Plastic	Economic	Industry	Major Employer	2025	Ragu Dr	Owensboro
Daviess	One Park Place	Vulnerable Pop	Elderly Housing	Assisted Living	2701	Frederica St	Owensboro
Daviess	Oney's Apartments	Vulnerable Pop	Housing	Apartment Building	1800	Parrish Plaza Dr	Owensboro
Daviess	Osborne Family Properties	Vulnerable Pop	Housing	Apartment Building	1831	Hughes Ave	Owensboro
Daviess	Over the Rainbow Childcare	Vulnerable Pop	Childcare	Daycare	411	W 4th St	Owensboro
Daviess	Owensboro Catholic 4-6	Vulnerable Pop	School	Elementary School	525	E 23rd St	Owensboro
Daviess	Owensboro Catholic 4-6 After School	Vulnerable Pop	Childcare	After School	525	E 23rd St	Owensboro
Daviess	Owensboro Catholic High School+	Vulnerable Pop	School	High School	1525	W Parrish Ave	Owensboro
Daviess	Owensboro Catholic K-3+	Vulnerable Pop	School	Elementary School	4017	Frederica St	Sutherland
Daviess	Owensboro Catholic K-3 After School	Vulnerable Pop	Childcare	After School	4017	Frederica St	Owensboro
Daviess	Owensboro Catholic Middle School	Vulnerable Pop	School	Middle School	2540	Christie Pl	Owensboro
Daviess	Owensboro Catholic Schools Office	Vulnerable Pop	School	District Office	1524	W Parrish Ave	Owensboro
Daviess	Owensboro Central Dispatch	Emergency Services	911 Dispatch	911 Dispatch	222	E 9th St	Owensboro
Daviess	Owensboro Child Care Center	Vulnerable Pop	Childcare	Daycare	300	W Byers Ave	Owensboro
Daviess	Owensboro Christian Church*	Vulnerable Pop	Church	Religious	2818	New Hartford Rd	Owensboro
Daviess	Owensboro Church of Christ Preschool	Vulnerable Pop	School	Preschool	3300	KY 144	Owensboro
Daviess	Owensboro City Hall	Government	Building	City Hall	101	E 4th St	Owensboro
Daviess	Owensboro Convention Center	Vulnerable Pop	Recreation	Entertainment			Owensboro
Daviess	Owensboro Family YMCA After School	Vulnerable Pop	Childcare	After School	900	Kentucky Pkwy	Owensboro
Daviess	Owensboro FDStation 1+	Emergency Services	Fire Dept.	Fire Dept.	512	W 9th St	Owensboro
Daviess	Owensboro FDStation 2+	Emergency Services	Fire Dept.	Fire Dept.	1900	E Parrish Ave	Owensboro
Daviess	Owensboro FDStation 3+	Emergency Services	Fire Dept.	Fire Dept.	2633	Cravens Ave	Owensboro
Daviess	Owensboro FDStation 4+	Emergency Services	Fire Dept.	Fire Dept.	819	E 25th St	Owensboro
Daviess	Owensboro FDStation 5+	Emergency Services	Fire Dept.	Fire Dept.	3845	South Griffith Ave	Sutherland
Daviess	Owensboro Grain Company	Economic	Industry	Major Employer	822	E 2bd St	Owensboro
Daviess	Owensboro Health Regional Hospital	Emergency Services	Healthcare	Hospital	1201	Pleasant Valley Rd	Owensboro
Daviess	Owensboro Health Urgent Care	Emergency Services	Healthcare	Clinic	2211	Mayfair Ave	Owensboro
Daviess	Owensboro High School+	Vulnerable Pop	School	High School	1800	Frederica St	Owensboro
Daviess	Owensboro Innovation Academy+	Vulnerable Pop	School	High School	2631	S Griffith Ave	Sutherland
Daviess	Owensboro Innovation Middle+	Vulnerable Pop	School	Middle School	2631	S Griffith Ave	Sutherland
Daviess	Owensboro Middle School+	Vulnerable Pop	School	Middle School	1300	Booth Ave	Owensboro
Daviess	Owensboro Place	Vulnerable Pop	Elderly Housing	Nursing Home	1205	Leitchfield Rd	Owensboro
Daviess	Owensboro Police Department	Emergency Services	Police	Police	222	E 9th St	Owensboro
Daviess	Owensboro Public Schools District Office	Vulnerable Pop	School	District Office	450	Griffith Ave	Owensboro
Daviess	Owensboro Public Works	Infrastructure	Public Works	Public Works Building	1410	W 5th St	Owensboro
Daviess	Owensboro Regional Recovery	Vulnerable Pop	Rehabilitation	Rehab	4301	Veach Rd	Owensboro
Daviess	Owensboro Riverport	Infrastructure	Transportation	Riverport	1771	River Rd	Owensboro
Daviess	Owensboro Specialty Polymers	Economic	Industry	Major Employer	5529	KY 2830	Owensboro
Daviess	Owensboro Sportscenter	Vulnerable Pop	Recreation	Entertainment	1300	Hickman Ave	Owensboro
Daviess	Owensboro Surgical Center	Emergency Services	Healthcare	Medical Center	1000	Breckenridge St	Owensboro
Daviess	Owensboro Transit System	Infrastructure	Transportation	Public Transit	430	Allen St	Owensboro
Daviess	Owensboro West Broadband Tower	Emergency	Broadband Tower			37.757919	-87.1591
Daviess	Owensboro-Daviess County Airport	Infrastructure	Transportation	Airport	2200	Airport Rd	Owensboro
Daviess	Panther Creek Baptist Church*	Vulnerable Pop	Church	Religious	7146	US 431	Owensboro
Daviess	Panther Creek Park	Vulnerable Pop	Recreation	Park	5160	Wayne Bridge Rd	Owensboro
Daviess	Panther Tank	Infrastructure	Water/Waste Water	Water Tank		37.651	-87.200978
Daviess	Park Regency Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	5058	Back Square Dr	Owensboro
Daviess	Parkside Rental	Vulnerable Pop	Housing	Apartment Building	10363	KY 54	Whitesville
Daviess	Parrish Avenue Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.757807	-87.14816
Daviess	Parrish Avenue Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7588	-87.143006
Daviess	Peach Lutheran Preschool	Vulnerable Pop	School	Preschool	2220	Carter Rd	Owensboro
Daviess	Pellville Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.748535	-86.820299
Daviess	PG Walker Apartments	Vulnerable Pop	Housing	Apartment Building	715	Sycamore St	Owensboro

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Phill's Custom Cabinets	Economic	Industry	Major Employer	2400	KY 81	Owensboro
Daviess	Philpot Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.7321	-86.989709
Daviess	Play Smart Preschool	Vulnerable Pop	School	Preschool	3117	Alvey Park Dr W	Owensboro
Daviess	Pleasant Grove Tank #1	Infrastructure	Water/Waste Water	Water Tank		37.7473	-86.995563
Daviess	Pleasant Grove Tank #2	Infrastructure	Water/Waste Water	Water Tank		37.7475	-86.995399
Daviess	Police Hill Broadband Tower	Emergency	Broadband Tower			37.762423	-87.0921
Daviess	President Place	Vulnerable Pop	Elderly Housing	Assisted Living	2400	Friendship Dr	Owensboro
Daviess	Puzzle Pieces	Vulnerable Pop	Special Needs	Special Needs	2401	New Hartford Rd	Owensboro
Daviess	Ragu Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.770908	-87.079137
Daviess	Red Cross*	Red Cross	Red Cross	Red Cross	416	W 3rd St	Owensboro
Daviess	Reid Road Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.788267	-87.056575
Daviess	River Park Center	Vulnerable Pop	Recreation	Entertainment	101	Daviess St	Owensboro
Daviess	River Tree Church*	Vulnerable Pop	Church	Religious	600	Salem Dr	Owensboro
Daviess	River Valley Behavioral	Emergency Services	Healthcare	Behavioral	360	Rudy Rd	Owensboro
Daviess	River Valley Behavioral	Emergency Services	Healthcare	Behavioral	1100	Walnut St	Owensboro
Daviess	River Valley Behavioral Health	Emergency Services	Healthcare	Behavioral	1000	Industrial Dr	Owensboro
Daviess	River Valley Behavioral Health Hospital	Emergency Services	Healthcare	Hospital	1000	Industrial Dr	Owensboro
Daviess	Riverport 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.788442	-87.143712
Daviess	Riverport 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.787618	-87.144774
Daviess	Riverside Transport	Economic	Transportation	Major Employer	1700	Ragu Dr	Owensboro
Daviess	RNA Rental	Vulnerable Pop	Housing	Apartment Building	2554	Bittel Rd	Owensboro
Daviess	Rolling heights Apartments	Vulnerable Pop	Housing	Apartment Building	2161	E 19th St	Owensboro
Daviess	Roosevelt House #1	Vulnerable Pop	Elderly Housing	Assisted Living	2920	Yale Pl	Owensboro
Daviess	Roosevelt House #2	Vulnerable Pop	Elderly Housing	Assisted Living	530	Yale Pl	Owensboro
Daviess	Roots and Wings Childcare and Preschool	Vulnerable Pop	School	Preschool	519	W Byers Ave	Owensboro
Daviess	Rosedale Rest Home	Vulnerable Pop	Elderly Housing	Nursing Home	415	Sutton Ln	Owensboro
Daviess	Roseville Tank	Infrastructure	Water/Waste Water	Water Tank		37.7373	-86.755835
Daviess	RWRA East Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.76963	-87.070969
Daviess	RWRA West Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.788442	-87.143712
Daviess	Saint Mary of the Woods*	Vulnerable Pop	Church	Religious	10534	Main Cross St	Whitesville
Daviess	Salvation Army	Vulnerable Pop	Misc	Charity	235	Ewing Rd	Owensboro
Daviess	SCB Rentals	Vulnerable Pop	Housing	Apartment Building	2600	Duke Dr	Owensboro
Daviess	SCB Rentals	Vulnerable Pop	Housing	Apartment Building	725	Princeton Pkwy	Owensboro
Daviess	Senior Community Center	Vulnerable Pop	Elderly	Senior Center	1650	W 2nd St	Owensboro
Daviess	Settle Memorial Preschool	Vulnerable Pop	School	Preschool	201	E 4th St	Owensboro
Daviess	Settles Broadband Tower	Emergency	Broadband Tower			37.736589	-87.0533
Daviess	Settles Road Tank	Infrastructure	Water/Waste Water	Water Tank		37.7365	-87.053295
Daviess	Seven Hills Preschool	Vulnerable Pop	School	Preschool	2401	McConnell Ave	Owensboro
Daviess	Shawnee Apartments	Vulnerable Pop	Housing	Apartment Building	1709	Shawnee Dr	Owensboro
Daviess	Simpson Apartments	Vulnerable Pop	Housing	Apartment Building	59	Woodford Ave	Owensboro
Daviess	Sission Manor Apartments	Vulnerable Pop	Housing	Apartment Building	2900	Dixiana Ct	Owensboro
Daviess	Smothers Park	Vulnerable Pop	Recreation	Park			Owensboro
Daviess	Social Security Office	Government	Building	Social Security	4532	Lucky Strike Lp	Owensboro
Daviess	Sorgho Elementary School+	Vulnerable Pop	School	Elementary School	5390	KY 56	Owensboro
Daviess	Sorgho Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.752153	-87.191733
Daviess	South Hampton Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.775073	-86.980269
Daviess	Southern Oaks Elementary School+	Vulnerable Pop	School	Elementary School	7525	US 431	Owensboro
Daviess	Southern Star	Infrastructure	Natural Gas	Natural Gas Supply	4700	KY 56	Owensboro
Daviess	Southwest Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.718934	-87.149568
Daviess	Specialty Foods Group	Economy	Food Supply	Major Employer	6	Dublin Ln	Owensboro
Daviess	St Alphonsus Catholic Church*	Vulnerable Pop	Church	Religious	7925	Cummings Rd	Owensboro
Daviess	St Benedict Homeless Shelter	Vulnerable Pop	Homeless Shelter	Homeless	1001	W 11th St	Owensboro
Daviess	St Joseph Monastery	Vulnerable Pop	Church	Religious	8564	Crisp Rd	Whitesville
Daviess	St Martin Catholic Church*	Vulnerable Pop	Church	Religious	5856	KY 81	Owensboro
Daviess	St Mary of the Woods School	Vulnerable Pop	School	Elementary School	10521	Franklin St	Whitesville
Daviess	St Peters Catholic Church*	Vulnerable Pop	Church	Religious	81	Church St	Owensboro
Daviess	St Pius the Tenth Daycare	Vulnerable Pop	Childcare	Daycare	3418	KY 144	Owensboro
Daviess	St Pius X Catholic Church*	Vulnerable Pop	Church	Religious	3418	KY 144	Owensboro
Daviess	Starlite Shopping Center	Commerce	Retail	Shopping Center		W Parrish Ave	Owensboro
Daviess	State Office Building	Government	Building	State Offices	3656	Wathen's Crossing	Owensboro
Daviess	Steeplechase Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.73742	-87.043818
Daviess	Sterett Crane & Rigging	Economic	Industry	Major Employer	34	Booth Field Rd	Owensboro
Daviess	Sts Joseph & Paul Catholic Church*	Vulnerable Pop	Church	Religious	609	E 4th St	Owensboro
Daviess	Summit 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.81051	-87.005959
Daviess	Summit 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.804442	-86.997584
Daviess	Summit 3 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.80683	-86.993639

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Sun Windows	Economic	Industry	Major Employer	1515	E 18th St	Owensboro
Daviess	Sunnydale Rd Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.643164	-86.77279
Daviess	Sutton Elementary School	Vulnerable Pop	School	Elementary School	2060	Lewis Ln	Owensboro
Daviess	Swedish Match (x)	Economic	Industry	Major Employer	1121	Industrial Dr	Owensboro
Daviess	Sweet Peas	Vulnerable Pop	Childcare	Daycare	3271	Alvey Park Dr E	Owensboro
Daviess	T I Rentals	Vulnerable Pop	Housing	Apartment Building	1226	W 9th St	Owensboro
Daviess	Talkington Broadband Tower	Emergency	Broadband Tower			37.724203	-87.1219
Daviess	Tamarack After School Program	Vulnerable Pop	Childcare	After School	1733	Tamarack Rd	Owensboro
Daviess	Tamarack Elementary School +	Vulnerable Pop	School	Elementary School	1733	Tamarack Rd	Owensboro
Daviess	Target	Commerce	Retail	Supply	5151	Frederica St	Owensboro
Daviess	Target Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.713791	-87.124746
Daviess	Tennyson Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.731558	-87.111647
Daviess	The Heartford House	Emergency Services	Healthcare	Hospice	2914	Old Hartford Rd	Owensboro
Daviess	The Springs Urgent Care	Emergency Services	Healthcare	Clinic	2200	E Parrish Ave	Owensboro
Daviess	Thompson Dr Apartments	Vulnerable Pop	Housing	Apartment Building	1800	Thompson Dr	Owensboro
Daviess	Thompson Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.752342	-87.152814
Daviess	Thompson-Berry Park	Vulnerable Pop	Recreation	Park	1	Carter Rd	Owensboro
Daviess	Time Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.730308	-87.117867
Daviess	Titan Contracting	Economic	Industry	Major Employer	2205	Ragu Dr	Owensboro
Daviess	Total Packaging	Economic	Industry	Major Employer	901	Leitchfield Rd	Owensboro
Daviess	Town And Country Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.79184	-87.051981
Daviess	Towne Square Mall	Commerce	Retail	Shopping Center			Owensboro
Daviess	Towne Square North	Commerce	Retail	Shopping Center			Owensboro
Daviess	Toyotetsu Mid America	Economic	Industry	Major Employer	3100	Airpark Dr	Owensboro
Daviess	Trib Ball Daycare	Vulnerable Pop	Childcare	Daycare	801	W 5th St	Owensboro
Daviess	Trinity High School	Vulnerable Pop	School	High School	10510	Main Cross St	Whitesville
Daviess	Twin Rivers Nusing & Rehab	Vulnerable Pop	Elderly Housing	Nursing Home	2420	W 3rd St	Owensboro
Daviess	Unifirst	Economic	Industry	Major Employer	2810	Unifirst Dr	Owensboro
Daviess	Unique Granite & Marble	Economic	Industry	Major Employer	2601	Old Henderson Rd	Owensboro
Daviess	United States Marshal Service	Emergency Services	Police	Police	423	Frederica St	Owensboro
Daviess	UPS	Economic	Supply	Major Employer	2801	Warehouse Rd	Owensboro
Daviess	US 431 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.710345	-87.126856
Daviess	US Bank Home Mortgage	Economic	Bank	Major Employer	4801	Frederica St	Owensboro
Daviess	Utica/Orick Road Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5928	-87.110105
Daviess	V Somody Rentals	Vulnerable Pop	Housing	Apartment Building	719	W 13th St	Owensboro
Daviess	Valor Oil	Economic	Industry	Major Employer	1200	Alsop Ln	Owensboro
Daviess	Veach Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.741722	-87.10254
Daviess	Villa Point Shopping Center	Commerce	Retail	Shopping Center			Owensboro
Daviess	W01 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.682665	-86.882747
Daviess	W02 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.677332	-86.869719
Daviess	W03 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.682443	-86.860913
Daviess	W04 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.687459	-86.868983
Daviess	W05 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.684365	-86.873098
Daviess	W06 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.683304	-86.875653
Daviess	W217BP - 91.3 MHz	Emergency	FM Radio Antenna			37.762249	-87.0797
Daviess	W263BG - 100.5 MHz	Emergency	FM Radio Antenna			37.775648	-87.1586
Daviess	W293AT - 106.5 MHz	Emergency	FM Radio Antenna			37.761749	-87.0828
Daviess	Wal-Mart	Commerce	Retail	Supply	5031	Frederica St	Owensboro
Daviess	Wal-Mart	Commerce	Retail	Supply	3051	KY 54	Owensboro
Daviess	Walnut Baptist Church*	Vulnerable Pop	Church	Religious	507	W Byers Ave	Owensboro
Daviess	Warehouse Rd Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.782375	-87.147689
Daviess	Wax Works	Economic	Commercial	Major Employer	325	E 3rd St	Owensboro
Daviess	WBIO - 94.7 MHz	Emergency	FM Radio Antenna			37.69725	-86.9911
Daviess	WBKR - 92.5 MHz	Emergency	FM Radio Antenna			37.608148	-87.0542
Daviess	WBKR - 92.5 MHz	Emergency	FM Radio Antenna			37.741448	-87.1161
Daviess	WBKR Broadband Tower	Emergency	Broadband Tower			37.608439	-87.054
Daviess	Wee People Daycare	Vulnerable Pop	Childcare	Daycare	2024	Hall St	Owensboro
Daviess	Wellington Park	Vulnerable Pop	Elderly Housing	Nursing Home	2885	New Hartford Rd	Owensboro
Daviess	Wendell Foster Center	Vulnerable Pop	Special Needs	Special Needs	815	Triplett St	Owensboro
Daviess	Wendell Foster Center	Vulnerable Pop	Elderly Housing	Assisted Living	815	Triplett St	Owensboro
Daviess	Wesleyan Park Plaza	Commerce	Retail	Shopping Center	2650	Frederica St	Owensboro
Daviess	West 2nd St Apartments	Vulnerable Pop	Housing	Apartment Building	3233	W 2nd St	Owensboro
Daviess	West End Child Development Center	Vulnerable Pop	Childcare	Daycare	800	W 5th St	Owensboro
Daviess	West Louisville Broadband Tower	Emergency	Broadband Tower			37.697845	-87.2918
Daviess	West Louisville Elementary School+	Vulnerable Pop	School	Elementary School	8400	KY 56	Owensboro
Daviess	West Louisville Tank	Infrastructure	Water/Waste Water	Water Tank		37.6978	-87.291655

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Daviess	Western KY University - Owensboro	Vulnerable Pop	School	College Campus	4821	New Hartford Rd	Owensboro
Daviess	Whitesville #1 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6877	-86.887983
Daviess	Whitesville #2 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6876	-86.887798
Daviess	Whitesville Apartments	Vulnerable Pop	Housing	Apartment Building	9600	Oak St	Whitesville
Daviess	Whitesville Baptist	Vulnerable Pop	Church	Religious	10167	KY 54	Whitesville
Daviess	Whitesville Broadband Tower	Emergency	Broadband Tower			37.687298	-86.8876
Daviess	Whitesville Christian	Vulnerable Pop	Church	Religious	9945	Main St	Whitesville
Daviess	Whitesville Church of Christ	Vulnerable Pop	Church	Religious	10717	KY 764	Whitesville
Daviess	Whitesville City Hall	Government	Building	City Hall	10436	Main Cross St	Whitesville
Daviess	Whitesville City Park	Vulnerable Pop	Recreation	Park	10345	KY 54	Whitesville
Daviess	Whitesville Elementary School+	Vulnerable Pop	School	Elementary School	9656	KY 54	Whitesville
Daviess	Whitesville Lumber	Commerce	Retail	Building Supply	10766	KY 764	Whitesville
Daviess	Whitesville Public Works	Infrastructure	Public Works	Public Works Building	10436	Main Cross St	Whitesville
Daviess	Whitesville Senior Center*	Vulnerable Pop	Elderly	Senior Center	10345	KY 54	Whitesville
Daviess	Whitesville Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.70921	-86.866014
Daviess	William R Cavin Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.790881	-87.06121
Daviess	WIMM-LP - 107.7 MHz	Emergency	FM Radio Antenna			37.727549	-87.0542
Daviess	Windy Hollow Broadband Tower	Emergency	Broadband Tower			37.651096	-87.2011
Daviess	Windy Hollow Speedway	Vulnerable Pop	Recreation	Entertainment			Owensboro
Daviess	Wing Ave Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.764527	-87.086129
Daviess	WJVK - 91.7 MHz	Emergency	FM Radio Antenna			37.746748	-87.1161
Daviess	WKWC - 90.3 MHz	Emergency	FM Radio Antenna			37.742248	-87.1242
Daviess	Worthington Road Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.754312	-87.176745
Daviess	Wrights Acres Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.815839	-87.010862
Daviess	WSTO - 96.1 MHz	Emergency	FM Radio Antenna			37.772245	-87.3575
Daviess	WXCM - 97.1 MHz	Emergency	FM Radio Antenna			37.69725	-86.9911
Daviess	Yager Materials	Economic	Industry	Major Employer	701	E 2nd St	Owensboro
Daviess	Yakel Road Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.756855	-86.708564
Daviess	Yellow Creek Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.792203	-87.0329
Daviess	Yellow Creek Park	Vulnerable Pop	Recreation	Park	5701	KY 144	Owensboro
Daviess	Yelvington Broadband Tower	Emergency	Broadband Tower			37.853968	-86.972
Daviess	Yelvington Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.810725	-87.045246
Daviess	Yelvington Tank 2	Infrastructure	Water/Waste Water	Water Tank		37.8539	-86.972016
Daviess	Zephyr Villas	Vulnerable Pop	Housing	Apartment Building	9945	Oak St	Whitesville
Hancock	Aleris Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.94669	-86.84998
Hancock	Aleris Rolled Products	Economic	Industry	Major Employer	1372	KY 1957	Lewisport
Hancock	Alley Line Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.905769	-86.754042
Hancock	AMP Hydroelectric Dam	Infrastructure	Electric	Hydroelectric Plant	700	Wescor Rd	Hawesville
Hancock	Big Rivers Coleman Plant	Infrastructure	Electric	Power Plant		Big Rivers Rd	Hawesville
Hancock	Bluegrass Industrial Minerals	Economic	Water/Waste Water	Major Employer	2240	Poplar Grove Rd	Lewisport
Hancock	Boling Chapel Broadband Tower	Emergency	Broadband Tower			37.755355	-86.7156
Hancock	Cannelton Locks and Dam	Infrastructure	Water/Waste Water	Dam			Hawesville
Hancock	Century Aluminum	Economic	Industry	Major Employer	1627	KY 3543	Hawesville
Hancock	Chambers Broadband Tower	Emergency	Broadband Tower			37.862398	-86.7499
Hancock	Clay Street Apartments	Vulnerable Pop	Housing	Apartment Building	375	Clay St	Hawesville
Hancock	Clay Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.899526	-86.749532
Hancock	Clay Street Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.898062	-86.74947
Hancock	Columbia Specialty Metals	Economic	Industry	Major Employer	1600	KY 3543	Hawesville
Hancock	Domtar Paper	Economic	Industry	Major Employer	58	Wescor Rd	Hawesville
Hancock	Dukes Broadband Tower	Emergency	Broadband Tower			37.819349	-86.7023
Hancock	Dukes Volunteer Fire Department	Emergency Services	Fire Dept.	Fire Dept.	5130	Happy Hollow Rd	Dukes
Hancock	Dukes Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8193	-86.702325
Hancock	First Baptist Church	Vulnerable Pop	Church	Religious	235	Market St	Lewisport
Hancock	First Class Services	Economic	Transportation	Trucking	9500	US 60 W	Lewisport
Hancock	Fordsville Broadband Tower	Emergency	Broadband Tower			37.69583	-86.6617
Hancock	Fred Hodges Rd Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.922	-86.818094
Hancock	Hanckock County High School	Vulnerable Pop	School	High School	80	KY 271	Hawesville
Hancock	Hancock County Airport-Ron Lewis Field	Infrastructure	Transportation	Airport	500	Airport Rd	Lewisport
Hancock	Hancock County Courthouse	Government	Building	Courthouse	225	Main Cross St	Hawesville
Hancock	Hancock County E911	Emergency Services	911 Dispatch	911 Dispatch	655	Hawes Blvd	Hawesville
Hancock	Hancock County EMA	Emergency Services	EOC	EOC	655	Hawes Blvd	Hawesville
Hancock	Hancock CountyEMS	Emergency Services	Ambulance	Ambulance	655	Hawes Blvd	Hawesville
Hancock	Hancock County Emergency Ambulance Service	Emergency Services	Ambulance	Ambulance	590	Old Mill Rd	Lewisport
Hancock	Hancock County Health Center	Emergency Services	Healthcare	Clinic	175	Harrison St	Hawesville
Hancock	Hancock County Judicial Center	Government	Building	Judicial Center	310	Hawesville School Rd	Hawesville
Hancock	Hancock County Middle School	Vulnerable Pop	School	Middle School	100	KY 271	Hawesville

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Hancock	Hancock County Public Library*	Vulnerable Pop	Library	Library	1210	Madison St	Hawesville
Hancock	Hancock County Road Department	Infrastructure	Public Works	Road Dept Building	247	River St	Hawesville
Hancock	Hancock County Schools District Office	Vulnerable Pop	School	District Office	83	KY 271	Hawesville
Hancock	Hancock County Senior Citizens Center*	Vulnerable Pop	Elderly	Senior Center	315	Ridgewood Dr	Hawesville
Hancock	Hancock County Sheriff's Office	Emergency Services	Police	Police	225	Main Cross St	Hawesville
Hancock	Hancock Manor Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	520	Main St	Hawesville
Hancock	Happy Hollow Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.855052	-86.729449
Hancock	Harrison Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.905401	-86.759639
Hancock	Hawes Ave Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.894044	-86.750996
Hancock	Hawes Ave Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8949	-86.748682
Hancock	Hawesville Baptist Church*	Vulnerable Pop	Church	Religious	290	Main St	Hawesville
Hancock	Hawesville Church of Christ*	Vulnerable Pop	Church	Religious	2535	US 60 W	Hawesville
Hancock	Hawesville City Hall	Government	Building	City Hall	395	Main St	Hawesville
Hancock	Hawesville City Police Department	Emergency Services	Police	Police	395	Main St	Hawesville
Hancock	Hawesville United Methodist*	Vulnerable Pop	Church	Religious	360	Main St	Hawesville
Hancock	Hawesville Volunteer Fire Department	Emergency Services	Fire Dept.	Fire Dept.	385	Main St	Hawesville
Hancock	Hawesville Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.907871	-86.763721
Hancock	Hawesville Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.902666	-86.749004
Hancock	Heartland Villa	Vulnerable Pop	Elderly Housing	Nursing Home	8005	US 60 W	Lewisport
Hancock	Hwy 1847 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.898466	-86.765193
Hancock	Hwy 2181 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.896963	-86.758699
Hancock	Hwy 334 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.934949	-86.78749
Hancock	Immaculate Conception Catholic Church	Vulnerable Pop	Church	Religious	430	Main Cross St	Hawesville
Hancock	Industrial Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.915368	-86.906191
Hancock	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.8958	-86.8308
Hancock	Lambert Schoolhouse Broadband Tower	Emergency	Broadband Tower			37.878064	-86.7989
Hancock	Lewisport Baptist Church	Vulnerable Pop	Church	Religious	1115	Pell St	Lewisport
Hancock	Lewisport Booster Station	Infrastructure	Water/Waste Water	Pump Station		37.925645	-86.895585
Hancock	Lewisport City Garage	Infrastructure	Public Works	Public Works Building	360	Caroline St	Lewisport
Hancock	Lewisport City Hall	Government	Building	City Hall	405	2nd St	Lewisport
Hancock	Lewisport Fire Station+	Emergency Services	Fire Dept.	Fire Dept.	590	Old Mill Rd	Lewisport
Hancock	Lewisport H2O Broadband Tower	Emergency	Broadband Tower			37.937008	-86.9014
Hancock	Lewisport Police Department	Emergency Services	Police	Police	210	Caroline St	Lewisport
Hancock	Lewisport Senior Center*	Vulnerable Pop	Elderly	Senior Center	290	Market St	Lewisport
Hancock	Lewisport Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.931422	-86.922798
Hancock	Lewisport Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.93664	-86.899506
Hancock	Liberty Broadband Tower	Emergency	Broadband Tower			37.92938	-86.8777
Hancock	Lime Discharge Lagoon Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.935016	-86.896965
Hancock	Main Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.930942	-86.913224
Hancock	McCarty Broadband Tower	Emergency	Broadband Tower			37.922481	-86.8125
Hancock	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	980	Market St	Lewisport
Hancock	North Hancock Elementary School	Vulnerable Pop	School	Elementary School	330	Frank Luttrell Rd	Lewisport
Hancock	North Hancock Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.924615	-86.85448
Hancock	Old Hartford Rd Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.890562	-86.751633
Hancock	Poplar Grove Apartments	Vulnerable Pop	Housing	Apartment Building	100	Poplar Grove Ct	Lewisport
Hancock	Precision Roll Grinders	Economic	Industry	Major Employer	2240	Poplar Grove Rd	Lewisport
Hancock	Precoat Metals	Economic	Industry	Major Employer	2604	River Rd	Hawesville
Hancock	Ridgewood Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.8987	-86.773965
Hancock	River Hill Apartments	Vulnerable Pop	Housing	Apartment Building	259	Jennings St	Hawesville
Hancock	River Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.902242	-86.748042
Hancock	Shopping Center Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.926399	-86.890243
Hancock	Skillman Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.853112	-86.669659
Hancock	Skyline Trailer Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.924051	-86.881578
Hancock	Snyder Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	10	Snyder Ct	Hawesville
Hancock	South Hancock Elementary School	Vulnerable Pop	School	Elementary School	8631	KY 69	Pellville
Hancock	South Hancock Fire Department	Emergency Services	Fire Dept.	Fire Dept.	12194	KY 2181	Pellville
Hancock	Southwire	Economic	Industry	Major Employer	1657	KY 3543	Hawesville
Hancock	St Camillus Urgent Care	Emergency Services	Healthcare	Clinic	1520	4th Street	Lewisport
Hancock	St Columba Church	Vulnerable Pop	Church	Religious	815	Pell St	Lewisport
Hancock	The Oaks Professional Care	Vulnerable Pop	Elderly Housing	Nursing Home	1580	4th St	Lewisport
Hancock	Thomas Lane Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.9115	-86.884887
Hancock	Town Tank Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.937	-86.901369
Hancock	Trailer Park	Vulnerable Pop	Housing	Trailer Park	200	Lake St	Lewisport
Hancock	Vastwood Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.919562	-86.804046
Hancock	Vastwood Park	Vulnerable Pop	Recreation	Park			Hawesville
Hancock	Weberstown Broadband Tower	Emergency	Broadband Tower			37.7738	-86.7787

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Hancock	Windward Heights Broadband Tower	Emergency	Broadband Tower			37.917042	-86.8123
Hancock	Windward Heights Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.9126	-86.785756
Hancock	WLME - 102.7 MHz	Emergency	FM Radio Antenna			37.795653	-86.8494
Henderson	A B Chander Elementary*	Vulnerable Pop	School	Elementary School	11215	US 60 W	Corydon
Henderson	Accuride Corporation	Economic	Industry	Major Employer	2315	Adams Ln	Henderson
Henderson	Airport Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.810531	-87.677316
Henderson	Allstate Tower	Economic	Industry	Major Employer	232	Heilman Ave	Henderson
Henderson	AMG Aluminum	Economic	Industry	Major Employer	3293	McDonald Rd	Robards
Henderson	Atkinson Park	Vulnerable Pop	Recreation	Park			Henderson
Henderson	Atkinson Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.86438	-87.575739
Henderson	Atkinson Park Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8566	-87.582759
Henderson	Atkinson Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.856589	-87.582759
Henderson	Audubon Baptist Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.824541	-87.54368
Henderson	Audubon Broadband Tower	Emergency	Broadband Tower			37.7701	-87.3636
Henderson	Audubon Metals	Economic	Industry	Major Employer	3055	Ohio Dr	Henderson
Henderson	Azteca Milling	Economic	Industry	Major Employer	5301	Industrial Park Dr	Henderson
Henderson	Bakery Feeds	Economic	Industry	Major Employer	221	Heilman Ave	Henderson
Henderson	Baskett Volunteer Fire Department	Emergency Services	Fire Dept.	Fire Dept.	7492	Dr Hodge Rd	Spottsville
Henderson	Bell Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.746829	-87.701994
Henderson	Bend Gate Elementary School*	Vulnerable Pop	School	Elementary School	920	Bend Gate Rd	Henderson
Henderson	Bent Creek Broadband Tower	Emergency	Broadband Tower			37.798631	-87.5437
Henderson	Bent Creek Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.7983	-87.543497
Henderson	Bentley Hughes Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.853514	-87.573248
Henderson	Big Rivers Electric	Infrastructure	Electric	Electric Utility	201	Third St	Henderson
Henderson	Big Rivers Reid Station	Infrastructure	Electric	Power Plant	9000	KY 2096	Robards
Henderson	Bob Romans Rd Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.610119	-87.522629
Henderson	Brenntag Mid-South	Economic	Industry	Major Employer	1405	KY 136 W	Henderson
Henderson	Brickyard Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.741762	-87.709969
Henderson	Cairo Elementary School	Vulnerable Pop	School	Elementary School	10694	US 41-A	Cairo
Henderson	Cairo Fire Department	Emergency Services	Fire Dept.	Fire Dept.	13115	US 41-A	Cairo
Henderson	Canoe Creek Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.816532	-87.605334
Henderson	Carriage Mobile Home Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.802752	-87.566842
Henderson	Cemetery Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.814072	-87.618274
Henderson	Central Academy	Vulnerable Pop	School	High School	851	Center St	Henderson
Henderson	Century Aluminum	Economic	Industry	Major Employer	9404	KY 2096	Robards
Henderson	Chimney Hills Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.833061	-87.543826
Henderson	Christian Life Education Center	Vulnerable Pop	School	Elementary School	1515	Roosevelt St	Henderson
Henderson	Circle B Trailer Park	Vulnerable Pop	Housing	Trailer Park	2820	Sunset Ln	Henderson
Henderson	Coles Trailer Court Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.887421	-87.560868
Henderson	College Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7962	-87.648757
Henderson	Colonial Assisted Living	Vulnerable Pop	Elderly Housing	Assisted Living	6575	Adams Ln	Henderson
Henderson	Colonial Assisted Living	Vulnerable Pop	Elderly Housing	Nursing Home	2637	Stadium Dr	Henderson
Henderson	Columbia Sportswear	Economic	Industry	Major Employer	2001	Northern Star Wat	Robards
Henderson	Community Baptist Church*	Vulnerable Pop	Church	Religious	1035	Pebble Creek	Henderson
Henderson	Corydon City Hall	Government	Building	City Hall	212	US 60 W	Corydon
Henderson	Corydon Fire Department+	Emergency Services	Fire Dept.	Fire Dept.	330	2nd St	Corydon
Henderson	Corydon Public Works	Infrastructure	Public Works	Public Works Building	126	US 60 W	Corydon
Henderson	Corydon Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7359	-87.710281
Henderson	Cottages Of America Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.810935	-87.612886
Henderson	Countryview Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	1422	Mattingly Dr	Henderson
Henderson	Cresline Plastic Pipe Co	Economic	Industry	Major Employer	851	US 41 S	Henderson
Henderson	Cresline Plastics Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.810369	-87.57475
Henderson	Cross Creek Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.803992	-87.565041
Henderson	Custom Resins	Economic	Industry	Major Employer	1421	KY 136 W	Henderson
Henderson	Custom Resins Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.812029	-87.651562
Henderson	Dana Corporation	Economic	Industry	Major Employer	1491	Dana Dr	Henderson
Henderson	Delaware Broadband Tower	Emergency	Broadband Tower			37.746715	-87.4171
Henderson	Delaware Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7467	-87.4171
Henderson	Dollar Store Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.612805	-87.528091
Henderson	East Heights Elementary School	Vulnerable Pop	School	Elementary School	1776	Adams Ln	Henderson
Henderson	Ellis Park	Vulnerable Pop	Recreation	Entertainment			Henderson
Henderson	Fair St Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.819981	-87.600855
Henderson	Fair Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.820986	-87.600568
Henderson	Fairmont Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.811853	-87.621899
Henderson	Feedmill Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.628591	-87.524332
Henderson	Four Star Ind. Park Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6475	-87.528878

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Henderson	Four Star Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.645953	-87.534532
Henderson	Freetown Road Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.798144	-87.589923
Henderson	Frontier Village Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8661	-87.553834
Henderson	Garden Mile Road Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.816472	-87.559979
Henderson	Gardenside Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.823779	-87.554835
Henderson	Gardenside Shopping Center	Commerce	Retail	Shopping Center			Henderson
Henderson	Gavilon Grain	Economic	Industry	Major Employer	6206	Riverport Rd	Henderson
Henderson	Gibbs Die Casting	Economic	Industry	Major Employer	369	Community Dr	Henderson
Henderson	Golden Corral Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.814056	-87.616578
Henderson	Graham Hill Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.823818	-87.537408
Henderson	Graham Hill Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8229	-87.531779
Henderson	Green River Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8773	-87.540752
Henderson	Green Valley Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.799937	-87.643895
Henderson	GTE Wireless Tower	Emergency	Cellular Tower			37.6917	-87.6608
Henderson	GTE Wireless Tower	Emergency	Cellular Tower			37.77	-87.3636
Henderson	GTE Wireless Tower	Emergency	Cellular Tower			37.7769	-87.6236
Henderson	Halliburton Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.808459	-87.626199
Henderson	Harding Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	625	E Harding Ave	Henderson
Henderson	Haven Christian Academy	Vulnerable Pop	School	High School	425	Kresge Dr	Henderson
Henderson	Hazex Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.802442	-87.571975
Henderson	Hebbardsville Fire Department	Emergency Services	Fire Dept.	Fire Dept.	16756	KY 416	Reed
Henderson	Henderson Ambulance Service - North	Emergency Services	Ambulance	Ambulance	343	Starlight Dr	Henderson
Henderson	Henderson Backup 911	Emergency Services	911 Dispatch	911 Dispatch	1449	Corporate Ct	Henderson
Henderson	Henderson City Hall	Government	Building	City Hall	222	1st St	Henderson
Henderson	Henderson City Street Department	Infrastructure	Public Works	Road Dept Building	1449	Corporate Ct	Henderson
Henderson	Henderson City-County Airport	Infrastructure	Transportation	Airport	2154	KY 136	Henderson
Henderson	Henderson Community College	Vulnerable Pop	School	College Campus	2660	S Green St	Henderson
Henderson	Henderson County Ambulance - South	Emergency Services	Ambulance	Ambulance	383	Borax Dr	Henderson
Henderson	Henderson County Bus Garage	Vulnerable Pop	School	Bus Garage	386	Sam Ball Way	Henderson
Henderson	Henderson County Courthouse	Government	Building	Courthouse	20	N Main St	Henderson
Henderson	Henderson County EOC	Government	Building	EOC	1990	Barrett Ct	Henderson
Henderson	Henderson County EOC - Alternate	Government	Building	Alternate EOC	1449	Corporate Ct	Henderson
Henderson	Henderson County Fairgrounds	Vulnerable Pop	Recreation	Entertainment			Henderson
Henderson	Henderson County Health Department	Government	Building	Health Dept	472	Klutey Park Plaza	Henderson
Henderson	Henderson County High School*	Vulnerable Pop	School	High School	2424	Zion Rd	Henderson
Henderson	Henderson County Jail	Government	Correctional	Jail	380	Borax Dr	Henderson
Henderson	Henderson County Rescue	Emergency Services	Fire Dept.	Fire Dept.	390	Sam Ball Way	Henderson
Henderson	Henderson County Road Dept	Infrastructure	Public Works	Road Dept Building	399	Sam Ball Way	Henderson
Henderson	Henderson County Schools	Vulnerable Pop	School	District Office	1805	2nd St	Henderson
Henderson	Henderson County Sheriff's Office	Emergency Services	Police	Police	20	N Main St	Henderson
Henderson	Henderson FDStation 1	Emergency Services	Fire Dept.	Fire Dept.	332	Washington St	Henderson
Henderson	Henderson FDStation 2	Emergency Services	Fire Dept.	Fire Dept.	191	KY 2084 S	Henderson
Henderson	Henderson FDStation 3	Emergency Services	Fire Dept.	Fire Dept.	343	Starlight Dr	Henderson
Henderson	Henderson FDStation 4	Emergency Services	Fire Dept.	Fire Dept.	1560	S Green St	Henderson
Henderson	Henderson Manor	Vulnerable Pop	Elderly Housing	Nursing Home	201	Watson Ln	Henderson
Henderson	Henderson Municipal Center	Vulnerable Pop	Recreation	Entertainment			Henderson
Henderson	Henderson Municipal Power & Light	Infrastructure	Electric	Electric Utility	100	Fifth St	Henderson
Henderson	Henderson North Middle School	Vulnerable Pop	School	Middle School	1707	Second St	Henderson
Henderson	Henderson Police Department	Emergency Services	Police	Police	1990	Barrett Ct	Henderson
Henderson	Henderson Riverport	Infrastructure	Transportation	Riverport	6206	Riverport Rd	Henderson
Henderson	Henderson South Broadband Tower	Emergency	Broadband Tower			37.767322	-87.5499
Henderson	Henderson South Middle School*	Vulnerable Pop	School	Middle School	800	S Alves St	Henderson
Henderson	Henderson Water Utilities North Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.816166	-87.620414
Henderson	Henderson Water Utilities South Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.649724	-87.518823
Henderson	Hercules Manufacturing	Economic	Industry	Major Employer	800	Bob Posey St	Henderson
Henderson	Highlander Acres Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.827137	-87.552441
Henderson	Hoffman Plaza	Commerce	Retail	Shopping Center			Henderson
Henderson	Holy Name School	Vulnerable Pop	School	Elementary School	628	2nd St	Henderson
Henderson	Hospital Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.856107	-87.584439
Henderson	Housing Authority	Vulnerable Pop	Housing Authority	Housing Authority	1007	Dr MLK Jr Ave	Henderson
Henderson	Housing Authority Barrett Center*	Vulnerable Pop	Housing Authority	Housing Authority	111	S Adams St	Henderson
Henderson	Hydro Aluminum	Economic	Industry	Major Employer	5801	Riverport Rd	Henderson
Henderson	Independent Living II	Vulnerable Pop	Elderly Housing	Assisted Living	1629	S Main St	Henderson
Henderson	Industrial Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.802359	-87.642032
Henderson	Intake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.644262	-87.49818
Henderson	International Paper	Economic	Industry	Major Employer	1500	Commonwealth Dr	Henderson

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Henderson	International Paper Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.814029	-87.592771
Henderson	Irish Ivy Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.834303	-87.547532
Henderson	Janalee Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.822857	-87.611355
Henderson	Jefferson Elementary School	Vulnerable Pop	School	Elementary School	315	Jackson St	Henderson
Henderson	John J Audubon State Park	Vulnerable Pop	Recreation	Park	3100	US 41	Henderson
Henderson	Kentucky State Police Post 16	Emergency Services	Police	State Police	8298	Keach Dr	Henderson
Henderson	KY 1078 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.85609	-87.453356
Henderson	Larue Rd Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.835625	-87.551756
Henderson	Lock and Dam Number 1	Infrastructure	Dam	Dam			Spottsville
Henderson	Lock and Dam Number 48	Infrastructure	Dam	Dam			Henderson
Henderson	Medco of Henderson	Vulnerable Pop	Elderly Housing	Nursing Home	2500	N Elm St	Henderson
Henderson	Methodist Health	Emergency Services	Healthcare	Hospital	1305	N Elm St	Henderson
Henderson	Midway Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7709	-87.737323
Henderson	Mosaic Crop Nutrition	Economic	Industry	Major Employer	1141	KY 136 W	Henderson
Henderson	Mount Zion Baptist Church*	Vulnerable Pop	Church	Religious	8158	KY 351	Zion
Henderson	Myrene Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.874681	-87.576555
Henderson	National Guard Armory*	Government	Military	National Guard	735	N Elm St	Henderson
Henderson	New Cingular Wireless Tower	Emergency	Cellular Tower			37.7722	-87.3575
Henderson	New Cingular Wireless Tower	Emergency	Cellular Tower			37.8622	-87.5717
Henderson	New Cingular Wireless Tower	Emergency	Cellular Tower			37.7669	-87.55
Henderson	Newman Recreational Complex	Vulnerable Pop	Recreation	Entertainment			Henderson
Henderson	Niagara Fire Department	Emergency Services	Fire Dept.	Fire Dept.	15913	KY 136 E	Niagara
Henderson	Niagara School	Vulnerable Pop	School	Elementary School	13043	KY 136	Robards
Henderson	North Henderson Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.845646	-87.59032
Henderson	Ohio Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.809332	-87.642175
Henderson	Old 60 East Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.863577	-87.521281
Henderson	Old 60 West Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.790482	-87.671632
Henderson	Old Orchard Shopping Center	Commerce	Retail	Shopping Center			Henderson
Henderson	Owensboro Health	Emergency Services	Healthcare	Clinic	1200	Barrett Blvd	Henderson
Henderson	P B & S Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.802821	-87.653705
Henderson	Paragon Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.800268	-87.63791
Henderson	Parrish Shop Broadband Tower	Emergency	Broadband Tower			37.848267	-87.5302
Henderson	Period Tables Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.821945	-87.576976
Henderson	Pittsburgh Tank & Tower	Economic	Industry	Major Employer	1	Watertank Pl	Henderson
Henderson	Poole Fire Department	Emergency Services	Fire Dept.	Fire Dept.	9110	US 41N	Poole
Henderson	Presidential Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.809506	-87.55977
Henderson	Redbanks Nursing Home	Vulnerable Pop	Elderly Housing	Nursing Home	851	Kimsey Ln	Henderson
Henderson	Redbanks Regency	Vulnerable Pop	Elderly Housing	Assisted Living	875	Kimsey Ln	Henderson
Henderson	Redbanks Towers	Vulnerable Pop	Elderly Housing	Assisted Living	737	Kimsey Ln	Henderson
Henderson	Reed Fire Department	Emergency Services	Fire Dept.	Fire Dept.	16104	US 60 E	Reed
Henderson	Ridgewood Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8561	-87.430684
Henderson	Riverport Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.81182	-87.658479
Henderson	Riverview School	Vulnerable Pop	School	Elementary School	133	S Water St	Henderson
Henderson	Robards Broadband Tower	Emergency	Broadband Tower			37.662366	-87.5591
Henderson	Robards City Hall+	Government	Building	City Hall	1101	Clark St	Robards
Henderson	Robards Fire Department+	Emergency Services	Fire Dept.	Fire Dept.	7984	KY 416 W	Robards
Henderson	Robards Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6894	-87.522472
Henderson	Rock Springs Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.726695	-87.655784
Henderson	Rock Springs Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7267	-87.655637
Henderson	Rolling Hills Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.821729	-87.597599
Henderson	Russell Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.807659	-87.589647
Henderson	Sand Lane Manor Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.822851	-87.601434
Henderson	Sebree Main Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.609913	-87.529881
Henderson	Sebree Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6033	-87.519455
Henderson	Second Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.833992	-87.573928
Henderson	Senior Citizens Housing	Vulnerable Pop	Elderly Housing	Assisted Living	840	N Adams St	Henderson
Henderson	Service Tool & Plastics	Economic	Industry	Major Employer	2323	S Green St	Henderson
Henderson	Shadytree Mobile HomePark	Vulnerable Pop	Housing	Trailer Park	355	Race Track Rd	Henderson
Henderson	Shamrock Technologies	Economic	Industry	Major Employer	301	Community Dr	Henderson
Henderson	Sitex Corporation	Economic	Industry	Major Employer	1300	Commonwealth Dr	Henderson
Henderson	SKAPS Industries	Economic	Industry	Major Employer	5549	KY 425	Henderson
Henderson	Smith Avenue Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.819025	-87.608798
Henderson	Smith Mills Fire Department	Emergency Services	Fire Dept.	Fire Dept.	6027	KY 136	Smith Mills
Henderson	Sonoco	Economic	Industry	Major Employer	3100	Ohio Dr	Henderson
Henderson	South Heights School*	Vulnerable Pop	School	Elementary School	1199	Madison St	Henderson
Henderson	South Henderson Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.649222	-87.515977

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Henderson	Spottsville Broadband Tower	Emergency	Broadband Tower			37.856073	-87.4307
Henderson	Spottsville Elementary School*	Vulnerable Pop	School	Elementary School	9190	US 60 E	Spottsville
Henderson	Spottsville Fire Department	Emergency Services	Fire Dept.	Fire Dept.	8857	Old US 60 E	Spottsville
Henderson	Spruce Drive Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.867112	-87.568354
Henderson	State Police Post Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.793543	-87.570697
Henderson	Sugartree Broadband Tower	Emergency	Broadband Tower			37.7729	-87.7348
Henderson	Sunset Park	Vulnerable Pop	Recreation	Park			Henderson
Henderson	Sunset Terrace	Vulnerable Pop	Housing	Trailer Park	2751	US 41	Henderson
Henderson	Sunspring America	Economic	Industry	Major Employer	1105	5th St	Henderson
Henderson	Taubenesee Steel	Economic	Industry	Major Employer	3200	Ohio Dr	Henderson
Henderson	Teknor Apex	Economic	Industry	Major Employer	3070	Ohio Dr	Henderson
Henderson	The Gathering Place*	Vulnerable Pop	Elderly	Senior Center	1817	N Elm St	Henderson
Henderson	The Hills Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.864808	-87.53865
Henderson	Thelma B Johnson Early Learning Center	Vulnerable Pop	School	Preschool	631	N Green St	Henderson
Henderson	Trans Montaigne Terminal	Economic	Transportation	Major Employer	2633	Sunset Ln	Henderson
Henderson	Tunnel Hill Broadband Tower	Emergency	Broadband Tower			37.689009	-87.6396
Henderson	Tunnel Hill Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6908	-87.640693
Henderson	Tyson Tank Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6532	-87.51491
Henderson	U S Dam Number Four	Infrastructure	Dam	Dam			Henderson
Henderson	US 41 A Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.781336	-87.61473
Henderson	US 41 South Anthoston Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.768726	-87.542533
Henderson	US 41 South Robards Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.671771	-87.523732
Henderson	US 60 East Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.863447	-87.51939
Henderson	US 60 West Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.790894	-87.670909
Henderson	Vine St Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.8275	-87.590516
Henderson	W220DV - 91.9 MHz	Emergency	FM Radio Antenna			37.888143	-87.5436
Henderson	Walnut Lane Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.881898	-87.569655
Henderson	Washington Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.830182	-87.578345
Henderson	WGBF-FM - 103.1 MHz	Emergency	FM Radio Antenna			37.781743	-87.6233
Henderson	WGBF-FM - 103.1 MHz	Emergency	FM Radio Antenna			37.781743	-87.6233
Henderson	Wilson Lane Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.735757	-87.703564
Henderson	WKDQ - 99.5 MHz	Emergency	FM Radio Antenna			37.882543	-87.5411
Henderson	WKPB - 89.5 MHz	Emergency	FM Radio Antenna			37.851745	-87.3286
Henderson	Wright Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.818723	-87.580156
Henderson	Zion Fire Department	Emergency Services	Fire Dept.	Fire Dept.	8047	KY 351	Spottsville
McLean	4th Street Tank	Infrastructure	Water/Waste Water	Water Tank		37.4896	-87.13812
McLean	81 And Walnut Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.53074	-87.26034
McLean	A & S Fabricating	Economic	Industry	Major Employer	265	US 431	Livermore
McLean	A&S Fabricating Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.501101	-87.1217
McLean	Advanced Drainage Systems	Economic	Industry	Major Employer	121	Buck Creek Church Rd	Utica
McLean	Ballpark Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.495193	-87.138948
McLean	Beech Grove Broadband Tower	Emergency	Broadband Tower			37.601786	-87.3983
McLean	Beech Grove Fire Department	Emergency Services	Fire Dept.	Fire Dept.	445	KY 56	Beech Grove
McLean	Calhoun Broadband Tower	Emergency	Broadband Tower			37.550359	-87.2618
McLean	Calhoun City Fire Department	Emergency Services	Fire Dept.	Fire Dept.	325	W Second St	Calhoun
McLean	Calhoun City Hall	Government	Building	City Hall	325	W Second St	Calhoun
McLean	Calhoun Elementary School*	Vulnerable Pop	School	Elementary School	755	Main St	Calhoun
McLean	Calhoun Intake	Infrastructure	Water/Waste Water	Pump Station		37.535956	-87.258763
McLean	Calhoun Public Works Building	Infrastructure	Public Works	Public Works Building	125	High St	Calhoun
McLean	Calhoun Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.535757	-87.266195
McLean	Clear Well Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5352	-87.263465
McLean	Comy Dock Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.491917	-87.125245
McLean	Depot Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.491753	-87.133945
McLean	Doss Ln Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.527594	-87.265969
McLean	East District Fire Department	Emergency Services	Fire Dept.	Fire Dept.	213	E 3rd St	Livermore
McLean	East Harmons Ferry Rd Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.569149	-87.102335
McLean	Elba Broadband Tower	Emergency	Broadband Tower			37.658198	-87.3729
McLean	Elm St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.488999	-87.13375
McLean	Geary Brothers Inc	Economic	Industry	Major Employer	407	E 7th St	Livermore
McLean	Green River Apts	Vulnerable Pop	Housing	Apartment Building	408	W 5th St	Livermore
McLean	Green River Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.485946	-87.140365
McLean	Green River Lock & Dam 2	Infrastructure	Dam	Dam	695	First St	Calhoun
McLean	High School Lift Station Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.549261	-87.238367
McLean	Hillard Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.487108	-87.130322
McLean	Hwy 250 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.553119	-87.192359
McLean	Hwy 81 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.400575	-87.259281

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
McLean	Hwy 85 E Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.42096	-87.262472
McLean	Hwy 85 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.444478	-87.139292
McLean	Industrial Machine Services	Economic	Industry	Major Employer	83	KY 85	Sacramento
McLean	Intake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.485706	-87.135977
McLean	Island Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.442166	-87.156001
McLean	Island Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4622	-87.123929
McLean	Island Broadband Tower	Emergency	Broadband Tower			37.445877	-87.1373
McLean	Island City Hall	Government	Building	City Hall	280	Adams St	Island
McLean	Island Senior Center	Vulnerable Pop	Elderly	Senior Center	280	Adams St	Island
McLean	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.5486	-87.2681
McLean	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.5197	-87.1536
McLean	Kessinger Broadband Tower	Emergency	Broadband Tower			37.589607	-87.1963
McLean	Kips Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.496212	-87.138752
McLean	KY 138 East Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.528919	-87.256109
McLean	KY 81 Tank	Infrastructure	Water/Waste Water	Water Tank		37.5685	-87.236827
McLean	Lawerence St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.496411	-87.130354
McLean	Livermore Broadband Tower	Emergency	Broadband Tower			37.52	-87.1538
McLean	Livermore City Hall*+	Government	Building	City Hall	105	W 3rd St	Livermore
McLean	Livermore Elementary School	Vulnerable Pop	School	Elementary School	110	W 8th St	Livermore
McLean	Livermore Fire Department	Emergency Services	Fire Dept.	Fire Dept.	215	E 3rd St	Livermore
McLean	Livermore Heights	Vulnerable Pop	Housing	Apartment Building	900	KY 136	Livermore
McLean	Livermore Senior Center*	Vulnerable Pop	Elderly	Senior Center	105	W 3rd St	Livermore
McLean	Lock and Dam Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.5329	-87.264916
McLean	Lock Number 2	Infrastructure	Dam	Dam			Calhoun
McLean	Logsdon Broadband Tower	Emergency	Broadband Tower			37.470538	-87.3047
McLean	Marie Gatton Phillips Elementary	Vulnerable Pop	School	Elementary School	640	Main St	Sacramento
McLean	McLean Co Road Dept	Infrastructure	Public Works	Road Dept Building	215	KY 136 E	Calhoun
McLean	McLean County Alternate EOC+	Government	Building	Alternate EOC	105	W 3rd St	Livermore
McLean	McLean County Ambulance	Emergency Services	Ambulance	Ambulance	200	KY 81 N	Calhoun
McLean	McLean County Ambulance Service	Emergency Services	Ambulance	Ambulance	200	KY 81	Calhoun
McLean	McLean County Board of Education*	Vulnerable Pop	School	District Office	1859	KY 136	Calhoun
McLean	McLean County Bus Garage	Vulnerable Pop	School	Bus Garage	2059	KY 136 E	Calhoun
McLean	McLean County Central District Fire Department	Emergency Services	Fire Dept.	Fire Dept.	265	Walnut St	Calhoun
McLean	McLean County Courthouse	Government	Building	Courthouse	210	Main St	Calhoun
McLean	McLean County EOC	Government	Building	EOC	265	Walnut St	Calhoun
McLean	McLean County Health Center	Emergency Services	Healthcare	Clinic	200	KY 81 N	Calhoun
McLean	McLean County High School	Vulnerable Pop	School	High School	1859	KY 136 E	Calhoun
McLean	McLean County Middle School	Vulnerable Pop	School	Middle School	1901	KY 136 E	Calhoun
McLean	McLean County Senior Center*	Vulnerable Pop	Elderly	Senior Center	875	Walnut St	Calhoun
McLean	McLean County Sheriff's Office	Emergency Services	Police	Police	135	E Second St	Calhoun
McLean	McLean Regional Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.535855	-87.264508
McLean	MCRWC Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.535557	-87.263512
McLean	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	260	E First St	Calhoun
McLean	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	270	W Fourth St	Calhoun
McLean	Morgan Rickard Broadband Tower	Emergency	Broadband Tower			37.452551	-87.3207
McLean	Myer Creek Park	Vulnerable Pop	Recreation	Park			Beech Grove
McLean	North Elevated Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5504	-87.262035
McLean	Nurtrien Ag Solutions*	Economic	Industry	Major Employer	157	KY 81	Sacramento
McLean	River Bridge Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.53225	-87.258818
McLean	Riverfront Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.486126	-87.136533
McLean	Riverside Manor	Vulnerable Pop	Elderly Housing	Assisted Living	190	KY 136 E	Calhoun
McLean	Riverview Apts	Vulnerable Pop	Housing	Apartment Building	102	E 2nd St	Livermore
McLean	RV Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.486267	-87.146444
McLean	Sacramento Battlefield	Vulnerable Pop	Recreation	Entertainment			Sacramento
McLean	Sacramento Broadband Tower	Emergency	Broadband Tower			37.39917	-87.2364
McLean	Sacramento City Hall	Government	Building	City Hall	210	W 3rd St	Sacramento
McLean	Sacramento Fire Department*	Emergency Services	Fire Dept.	Fire Dept.	290	Main St	Sacramento
McLean	Sacramento Methodist Church*	Vulnerable Pop	Church	Religious	60	Main St	Sacramento
McLean	Sacramento Senior Center	Vulnerable Pop	Elderly	Senior Center	135	KY 2383	Sacramento
McLean	Sacramento Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.387641	-87.261508
McLean	Sacramento Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4122	-87.262064
McLean	Sandefur Manor Apartments	Vulnerable Pop	Housing	Apartment Building	680	W Third St	Calhoun
McLean	Southeastern Fire Department	Emergency Services	Fire Dept.	Fire Dept.	280	KY 85	Island
McLean	State Fire Rescue Training Area 3*	Emergency Services	Fire Dept.	Fire Dept.	1300	KY 136 E	Calhoun
McLean	Subway Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.551183	-87.257095
McLean	Sunny Acres	Vulnerable Pop	Elderly Housing	Assisted Living	426	KY 81 N	Calhoun

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
McLean	Tichner Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.487125	-87.132712
McLean	Townhouse Apts	Vulnerable Pop	Housing	Apartment Building	114	E Duvall St	Livermore
McLean	US 431 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.437969	-87.149093
McLean	US 431 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.4985	-87.123386
McLean	US 431 Livermore Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.518411	-87.114189
McLean	US 431 Livermore Tank	Infrastructure	Water/Waste Water	Water Tank		37.5596	-87.110034
McLean	US 431 Tank	Infrastructure	Water/Waste Water	Water Tank		37.495	-87.123205
McLean	West 5th St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.413058	-87.271103
McLean	Wildington Apts	Vulnerable Pop	Housing	Apartment Building	709	W 6th St	Livermore
McLean	Wilmington Apts Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.492247	-87.14335
McLean	Wrightsburg Hill Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.606657	-87.398819
McLean	Wrightsburg Hill Tank	Infrastructure	Water/Waste Water	Water Tank		37.602	-87.397616
Ohio	Apple Alley Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.452958	-86.909998
Ohio	Beaver Dam Ampitheater	Vulnerable Pop	Recreation	Entertainment	217	S Main St	Beaver Dam
Ohio	Beaver Dam Baptist Church Preschool	Vulnerable Pop	School	Preschool	343	S Main St	Beaver Dam
Ohio	Beaver Dam City Hall	Government	Building	City Hall	309	W 2nd St	Beaver Dam
Ohio	Beaver Dam City Park	Vulnerable Pop	Recreation	Park			Beaver Dam
Ohio	Beaver Dam Elementary School	Vulnerable Pop	School	Elementary School	183	US 62 E	Beaver Dam
Ohio	Beaver Dam Fire Department*	Emergency Services	Fire Dept.	Fire Dept.	250	N Madision St	Beaver Dam
Ohio	Beaver Dam Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.403435	-86.868662
Ohio	Beaver Dam Nursing and Rehab	Vulnerable Pop	Elderly Housing	Nursing Home	1595	US 231	Beaver Dam
Ohio	Beaver Dam Police Department	Emergency Services	Police	Police	309	W 2nd St	Beaver Dam
Ohio	Beaver Dam Shopping Center	Commerce	Retail	Shopping Center			Beaver Dam
Ohio	Beaver Dam Tank	Infrastructure	Water/Waste Water	Water Tank		37.4103	-86.888409
Ohio	Beaver Dam Village	Vulnerable Pop	Elderly Housing	Assisted Living	225	Rochester Rd	Beaver Dam
Ohio	Beaver Dam Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.396604	-86.874911
Ohio	Bells Run Broadband Tower	Emergency	Broadband Tower			37.584336	-86.9282
Ohio	Bells Run Tank	Infrastructure	Water/Waste Water	Water Tank		37.5843	-86.928167
Ohio	Big Iron Mount Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.462573	-86.897503
Ohio	Blackburn Heights	Vulnerable Pop	Housing	Apartment Building	4001	Walden Ct	Beaver Dam
Ohio	Blanchard Manor	Vulnerable Pop	Elderly Housing	Assisted Living	50	Cooper Ave	Beaver Dam
Ohio	Bluegrass Adult Daycare*	Vulnerable Pop	Water/Waste Water	Adult Daycare	2320	KY 69 N	Hartford
Ohio	Bluegrass Crossing Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.3631	-86.833321
Ohio	Bluegrass Crossings Broadband Tower	Emergency	Water/Waste Water			37.363164	-86.8335
Ohio	Bluegrass Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.376496	-86.823768
Ohio	Bobs Iga Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.444087	-86.898322
Ohio	Cagle's Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.42605	-86.872341
Ohio	Centertown Broadband Tower	Emergency	Broadband Tower			37.418246	-86.9973
Ohio	Centertown City Hall	Government	Building	City Hall	525	Main St	Centertown
Ohio	Centertown Fire Department	Emergency Services	Fire Dept.	Fire Dept.	814	Main St	Centertown
Ohio	Centertown Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.414421	-86.990442
Ohio	Centertown Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4165	-87.01532
Ohio	City Square Manor Apartments	Vulnerable Pop	Elderly Housing	Assisted Living	400	Clay St	Hartford
Ohio	Country Club Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.451261	-86.863343
Ohio	Dogwood Estates Assisted Living	Vulnerable Pop	Elderly Housing	Assisted Living	949	W 7th St	Beaver Dam
Ohio	Dundee Broadband Tower	Emergency	Broadband Tower			37.565357	-86.7988
Ohio	Dundee Fire Department	Emergency Services	Fire Dept.	Fire Dept.	11735	KY 69	Dundee
Ohio	Echols Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.342749	-86.884941
Ohio	Embry Woods Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.462348	-86.88986
Ohio	Fast Pace Urgent Care	Emergency Services	Healthcare	Clinic	1430	N Main St	Beaver Dam
Ohio	Fordsville #1 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6409	-86.714409
Ohio	Fordsville #2 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6291	-86.712031
Ohio	Fordsville City Hall	Government	Building	City Hall	25	Ridge Rd	Fordsville
Ohio	Fordsville Fire Department	Emergency Services	Fire Dept.	Fire Dept.	160	W Main St	Fordsville
Ohio	Fordsville Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.627659	-86.724531
Ohio	Goshem Meadows Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.404699	-86.891791
Ohio	Goshen Meadows Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.387487	-86.861403
Ohio	Goshen Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.404376	-86.900147
Ohio	Green Meadows Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.419364	-86.860574
Ohio	Green Meadows Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.370774	-86.846295
Ohio	Harbor Lane Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.401089	-86.886217
Ohio	Harbor Lane Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	113	Harbor Ln	Beaver Dam
Ohio	Hartford Big Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4578	-86.894926
Ohio	Hartford City Hall	Government	Building	City Hall	116	E Washington St	Hartford
Ohio	Hartford Fire Department*+	Emergency Services	Fire Dept.	Fire Dept.	677	Clay St	Hartford
Ohio	Hartford H20 Broadband Tower	Emergency	Broadband Tower			37.453383	-86.9009

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Ohio	Hartford Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.448809	-86.913453
Ohio	Hartford Little Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4534	-86.900944
Ohio	Hartford Police Department	Emergency Services	Police	Police	114	E Washington St	Hartford
Ohio	Hartford Public Works Building	Infrastructure	Public Works	Public Works Building	315	Locust St	Hartford
Ohio	Hartford Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.47216	-86.920883
Ohio	Hartford Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.451922	-86.91057
Ohio	Highland Court	Vulnerable Pop	Housing	Trailer Park	1316	Old Main St	Hartford
Ohio	Hoak Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.443347	-86.893535
Ohio	Hoover Hill Broadband Tower	Emergency	Broadband Tower			37.526308	-86.959
Ohio	Hoover Hill Tank	Infrastructure	Water/Waste Water	Water Tank		37.5263	-86.958755
Ohio	Houchens Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.432766	-86.887007
Ohio	Housing Authority	Vulnerable Pop	Housing Authority	Housing Authority	3030	James Ct	Beaver Dam
Ohio	Hunters Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	100	Liberty St	Hartford
Ohio	Hwy 505 Broadband Tower	Emergency	Broadband Tower			37.452937	-86.7272
Ohio	Hwy 85 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.399799	-86.991277
Ohio	Independent Living II	Vulnerable Pop	Elderly Housing	Nursing Home	316	E 8th St	Beaver Dam
Ohio	Industrial Park East Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.3856	-86.869054
Ohio	Intake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.334496	-86.793153
Ohio	Ipe Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.388997	-86.867542
Ohio	Iron Mountain Dr Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.459771	-86.898075
Ohio	Kentucky Kid Childcare	Vulnerable Pop	Childcare	Childcare	653	KY 69 N	Hartford
Ohio	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.4053	-86.7047
Ohio	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.525	-86.9178
Ohio	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.3833	-86.8744
Ohio	Kentucky RSA #3 Cellular Tower	Emergency	Cellular Tower			37.6425	-86.7128
Ohio	KWK Pkwy Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.377195	-86.825299
Ohio	KY 1543 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.447156	-86.883948
Ohio	KY 919 Olaton Tank	Infrastructure	Water/Waste Water	Water Tank		37.5263	-86.705465
Ohio	Lewis Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	218	E Kirk St	Hartford
Ohio	Lift station 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.636013	-86.726066
Ohio	Lift station 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.630359	-86.723589
Ohio	Likens Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	411	Locust St	Hartford
Ohio	List station 7 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.428637	-86.884495
Ohio	Little Friends Playhouse	Vulnerable Pop	Childcare	Childcare	321	Simmerman St	Hartford
Ohio	Little Iron Mount Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.465188	-86.897116
Ohio	Lock Number 3	Infrastructure	Dam	Dam			Rochester
Ohio	McCreary Apartments	Vulnerable Pop	Housing	Apartment Building	199	McCreary Ct	Hartford
Ohio	McHenry City Hall	Government	Building	City Hall	59	Hilliard Moseley St	McHenry
Ohio	McHenry Fire Department	Emergency Services	Fire Dept.	Fire Dept.	59	Hilliard Moseley St	Hartford
Ohio	Mill Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.419072	-87.001423
Ohio	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	108	Barrett Ave	Hartford
Ohio	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	315	W Union St	Hartford
Ohio	Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	498	W Washington St	Hartford
Ohio	Mother Hen Child Care	Vulnerable Pop	School	Preschool	155	Silver St	Beaver Dam
Ohio	Mulberry Apartments	Vulnerable Pop	Housing	Apartment Building	100	McCreary Ct	Hartford
Ohio	Mya Manor	Vulnerable Pop	Elderly Housing	Assisted Living	215	Rochester Rd	Beaver Dam
Ohio	Ohio County 911 Dispatch	Emergency Services	911 Dispatch	911 Dispatch	301	S Main St	Hartford
Ohio	Ohio County Airport	Infrastructure	Transportation	Airport	2260	Country Club Rd	Hartford
Ohio	Ohio County Alternative Learning Program	Vulnerable Pop	School	Alternative	100	E Render St	Hartford
Ohio	Ohio County Apartments	Vulnerable Pop	Housing	Apartment Building	112	W 12th St	Beaver Dam
Ohio	Ohio County Area Technology Center	Vulnerable Pop	School	Technical	1406	S Main St	Beaver Dam
Ohio	Ohio County Community Center*	Vulnerable Pop	Community Center	Community Center	130	E Washington St	Hartford
Ohio	Ohio County Courthouse	Government	Building	Courthouse	301	S Main St	Hartford
Ohio	Ohio County Emergency Medical Services+	Emergency Services	Ambulance	Ambulance	500	KY 69 N	Hartford
Ohio	Ohio County Emergency Operations Center+	Government	Building	EOC	130	E Washington St	Hartford
Ohio	Ohio County Fairgrounds*	Vulnerable Pop	Recreation	Entertainment	2300	KY 69 N	Hartford
Ohio	Ohio County Family Care	Emergency Services	Healthcare	Clinic	1313	N Main St	Beaver Dam
Ohio	Ohio County Health Department	Government	Building	Health Dept	1336	Clay St	Hartford
Ohio	Ohio County High School	Vulnerable Pop	School	High School	1400	S Main St	Beaver Dam
Ohio	Ohio County Hospital	Emergency Services	Healthcare	Hospital	1211	Old Main St	Hartford
Ohio	Ohio County Jail	Government	Correctional	Jail	108	E Washington St	Hartford
Ohio	Ohio County Middle School	Vulnerable Pop	School	Middle School	1404	S Main St	Beaver Dam
Ohio	Ohio County Park	Vulnerable Pop	Recreation	Park			Hartford
Ohio	Ohio County Park Campground	Vulnerable Pop	Housing	Trailer Park	2300	KY 69 N	Hartford
Ohio	Ohio County Quick Care	Emergency Services	Healthcare	Clinic	200	McMurty Ave	Hartford
Ohio	Ohio County Regional Wastewater	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.417293	-86.923826

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Ohio	Ohio County Road Department	Infrastructure	Public Works	Road Dept Building	2300	KY 69 N	Hartford
Ohio	Ohio County Schools Bus Garage+	Vulnerable Pop	School	Bus Garage	314	E UInion St	Hartford
Ohio	Ohio County Senior Center*	Vulnerable Pop	Elderly	Senior Center	2320	KY 69 N	Hartford
Ohio	Ohio County Sheriff's Office	Emergency Services	Police	Police	301	S Main St	Hartford
Ohio	Ohio County Water Treatment Plant #2	Infrastructure	Water/Waste Water	Water Treatment Plant		37.344522	-86.798261
Ohio	Olaton Broadband Tower	Emergency	Broadband Tower			37.526296	-86.7055
Ohio	Perdue Farms Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.347968	-86.78938
Ohio	Plant Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.417293	-86.923826
Ohio	Pleasant Ridge Broadband Tower	Emergency	Broadband Tower			37.5909	-86.9732
Ohio	Professional Care Nursing Home	Vulnerable Pop	Elderly Housing	Nursing Home	114	McMurty Ave	Hartford
Ohio	Raines Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.419863	-86.888629
Ohio	Render Center*	Vulnerable Pop	Community Center	Community Center	100	E Render St	Hartford
Ohio	Reynolds Station Broadband Tower	Emergency	Broadband Tower			37.648266	-86.7741
Ohio	Riverbend Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.457927	-86.904867
Ohio	Rockport City Hall	Government	Building	City Hall	9133	US 62	Rockport
Ohio	Rockport Fire Department	Emergency Services	Fire Dept.	Fire Dept.	9133	US 62	Rockport
Ohio	Rockport Tank	Infrastructure	Water/Waste Water	Water Tank		37.3357	-86.998714
Ohio	Rosine Broadband Tower	Emergency	Broadband Tower			37.449682	-86.7406
Ohio	Rosine Fire Department	Emergency Services	Fire Dept.	Fire Dept.	5	2nd St	Rosine
Ohio	Scottown Broadband Tower	Emergency	Broadband Tower			37.326294	-86.9624
Ohio	Southern Elementary Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.350452	-86.82169
Ohio	Spring Woods Mobile Home Park	Vulnerable Pop	Housing	Trailer Park	101	Springwood Dr	Hartford
Ohio	Stericycle Inc	Economic	Industry	Major Employer	1	Technology Pl	Beaver Dam
Ohio	Suburban Manor Apartments	Vulnerable Pop	Housing	Apartment Building	323	E 5th St	Beaver Dam
Ohio	Taffy Broadband Tower	Emergency	Broadband Tower			37.52511	-86.9178
Ohio	Tamarlane Industries	Economic	Industry	Major Employer	846	S Main St	Beaver Dam
Ohio	Town Terrace	Vulnerable Pop	Housing	Trailer Park	131	Terrace Dr	Beaver Dam
Ohio	Tutors Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.454598	-86.908972
Ohio	Twin Hills Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.424633	-86.883233
Ohio	US 231 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.436593	-86.88734
Ohio	US 231 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.390639	-86.867501
Ohio	W265BZ - 100.9 MHz	Emergency	FM Radio Antenna			37.446448	-86.8892
Ohio	Wal-Mart	Commerce	Retail	Supply	1701	N Main St	Beaver Dam
Ohio	Walmart Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.428791	-86.878992
Ohio	Wayland Alexander Child Care	Vulnerable Pop	Childcare	Childcare	1250	Oakwood Dr	Hartford
Ohio	Wayland Alexander Elementary	Vulnerable Pop	School	Elementary School	1250	Oakwood Dr	Hartford
Ohio	Wayland Child Development Center	Vulnerable Pop	Childcare	Childcare	111	W Frederica St	Hartford
Ohio	Wayland Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.456681	-86.888583
Ohio	Windy Hill Broadband Tower	Emergency	Broadband Tower			37.40527	-86.7047
Ohio	Windy Hill Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4153	-86.707399
Ohio	WPT Nonwovens Corporation	Economic	Industry	Major Employer	850	US 231	Beaver Dam
Ohio	WXMZ - 106.3 MHz	Emergency	FM Radio Antenna			37.443348	-86.8992
Ohio	Young Manufacturing	Economic	Industry	Major Employer	521	S Main St	Beaver Dam
Union	13th Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.554931	-87.98777
Union	15th Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.555904	-87.983527
Union	Adams Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.779262	-87.928039
Union	Ashmoor Apartments	Vulnerable Pop	Housing	Apartment Building	301	Kelsey St	Sturgis
Union	Audubon Area Head Start	Vulnerable Pop	School	Preschool	4464	US 60 W	Morganfield
Union	Ball Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.678009	-87.908678
Union	Ball Park Station Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.766335	-87.934904
Union	Bethel Church Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.612697	-87.98619
Union	Bickett Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.664711	-87.934031
Union	Blueberry #2 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5768	-87.961473
Union	Blueberry Hill Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5765	-87.960899
Union	Boxville H20 Broadband Tower	Emergency	Broadband Tower			37.602933	-87.8448
Union	Brandonwood Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.6844	-87.887592
Union	Breckenridge Golf Course	Vulnerable Pop	Recreation	Park	240	Whitaker Way	Morganfield
Union	Breckenridge Place	Vulnerable Pop	Elderly Housing	Nursing Home	170	Sykes Blvd	Morganfield
Union	Buck Track Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6442	-88.076259
Union	Bucktrack H2O Broadband Tower	Emergency	Broadband Tower			37.644295	-88.0762
Union	Calvary Baptist Church	Vulnerable Pop	Water/Waste Water	Religious	31	Calvary Church Rd	Uniontown
Union	Camp Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.55617	-88.014925
Union	Carlisle Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.691431	-87.926942
Union	Carwash Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.687963	-87.910172
Union	Cellco Partnership Cellular Tower	Emergency	Cellular Tower			37.6606	-87.9197
Union	City Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.679068	-87.885964

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Union	City Tank	Infrastructure	Water/Waste Water	Water Tank		37.685	-87.922935
Union	Consolidated Grain & Barge	Economic	Transportation	Barge	325	3rd St	Uniontown
Union	Country Club Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.688498	-87.87936
Union	Dam Number 49	Infrastructure	Dam	Dam			Uniontown
Union	Daviess Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6598	-87.944064
Union	Dekovan Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.578052	-88.071873
Union	Dekoven Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.578	-88.071722
Union	Earle C Clements Job Corps	Vulnerable Pop	School	Technical	2303	US 60 E	Morganfield
Union	Elementary School Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.676361	-87.915374
Union	Ervin Cable	Economic	Industry	Major Employer	450	Pryor Blvd	Sturgis
Union	EZ Access	Economic	Industry	Major Employer	3215	KY 2835	Morganfield
Union	Flournoy Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.693785	-87.859298
Union	Food Giant	Economic	Retail	Supply	1260	N Main St	Sturgis
Union	God's Little Lambs Daycare	Vulnerable Pop	Childcare	Daycare	200	N Morgan St	Morganfield
Union	Grangertown Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.546466	-88.002403
Union	Green River Behavioral Health	Emergency Services	Healthcare	Behavioral	233	N Townsend St	Morganfield
Union	Grove Center Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.643585	-87.987954
Union	H & H Signs	Economic	Industry	Major Employer	51	Blakely Dr	Sturgis
Union	Health First	Emergency Services	Healthcare	Clinic	220	N Morgan St	Morganfield
Union	Henry Higgins Wildlife Management Area	Vulnerable Pop	Recreation	Park			Morganfield
Union	Herigas Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.676031	-87.887811
Union	Highway 141 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.603	-87.844782
Union	Holly Park Apartments	Vulnerable Pop	Housing	Apartment Building	724	E Lyon St	Morganfield
Union	Hometown Inn*	Vulnerable Pop	Housing	Apartment Building	551	US 60 E	Morganfield
Union	Housing Authority	Vulnerable Pop	Housing Authority	Housing Authority	703	Culver Ct	Morganfield
Union	Housing Authority of Sturgis	Vulnerable Pop	Housing	Apartment Building	116	E Old Providence Rd	Sturgis
Union	Hughes St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.688688	-87.914803
Union	Intake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.798715	-87.916492
Union	Jackson Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.540756	-87.979778
Union	Jim David Meats	Economic	Food Supply	Major Employer	350	T Frank Wathern Ln	Uniontown
Union	Job Corps Tank	Infrastructure	Water/Waste Water	Water Tank		37.6862	-87.855673
Union	John A Arnold Convention Ctr	Vulnerable Pop	Recreation	Entertainment			Sturgis
Union	John Paul II Catholic School	Vulnerable Pop	School	Elementary School	307	Church St	Morganfield
Union	John T. Myers Lock and Dam	Infrastructure	Dam	Dam			Uniontown
Union	Kelly Brook Apartments	Vulnerable Pop	Housing	Apartment Building	221	S Holt Dr	Sturgis
Union	Legion Park	Vulnerable Pop	Recreation	Park			Morganfield
Union	Lift station #1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.706403	-87.818298
Union	Lift station #2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.706247	-87.810801
Union	Lisa Ferguson Childcare Home	Vulnerable Pop	Childcare	Daycare	515	5th St	Uniontown
Union	Little Kentucky Smokehouse	Economic	Industry	Major Employer	400	T Frank Wathern Ln	Uniontown
Union	Little Sturgis Motoplex	Vulnerable Pop	Recreation	Entertainment			Sturgis
Union	Main Lift Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.543811	-87.979644
Union	Main Street Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.772711	-87.937176
Union	Martin Tire	Economic	Industry	Major Employer	11675	US 60 W	Sturgis
Union	Martin Tire Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.540029	-87.960524
Union	McFall Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.611556	-87.95402
Union	Medco of Morganfield	Vulnerable Pop	Elderly Housing	Nursing Home	509	N Carrier St	Morganfield
Union	Methodist Hospital Union County	Emergency Services	Healthcare	Hospital	4604	US 60 W	Morganfield
Union	Minerva Limp Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.722059	-87.987511
Union	Morganfield Broadband Tower	Emergency	Broadband Tower			37.6517	-87.9216
Union	Morganfield City Hall+	Government	Building	City Hall	130	E Main St	Morganfield
Union	Morganfield City Park	Vulnerable Pop	Recreation	Park	201	Park St	Morganfield
Union	Morganfield Elementary School*	Vulnerable Pop	School	Elementary School	411	S Mart St	Morganfield
Union	Morganfield Fire Department	Emergency Services	Fire Dept.	Fire Dept.	120	E Main St	Morganfield
Union	Morganfield Police Department	Emergency Services	Police	Police	118	E Main St	Morganfield
Union	Morganfield Public Works	Infrastructure	Public Works	Public Works	526	N Court St	Morganfield
Union	Morganfield Road Department	Infrastructure	Public Works	Road Dept	224	W Waverly St	Morganfield
Union	Morganfield Townhouse Apartments	Vulnerable Pop	Housing	Apartment Building	618	E Waverly St	Morganfield
Union	Morganfield Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.671554	-87.828593
Union	Morganfield Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.679363	-87.88584
Union	N. Morgan St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.694002	-87.905398
Union	New Cingular Wireless Tower	Emergency	Cellular Tower			37.6517	-87.9214
Union	New Cingular Wireless Tower	Emergency	Cellular Tower			37.6472	-87.9011
Union	North Wallace Lane Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.544661	-87.966822
Union	Northside Apartments	Vulnerable Pop	Housing	Apartment Building	43	Northside	Morganfield
Union	Northside Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.692676	-87.91585

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Union	Old Sewer Plant Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.694599	-87.909674
Union	Padgett St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.68121	-87.908282
Union	Penrod Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.541053	-87.98644
Union	Prep Plant Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.742591	-87.887334
Union	Pride Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.564181	-87.881778
Union	Raleigh Broadband Tower	Emergency	Broadband Tower			37.715567	-88.0136
Union	Raleigh Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.7155	-88.013613
Union	Rayloc	Economic	Industry	Major Employer	3710	US 60 E	Morganfield
Union	Riverview Coal	Economic	Industry	Major Employer	835	KY 1179	Waverly
Union	Riverview Coal Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.761649	-87.945651
Union	Ruark Dr Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.769884	-87.926714
Union	Saint Ann Catholic Church*	Vulnerable Pop	Church	Religious	304	S Church St	Morganfield
Union	Saint Peters Church	Vulnerable Pop	Church	Religious	201	E Market St	Waverly
Union	Saturn Machine & Welding	Economic	Industry	Major Employer	223	N Willie Pride Rd	Sturgis
Union	Senior Park Station Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.550404	-87.980894
Union	Sonoco Products	Economic	Industry	Major Employer	3996	US 60 E	Morganfield
Union	South Chapman Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.686185	-87.929904
Union	Southgate Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.675604	-87.92463
Union	Spring Grove Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.679	-88.041295
Union	St Agnes Catholic Church	Vulnerable Pop	Church	Religious	401	5th St	Uniontown
Union	Staley'S=s Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.685539	-87.876043
Union	Sturgis Broadband Tower	Emergency	Broadband Tower			37.591673	-88.0222
Union	Sturgis City Hall	Government	Building	City Hall	106	W 6th St	Sturgis
Union	Sturgis Elementary School*	Vulnerable Pop	School	Elementary School	1101	N Grant St	Sturgis
Union	Sturgis Fire Department	Emergency Services	Fire Dept.	Fire Dept.	110	W 6th St	Sturgis
Union	Sturgis Municipal Airport	Infrastructure	Transportation	Airport	11675	US 60	Sturgis
Union	Sturgis Police Department	Emergency Services	Police	Police	306	N Adams St	Sturgis
Union	Sturgis Public Works	Infrastructure	Public Works	Public Works	306	N Adams St	Sturgis
Union	Sturgis Senior Center*	Vulnerable Pop	Elderly	Senior Center	1002	Monroe St	Sturgis
Union	Sturgis Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.5458	-87.966235
Union	Sturgis Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5556	-87.970818
Union	Sturgis Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.540229	-88.056787
Union	Subway Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.68895	-87.903401
Union	Sullivan Community Fire Department	Emergency Services	Fire Dept.	Fire Dept.	19327	KY 141	Sturgis
Union	Sullivan Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5018	-87.937025
Union	Superior Daycare	Vulnerable Pop	Childcare	Daycare	519	N Morgan St	Morganfield
Union	Sykes Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.692078	-87.868775
Union	Terry Hill Pump Station #1	Infrastructure	Water/Waste Water	Pump Station		37.660406	-87.934342
Union	Terry Hill Pump Station 2	Infrastructure	Water/Waste Water	Pump Station		37.662574	-87.932831
Union	Trailer Park	Vulnerable Pop	Housing	Trailer Park	615	Sandy Ln	Morganfield
Union	Trailer Park	Vulnerable Pop	Housing	Trailer Park	215	Vinson Ln	Morganfield
Union	Trelleborg Adhesive Plant	Economic	Industry	Major Employer	3564	US 60 E	Morganfield
Union	Trelleborg Vibracoustics	Economic	Industry	Major Employer	3408	US 60 E	Morganfield
Union	Turner Building*+	Vulnerable Pop	Community Center	Community Center	532	2nd St	Uniontown
Union	Union County 911	Emergency Services	911 Dispatch	911 Dispatch	118	E Main St	Morganfield
Union	Union County Alternate EOC	Government	Building	EOC	225	N Richards Ln	Morganfield
Union	Union County Ambulance Service	Emergency Services	Ambulance	Ambulance	4604	US 60 W	Morganfield
Union	Union County Courthouse	Government	Building	Courthouse	100	W Main St	Morganfield
Union	Union County Courthouse Annex	Government	Government	Courthouse Annex	121	S Morgan St	Morganfield
Union	Union County Emergency Operations Center	Government	Building	EOC	212	Airline Rd	Morganfield
Union	Union County Fair & Sturgis Convention Center	Vulnerable Pop	Recreation	Entertainment			Sturgis
Union	Union County Health Department	Government	Building	Health Dept	218	W McElroy St	Morganfield
Union	Union County High School	Vulnerable Pop	School	High School	4464	US 60 W	Morganfield
Union	Union County High School Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.632088	-87.941665
Union	Union County Jail	Government	Correctional	Jail	100	W Main St	Morganfield
Union	Union County Middle School	Vulnerable Pop	School	Middle School	4465	US 60 W	Morganfield
Union	Union County Senior Center*	Vulnerable Pop	Elderly	Senior Center	225	Richards Ln	Morganfield
Union	Union County Sheriff's Office	Emergency Services	Police	Police	100	W Main St	Morganfield
Union	Union County Volunteer Fire Department*+	Emergency Services	Fire Dept.	Fire Dept.	920	Second St	Uniontown
Union	Uniontown Baptist	Vulnerable Pop	Church	Religious	316	Pearl St	Uniontown
Union	Uniontown Broadband Tower	Emergency	Broadband Tower			37.769343	-87.9295
Union	Uniontown City Hall	Government	Building	City Hall	237	Main St	Uniontown
Union	Uniontown Elementary School	Vulnerable Pop	School	Elementary School	401	Walnut St	Uniontown
Union	Uniontown Fire Department	Emergency Services	Fire Dept.	Fire Dept.	237	Main St	Uniontown
Union	Uniontown Library	Vulnerable Pop	Library	Library	236	Main St	Uniontown
Union	Uniontown Park	Vulnerable Pop	Recreation	Park	900	Waller St	Uniontown

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Union	Uniontown Police Department	Emergency Services	Police	Marshal Service	237	Main St	Uniontown
Union	Uniontown Tank #1	Infrastructure	Water/Waste Water	Water Tank		37.7691	-87.929315
Union	Uniontown Tank #2	Infrastructure	Water/Waste Water	Water Tank		37.7693	-87.929694
Union	Uniontown Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.771573	-87.923763
Union	US 60 Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.587793	-87.964273
Union	US 60 Shopping Center Morganfield	Commerce	Retail	Shopping Center			Morganfield
Union	Victory Technical High School	Vulnerable Pop	School	Technical	2302	US 60 E	Morganfield
Union	Wagner Ct Trailer Park	Vulnerable Pop	Housing	Trailer Park	31	Wagner Ct	Sturgis
Union	Wal-Mart	Commerce	Retail	Supply			Morganfield
Union	Walmart Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.690589	-87.895129
Union	Waverly 1 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.717	-87.815679
Union	Waverly 2 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.741	-87.888092
Union	Waverly Broadband Tower	Emergency	Broadband Tower			37.716978	-87.8157
Union	Waverly City Hall	Government	Building	City Hall	120	US 60	Waverly
Union	Waverly City Park	Vulnerable Pop	Recreation	Park	105	N Johnson St	Waverly
Union	Waverly Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.697825	-87.846383
Union	Waverly Volunteer Fire Department	Emergency Services	Fire Dept.	Fire Dept.	6353	US 60	Waverly
Union	West Main Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.689463	-87.925348
Union	Wetherby Circle Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.691293	-87.904334
Union	WEUC - 88.7 MHz	Emergency	FM Radio Antenna			37.735844	-87.9958
Union	Whispering Meadows #1 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.665	-87.868126
Union	Whispering Meadows #2 Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.6626	-87.862844
Union	Whispering Meadows Volunteer Fire Department	Emergency Services	Fire Dept.	Fire Dept.	1944	Meadows Rd	Morganfield
Union	WKVN - 95.3 MHz	Emergency	FM Radio Antenna			37.777243	-87.6239
Union	WMSK-FM - 101.3 MHz	Emergency	FM Radio Antenna			37.667845	-87.9294
Union	Young Street Lift Station Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.769239	-87.939979
Webster	5 Star Electric	Business	Electric	Constractor	175	KY 109	Clay
Webster	Americold Logistics	Economic	Industry	Major Employer	1541	US 41	Sebree
Webster	Apartment Building	Vulnerable Pop	Housing	Apartment Building	7549	KY 56 E	Sebree
Webster	Apartment Building	Vulnerable Pop	Housing	Apartment Building	7181	Main St	Sebree
Webster	Apartment Building	Vulnerable Pop	Housing	Apartment Building	39	N Henderson St	Sebree
Webster	Apartment Building	Vulnerable Pop	Housing	Apartment Building	25	Thomas St	Sebree
Webster	Baker Ln Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.40845	-87.740978
Webster	Baker Park	Vulnerable Pop	Recreation	Park	236	Lakeview Dr	Dixon
Webster	Big Hill Apartments	Vulnerable Pop	Housing	Apartment Building	307	Marlin St	Providence
Webster	Blackford Fire Department	Emergency Services	Fire Dept.	Fire Dept.	2540	KY 143	Blackford
Webster	Carhart Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.614265	-87.508889
Webster	Cellco Partnership Cellular Tower	Emergency	Cellular Tower			37.6128	-87.4931
Webster	Cellco Partnership Tower	Emergency	Cellular Tower			37.5142	-87.505
Webster	City Lake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.375946	-87.796822
Webster	Clay City Hall+	Government	Building	City Hall	9100	KY 132	Clay
Webster	Clay Elementary	Vulnerable Pop	School	Elementary School	210	College St	Clay
Webster	Clay Fire Department	Emergency Services	Fire Dept.	Fire Dept.	135	E Railroad St	Clay
Webster	Clay Machine Works	Economic	Industry	Major Employer	99	Kentucky Ave	Clay
Webster	Clay Police Department	Emergency Services	Police	Police	22	W Railroad St	Clay
Webster	Clay Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.472936	-87.813952
Webster	Clay Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4778	-87.832251
Webster	Clay1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.472748	-87.813487
Webster	Colonial Terrace	Vulnerable Pop	Elderly Housing	Nursing Home	142	Roger Powell Rd	Sebree
Webster	Custom Engineering	Economic	Industry	Major Employer	656	Hall St	Clay
Webster	Dixon Broadband Tower	Emergency	Broadband Tower			37.5316	-87.6811
Webster	Dixon City Hall	Government	Building	City Hall	16	US 41-A N	Dixon
Webster	Dixon Elementary School	Vulnerable Pop	School	Elementary School	277	KY 1340	Dixon
Webster	Dixon Fire Department	Emergency Services	Fire Dept.	Fire Dept.	16	US 41-A	Dixon
Webster	Dixon First Baptist*	Vulnerable Pop	Church	Religious	87	US 41-A S	Dixon
Webster	Dixon General Baptist Church*	Vulnerable Pop	Church	Religious	63	KY 132	Dixon
Webster	Dixon Manor Apartments	Vulnerable Pop	Housing	Apartment Building	1080	US 41-A S	Dixon
Webster	Dixon Public Works	Infrastructure	Public Works	Public Works Building	17	US 41-A N	Dixon
Webster	Dixon Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5233	-87.689641
Webster	Elk Rentals	Vulnerable Pop	Housing	Apartment Building	714	N Broadway St	Providence
Webster	Elk Rentals	Vulnerable Pop	Housing	Apartment Building	11 Dispat	S Broadway St	Providence
Webster	Evergreen Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.389065	-87.769674
Webster	Fairview Church of Christ*	Vulnerable Pop	Church	Religious	1693	US 41-A S	Dixon
Webster	Fairway Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.405262	-87.732229
Webster	First Baptist Church*	Vulnerable Pop	Church	Religious	214	S Broadway St	Providence
Webster	Givens St Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.390049	-87.751252

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Webster	Green River Post	Economic	Industry	Major Employer	11029	KY 132	Sebree
Webster	Greenbriar Apts	Vulnerable Pop	Housing	Apartment Building	314	N Willow St	Providence
Webster	Health First	Emergency Services	Healthcare	Clinic	215	E Main St	Providence
Webster	Health First	Emergency Services	Healthcare	Clinic	9086	KY 132	Clay
Webster	Hearin-Bordley Broadband Tower	Emergency	Broadband Tower			37.536862	-87.8501
Webster	Herrin Tank	Infrastructure	Water/Waste Water	Water Tank		37.5369	-87.850227
Webster	Herrin Tank Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.532867	-87.847371
Webster	Hometown First	Emergency Services	Healthcare	Clinic	9061	KY 132	Clay
Webster	Hometown Health Clinic	Emergency Services	Healthcare	Clinic	1871	US 41-A S	Dixon
Webster	Hudson Meadows Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.405998	-87.726141
Webster	Imperial Apts	Vulnerable Pop	Housing	Apartment Building	500	Marlin St	Providence
Webster	Industrial Park Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.577853	-87.519644
Webster	Intake Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.591115	-87.435936
Webster	KY 120 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.415672	-87.724935
Webster	KYTC Maintenance Garage	Government	Public Works	Public Works Building	806	US 41-A S	Dixon
Webster	Lakeview Baptist Church*	Vulnerable Pop	Church	Religious	257	Lakeview Dr	Dixon
Webster	Life Center Church*	Vulnerable Pop	Church	Religious	630	Edgewood Dr	Providence
Webster	Lift Station 5 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.524842	-87.699356
Webster	Lift Station 7 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.525434	-87.685216
Webster	Methodist Church*	Vulnerable Pop	Church	Religious	22	Church St	Slaughters
Webster	Methodist Clinic	Emergency Services	Healthcare	Clinic	1355	US 41-A S	Dixon
Webster	Methodist Family Medicine Sebree	Emergency Services	Healthcare	Clinic	47	E Webster St	Sebree
Webster	Mooney Motel	Vulnerable Pop	Housing	Apartment Building	421	US 41-A S	Dixon
Webster	Mount Pleasant Pump Station #1	Infrastructure	Water/Waste Water	Pump Station		37.523289	-87.559411
Webster	Mount Pleasant Pump Station #2	Infrastructure	Water/Waste Water	Pump Station		37.523083	-87.559365
Webster	Mount Pleasant Tank #1	Infrastructure	Water/Waste Water	Water Tank		37.5233	-87.559411
Webster	Mount Pleasant Tank #2	Infrastructure	Water/Waste Water	Water Tank		37.5231	-87.559365
Webster	Nutrien Ag Solutions*	Economic	Industry	Major Employer	8381	KY 132	Clay
Webster	Oak Heights Broadband Tower	Emergency	Broadband Tower			37.576607	-87.6892
Webster	Oak Heights Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.5766	-87.689115
Webster	Onton Fire Department	Emergency Services	Fire Dept.	Fire Dept.	6675	KY 370	Onton
Webster	Palmer Place I	Vulnerable Pop	Elderly Housing	Assisted Living	500	US 41-A N	Providence
Webster	Pioneer Plastics	Economic	Industry	Major Employer	1584	US 41-A N	Dixon
Webster	Pleasant Hill Baptist Church	Vulnerable Pop	Church	Religious	821	Westerfield Ave	Providence
Webster	Poole Broadband Tower	Emergency	Broadband Tower			37.637094	-87.6361
Webster	Providence Back Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4061	-87.762769
Webster	Providence Broadband Tower	Emergency	Broadband Tower			37.417759	-87.788
Webster	Providence Church of Christ*	Vulnerable Pop	Church	Religious	2500	Liberty Rd	Providence
Webster	Providence City Hall	Government	Building	City Hall	201	E Main St	Providence
Webster	Providence City Park	Vulnerable Pop	Recreation	Park	491	Cobb Dr	Providence
Webster	Providence Community Center*+	Vulnerable Pop	Center	Community	211	Wallace St	Providence
Webster	Providence Elementary School	Vulnerable Pop	School	Elementary School	470	S Broadway St	Providence
Webster	Providence Fire Department	Emergency Services	Fire Dept.	Fire Dept.	200	N Willow St	Providence
Webster	Providence General Baptist	Vulnerable Pop	Church	Religious	309	W Main St	Providence
Webster	Providence Minicipal Housing Comm	Vulnerable Pop	Housing	Apartment Building	434	Centerridge Dr	Providence
Webster	Providence New Tank Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.406	-87.762972
Webster	Providence Police Department	Emergency Services	Police	Police	200	N Willow St	Providence
Webster	Providence Wastewater Treatment Plant	Infrastructure	Water/Waste Water	astewater Treatment Plant		37.393108	-87.770877
Webster	Providence Water Treatment Plant #2	Infrastructure	Water/Waste Water	Water Treatment Plant		37.393272	-87.771776
Webster	Providence-Webster County Airport	Infrastructure	Transportation	Airport	611	Airport Rd	Providence
Webster	Pump Station 1 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.510677	-87.697293
Webster	Pump Station 2 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.509949	-87.687768
Webster	Pump Station 3 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.520344	-87.700503
Webster	Pump Station 4 Lift Station	Infrastructure	Water/Waste Water	Lift Station		37.514894	-87.694126
Webster	Ridgemount Apartments	Vulnerable Pop	Housing	Apartment Building	87	Nall St	Clay
Webster	Ritz Road Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.519757	-87.547878
Webster	River Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.378728	-87.801476
Webster	S & S Salvage	Economic	Industry	Major Employer	501	US 41-A N	Providence
Webster	Saddle Club Apts	Vulnerable Pop	Housing	Apartment Building	216	Gulf St	Providence
Webster	Scott Manufacturing	Economic	Industry	Major Employer	1185	US 41	Sebree
Webster	Sebree Broadband Tower	Emergency	Broadband Tower			37.603337	-87.5195
Webster	Sebree City Hall	Government	Building	City Hall	36	S Spring St	Sebree
Webster	Sebree Elementary School	Vulnerable Pop	School	Elementary School	61	N State St	Sebree
Webster	Sebree Fire Department	Emergency Services	Fire Dept.	Fire Dept.	36	S Spring St	Sebree
Webster	Sebree Maintenance Garage	Infrastructure	Public Works	Public Works Garage	211	N State St	Sebree
Webster	Sebree Police Department	Emergency Services	Police	Police	36	S Spring St	Sebree

Critical Facitilies

County	Name	Category	Subcategory	Subcategory2	Location	Location2	Location3
Webster	Sebree Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.603246	-87.519111
Webster	Sebree Tank	Infrastructure	Water/Waste Water	Water Tank		37.6033	-87.518997
Webster	Second Baptist Dhurch	Vulnerable Pop	Church	Religious	700	Langley Ave	Providence
Webster	Shemwell Nursing Home	Vulnerable Pop	Elderly Housing	Nursing Home	805	Princeton St	Providence
Webster	Ship of Zion*	Vulnerable Pop	Church	Religious	849	US 41-A S	Dixon
Webster	Slaughters Broadband Tower	Emergency	Broadband Tower			37.514287	-87.5048
Webster	Slaughters City Hall	Government	Building	City Hall	23	Main Cross St	Slaughters
Webster	Slaughters Elementary School	Vulnerable Pop	School	Elementary School	200	Second Cross St	Slaughters
Webster	Slaughters Fire Department+	Emergency Services	Fire Dept.	Fire Dept.	93	W 2nd St	Slaughters
Webster	Slaughters Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.475243	-87.492103
Webster	Smith Metals	Economic	Industry	Major Employer	610	W Main St	Providence
Webster	Sureway	Commerce	Retail	Supply	105	US 41-A N	Providence
Webster	Teen Challenge	Vulnerable Pop	School	Alternative	86	Burnt Mill Rd	Dixon
Webster	Texas Gas Transmission	Infrastructure	Natural Gas	Natural Gas Supply	3562	KY 1405	Slaughters
Webster	Timewell Drainage Products	Economic	Industry	Major Employer	201	Donan Dr	Providence
Webster	Townsend Foods	Commerce	Retail	Supply	1308	US 41-A S	Dixon
Webster	Tyson Foods	Economic	Food Supply	Major Employer	1791	US 41	Sebree
Webster	US 41A Pump Station	Infrastructure	Water/Waste Water	Pump Station		37.540343	-87.683745
Webster	Vanderburg Broadband Tower	Emergency	Broadband Tower			37.474112	-87.6468
Webster	Vanderburg Water Tank	Infrastructure	Water/Waste Water	Water Tank		37.4741	-87.646838
Webster	Victory Baptist Church	Vulnerable Pop	Church	Religious	501	S Broadway St	Providence
Webster	Victory Worship Center*	Vulnerable Pop	Church	Religious	80	KY 1340	Dixon
Webster	Vonda Ln Trailer Park	Vulnerable Pop	Housing	Trailer Park	20	Vonda Ln	Sebree
Webster	W269CD - 101.7 MHz	Emergency	FM Radio Antenna			37.406445	-87.7628
Webster	Webster County 911 Coordinator	Emergency Services	911 Dispatch	911 Dispatch	132	Stegal St	Dixon
Webster	Webster County Community Based Services	Vulnerable Pop	Center	Community	26	US 41-A S	Dixon
Webster	Webster County Courthouse	Government	Building	Courthouse	25	US 41-A	Dixon
Webster	Webster County Detention Center	Government	Correctional	Jail	141	Stegal St	Dixon
Webster	Webster County Emergency Management	Government	Building	EOC	773	US 41-A S	Dixon
Webster	Webster County Emergency Medical Services	Emergency Services	Ambulance	Ambulance	2690	US 41-A S	Dixon
Webster	Webster County Extension Office	Vulnerable Pop	School	Extension Office	1118	US 41-A S	Dixon
Webster	Webster County Food Bank	Vulnerable Pop	Food Bank	Community	110	US 41-A N	Providence
Webster	Webster County Garage	Infrastructure	Public Works	Public Works	1075	KY 132 W	Dixon
Webster	Webster County Health Department	Government	Building	Health Dept	80	Clayton Ave	Dixon
Webster	Webster County High School	Vulnerable Pop	School	High School	1922	US 41-A S	Dixon
Webster	Webster County Middle School	Vulnerable Pop	School	Middle School	1928	US 41-A S	Dixon
Webster	Webster County Public Library	Vulnerable Pop	Library	Library	101	KY 132	Dixon
Webster	Webster County Restricted Custody Center	Government	Correctional	Jail	101	S College St	Dixon
Webster	Webster County Senior Center	Vulnerable Pop	Elderly	Senior Center	44	N College St	Dixon
Webster	Webster County Sheriff's Office	Emergency Services	Police	Police	25	US 41-A	Dixon
Webster	Webster County Water Treatment Plant	Infrastructure	Water/Waste Water	Water Treatment Plant		37.576537	-87.421199
Webster	Wheatcroft Broadband Tower	Emergency	Broadband Tower			37.48193	-87.8767
Webster	Wheatcroft City Hall	Government	Building	City Hall	32	Main St	Wheatcroft
Webster	Wheatcroft Fire Department	Emergency Services	Fire Dept.	Fire Dept.	32	Main St	Wheatcroft

Capability Assessment Worksheet

Jurisdiction: Daviess County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	Yes Yes Yes
Capital Improvements Plan (RWRA, City, County)	Yes	Yes Yes Yes
Economic Development Plan	Yes	Included in Comprehensive Plan
Local Emergency Operations Plan	Yes	Yes Yes Yes
Continuity of Operations Plan	Yes	Yes Yes Yes
Transportation Plan	Yes	Yes Yes Yes Included in Comprehensive Plan and GRADD Regional Transportation Plan
Storm water Management Plan	Yes	Yes Yes Yes
Community Wildlife Protection Plan	Yes	Yes Yes Yes Incorporated into Master Plan
Other Special Plans: Brownfields, disaster recovery, etc.	Yes	Yes Yes Yes Earthquake Plan

Capability Assessment Worksheet

Jurisdiction: Daviess County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	Yes	Version/Year: KRS83A.060(5) Yes
Building Code Effectiveness Grading Schedule (BCEGS) Score		We do not participate. We use 2015 International Building code with KY amendments.
Fire Department ISO Rating		OFD – Class 2 Airport-Sorgho, Knottsville, Masonville, Mosleyville, St. Joseph, Yelvington – Class 5 Stanley, Thruston-Philpot, Utica and Whitesville – Class 4
Site Plan Review Requirements	Yes	Yes
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	Yes	Yes Yes Included in Comprehensive Plan
Subdivision Ordinance	Yes	Yes Yes Included in Comprehensive Plan
Floodplain Ordinance	Yes	Yes Yes Included in Comprehensive Plan
Natural Hazard Specific Ordinance (Storm water, etc.)	Yes	Yes Yes Included in Comprehensive Plan
Flood Insurance Rate Maps	Yes	Yes Yes Included in Comprehensive Plan
Acquisition of Land for open space and public recreation uses	Yes	Yes Yes Included in Comprehensive Plan
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Daviess County

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	Yes	Yes – includes city and county
Mitigation Planning Committee	Yes	GRADD Hazard Mitigation Council
Maintenance program to reduce risk (ie. tree trimming/clearing drainage)	Yes	Utility companies trim trees and city and county clear drainage areas
Mutual Aid Agreements	Yes	Mutual aid is in place between city and county and surrounding jurisdictions
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official	Yes/FT	Yes Yes Yes
Floodplain Administrator	Yes/FT	Yes Yes Yes
Emergency Manager	Yes/FT	Yes Yes Yes
Community Planner	Yes/FT	Yes Yes Yes
Civil Engineer	Yes/FT	Yes Yes Yes
GIS Coordinator	Yes/FT	Yes Yes Yes
Other		
Technical		Yes - Engineering
Warning Systems/Services		Yes – EMA
Hazard Data & Information		Yes – EMA and GRADD
Grant Writing		Yes – various agencies
Hazus Analysis		Yes - Kentucky Division of Water
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: Daviess County

Financial Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.		
Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Yes	Stormwater drainage
Authority to levy taxes for specific purposes	Yes	Economic development
Fees for water, sewer, gas, or electric services	Yes	Sewer
Storm water utility fee	Yes	Stormwater drainage
Incur debt through general obligation bonds?	Yes	Economic development
Incur debt through private activities	Yes	Economic development
Community Development Block Grant	Yes	Economic development
Other federal funding programs	Yes	FEMA, HMPG, EMPG
State funding programs	Yes	Homeland Security, LEPC
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Daviess County

Education and Outreach Identify methods already in place that could be used to implement mitigation activities and communicate hazard information		
Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	Sierra Club, Brescia University Environmental Club, Ursuline Sisters, Wendell Foster Center, Audubon Society
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	Yes	CERT Program, Medical Reserve Corps, Red Cross, EMA Social Media
Natural disaster of safety related school programs	Yes	Daviess County EMA, School Safety Committees
Storm Ready certification	Yes	WRN Ambassador 2019
Firewise Communities certification	No	
Public-private partnership initiative addressing disaster related issues	Yes	CERT, Daviess County VOAD, Daviess County Weather Spotters, Daviess County ARES
Other	Yes	Homeless Council
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Hancock County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	YES	GRADD
Capital Improvements Plan	NO	
Economic Development Plan	NO	
Local Emergency Operations Plan	YES/ 2019	PLAN ADDRESSES HAZARDS AND PROJECTS IN MITIGATION PLAN
Continuity of Operations Plan	YES/ 2019	PART OF THER OPERATIONS PLAN
Transportation Plan	YES/ 2019	GRADD REGIONAL TRANSPORTATION PLAN
Storm water Management Plan	NO	
Community Wildlife Protection Plan	NO	

Capability Assessment Worksheet

Jurisdiction: Hancock County

Other Special Plans: Brownfields, disaster recovery, etc.	NO	
Planning & Regulatory **Please indicate which of the following your jurisdiction has in place.**		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	YES	Version/Year: KY BUILDING CODE
Building Code Effectiveness Grading Schedule (BCEGS) Score	NO	Score:
Fire Department ISO Rating	YES	Rating: ISO IS SPLIT AMONG DEPTS 6/9
Site Plan Review Requirements	NO	
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts?** **Is the ordinance adequately administered and enforced?**
Zoning Ordinance	YES	YES
Subdivision Ordinance	NO	NO
Floodplain Ordinance	YES	YES
Natural Hazard Specific Ordinance (Storm water, etc.)	NO	
Flood Insurance Rate Maps	YES	YES
Acquisition of Land for open space and public recreation uses	NO	
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Hancock County

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	NO	
Mitigation Planning Committee	YES	GRADD MITIGATION COUNCIL
Maintenance program to reduce risk (ie. tree trimming/clearing drainage)	YES	COUNTY ROAD DEPT AND CITY PUBLIC WORKS CLEAN DITCHES AND CONTRACTORS TRIM TREES NEAR POWERLINES THROUGH KENERGY
Mutual Aid Agreements	YES	THERE ARE AGREEMENTS IN PLACE WITH SURROUNDING COUNTIES AS WELL AS THE STATEWIDE MUTUAL AID AGREEMENT.
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official	NO	POSITION IS CURRENLTY VACANT DUE TO DEATH
Floodplain Administrator	NO	POSITION IS CURRENLTY VACANT DUE TO DEATH
Emergency Manager	YES/PT	YES
Community Planner	YES FT	
Civil Engineer	NO	
GIS Coordinator	NO	GRADD
Other		
Technical	NO	
Warning Systems/Services	YES	ALL FALL INTO EMERGENCY MANAGEMENT
Hazard Data & Information	YES	
Grant Writing	YES	GRADD
Hazard Analysis	NO	

Capability Assessment Worksheet

Jurisdiction: Hancock County

Other		
How can these capabilities be expanded and improved to reduce risk?		

Financial

Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	NO	
Authority to levy taxes for specific purposes	YES	NO
Fees for water, sewer, gas, or electric services	NO	
Storm water utility fee	NO	
Incur debt through general obligation bonds?	NO	
Incur debt through private activities	NO	
Community Development Block Grant	YES	FOOD BANK AND LIBRARY
Other federal funding programs	YES	FEMA DISASTER RELIEF

Capability Assessment Worksheet

Jurisdiction: Hancock County

State funding programs	YES	MEALS ON WHEELS
How can these capabilities be expanded and improved to reduce risk?		

Education and Outreach

Identify methods already in place that could be used to implement mitigation activities and communicate hazard information

Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	YES	CERT TRAINING IS OFFERED TO CITIZENS. PROGRAM ALLOWS US TO USE PRIVATE CITIZENS DURIMG AN EMERGENCY AS FIRSDT RESPONDERS.
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	YES	LOCAL FIRE DEPTS DO FIRE SAFETY SURVEYS WITH THE ELEMENTARY SCHOOLS
Natural disaster of safety related school programs	NO	
Storm Ready certification	NO	
Firewise Communities certification	YES	HVFD IS FIREWISE CERTIFIED

Capability Assessment Worksheet

Jurisdiction: Hancock County

Public-private partnership initiative addressing disaster related issues	NO	
Other		
How can these capabilities be expanded and improved to reduce risk?		

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: HENDERSON COUNTY—INCLUDES CITY OF HENDERSON, CORYDON AND ROBARDS

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	YES 2015	YES—FLOOD MITIGATION NO SPECIFIC PROJECTS USING THE STRATEGIES LISTED, COULD BE VERY HELPFUL DOCUMENT
Capital Improvements Plan	YES 2019	INCLUDED IN ANNUAL BUDGET
Economic Development Plan	YES	INCLUDED IN COMPREHENSIVE PLAN
Local Emergency Operations Plan	YES 2018	YES NO YES
Continuity of Operations Plan	YES	YES NO YES
Transportation Plan	YES 2019	GRADD REGIONAL TRANSPORTATION PLAN
Storm water Management Plan	YES 2015	HENDERSON WATER UTILITY FOR THE CITY OF HENDERSON & HENDERSON COUNTY ROAD DEPARTMENT ARE RESPONSBILE FOR STORM WATER AND APPROVES ACCESS POINTS FOR SUBDIVISIONS. CITY HAS MS4, COUNTY DOESN'T. YES—CANOE CREEK IS IDENTIFIED AS A PROJECT TO MITIGATE FLOODING
Community Wildlife Protection Plan	YES	INCOPORATES PROTECTION INTO COMPREHENSIVE PLAN FOR ENVIRONMENTAL PROTECTION.
Other Special Plans: Brownfields, disaster recovery, etc.	YES	EARTHQUAKE, SEVERE WEATHER, FLOODING PLANS

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: HENDERSON COUNTY—INCLUDES CITY OF HENDERSON, CORYDON AND ROBARDS

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	YES 2017	Version/Year: KRS 83A.060(5)
Building Code Effectiveness Grading Schedule (BCEGS) Score	YES 2018	Score: 4
Fire Department ISO Rating	YES 2014	Henderson City Fire Department - 2 Baskett VFD, Spottsville VFD, Reed VFD, Hebbardsville VFD, Zion VFD-6, Niagara VFD – 6, Robards VFD, Cairo VFD, Corydon VFD-5, Smith Mills VFD-9
Site Plan Review Requirements	YES 2017	DEVELOPMENT PLANS/CHECKLIST/APPLICATIONS ALL AVAILABLE ON COUNTY WEBSITE.
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	YES	YES—GROUPS LAND USE INTO 3 DIFFERENT CATEGORIES, MAINTAINS GREEN SPACE, AND CONTROLS DEVELOPMENT IN THE FLOODPLAIN.
Subdivision Ordinance	YES	ORDINANCE IS INCLUDED IN COMPREHENSIVE PLAN
Floodplain Ordinance	YES 2012	YES—STRATEGIES AND GOALS CLEARLY DESCRIBED
Natural Hazard Specific Ordinance (Storm water, etc.)	YES	STORMWATER PLAN INCLUDED IN COMPREHENSIVE PLAN
Flood Insurance Rate Maps	YES 2013	YES YES
Acquisition of Land for open space and public recreation uses	YES	GOALS/STRATEGIES LISTED IN COMPREHENSIVE PLAN
Other		
How can these capabilities be expanded and improved to reduce risk?		

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: HENDERSON COUNTY—INCLUDES CITY OF HENDERSON, CORYDON AND ROBARDS

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	YES	INCLUDES MEMBERS FROM COUNTY AND CITY, ALONG WITH COMMISSION STAFF.
Mitigation Planning Committee	YES	GRADD HAZARD MITIGATION COUNCIL
Maintenance program to reduce risk (i.e. tree trimming/clearing drainage)	YES	CITY WATER DEPT HAS DATABASE THAT USES PRIORITY SCORING SYSTEM TO DETERMINE RESPONSE PRIORITY.
Mutual Aid Agreements	YES	FEMA REGION IV—HENDERSON POWER & LIGHT. KENTUCKY EMERGENCY MANAGEMENT MUTUAL AID AGREEMENT
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official	YES FT	BRIAN BISHOP, EXECUTIVE DIRECTOR OF PLANNING COMMISSION
Floodplain Administrator	YES FT	BRIAN BISHOP
Emergency Manager	YES FT	KENNY GARRETT, EM DIRECTOR
Community Planner	YES FT	BRIAN BISHOP
Civil Engineer	YES FT	DOUG BOOM, CITY ENGINEER, BILL HUBIAK, COUNTY ENGINEER
GIS Coordinator	YES FT	CHRIS RAYMER
Other		
Technical	YES FT	INFORMATION TECHNOLOGY DIRECTOR – GREG NUNN, CITY, BRENT JACOBS, COUNTY
Warning Systems/Services	YES	(13) SIRENS IN HENDERSON CITY LIMITS. (19) IN HENDERSON COUNTY. HYPER-REACH PUBLIC EMERGENCY NOTIFICATION SYSTEM
Hazard Data & Information	YES	GRADD
Grant Writing	YES	GRADD
Hazus Analysis	YES	KENTUCKY DIVISION OF WATER HAZARD MITIGATION PLAN
Other		

How can these capabilities be expanded and improved to reduce risk?

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: HENDERSON COUNTY—INCLUDES CITY OF HENDERSON, CORYDON AND ROBARDS

Financial

Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	YES	
Authority to levy taxes for specific purposes	YES	
Fees for water, sewer, gas, or electric services	YES	
Storm water utility fee	YES	
Incur debt through general obligation bonds?	YES	JAIL
Incur debt through private activities	YES	
Community Development Block Grant	YES	
Other federal funding programs	YES	HMGP/TEA-21/LAND AND WATER/HOME
State funding programs	YES	

How can these capabilities be expanded and improved to reduce risk?

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: HENDERSON COUNTY—INCLUDES CITY OF HENDERSON, CORYDON AND ROBARDS

Education and Outreach

Identify methods already in place that could be used to implement mitigation activities and communicate hazard information

Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	YES	CERT, VOAD, LTC, HCHS, SIERRA CLUB, FRIENDS OF AUDUBON
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	YES	MONTHLY PSA'S, social media outreach, website outreach, LEPC public meetings
Natural disaster of safety related school programs	YES	QUARTERLY SAFETY MEETINGS WITH SCHOOL BOARD COMMITTEE (POLICE, FIRE, EMS, EMA, 911, ETC)
Storm Ready certification	YES	NATIONAL WEATHER SERVICE STORM READY COMMUNITY
Firewise Communities certification	NO	SOME AREAS IN HENDERSON COUNTY MAY CONSIDER THIS CERTIFICATION DUE TO WILDFIRE THREATS FROM FARMERS FIELDS, LARGER WOODED AREAS THAN INSIDE THE CITY OF HENDERSON. GOOD AWARENESS PROGRAM.
Public-private partnership initiative addressing disaster related issues	YES	QUARTERLY DES / LEPC MEETINGS WITH FIRST RESPONSE AGENCIES, LOCAL BUSINESS LEADERS, LEPC FACILITIES, SCHOOL SYSTEM AND MANY OTHERS
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: McLean County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes 2018	Yes
Capital Improvements Plan	no	
Economic Development Plan	Yes	
Local Emergency Operations Plan	Yes 2020	Yes, yes, yes
Continuity of Operations Plan	Yes 2020	no
Transportation Plan	no	
Storm water Management Plan	no	
Community Wildlife Protection Plan	no	
Other Special Plans: Brownfields, disaster recovery, etc.		

Capability Assessment Worksheet

Jurisdiction: McLean County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	Yes	Version/Year: State Codes
Building Code Effectiveness Grading Schedule (BCEGS) Score		Score:
Fire Department ISO Rating	Yes 2015	Rating:05/5X
Site Plan Review Requirements		
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	Yes 2020	
Subdivision Ordinance	Yes	
Floodplain Management Ordinance	Yes	Yes, Yes
Natural Hazard Specific Ordinance (Storm water, etc.)		
Flood Insurance Rate Maps	Yes	Yes
Acquisition of Land for open space and public recreation uses	Yes	Yes
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: McLean County

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	Yes	Yes
Mitigation Planning Committee	Yes	GRADD – Hazard Mitigation Plan Committee
Maintenance program to reduce risk (i.e. tree trimming/clearing drainage)		
Mutual Aid Agreements	Yes	Statewide Need local/interlocal agreements established.
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official		
Floodplain Administrator	Yes	Yes
Emergency Manager	Yes PT	Yes
Community Planner		
Civil Engineer		
GIS Coordinator	No	
Other		
Technical		
Warning Systems/Services	Yes	Reverse 911/IPAWS
Hazard Data & Information	Yes	GRADD
Grant Writing	Yes	GRADD
Hazus Analysis	No	In progress - GRADD
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: McLean County

Financial Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.		
Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes	Yes	Yes, for road improvements on motor vehicle sticker tax.
Fees for water, sewer, gas, or electric services	Yes	no
Storm water utility fee	no	
Incur debt through general obligation bonds?	Yes	
Incur debt through private activities	Yes	
Community Development Block Grant	Yes	
Other federal funding programs	Yes	
State funding programs	Yes	
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: McLean County

Education and Outreach Identify methods already in place that could be used to implement mitigation activities and communicate hazard information		
Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	no	
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	yes	Our Fire Districts teach these classes to citizens.
Natural disaster of safety related school programs	no	
Storm Ready certification	No	Will be added to list of mitigation projects for 2021 plan.
Firewise Communities certification	no	
Public-private partnership initiative addressing disaster related issues	no	
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Ohio County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	Yes	Flood Mitigation, Rochester Dam, Reno
Capital Improvements Plan	Yes 2019	Included in annual budget
Economic Development Plan	Yes	OCEDA
Local Emergency Operations Plan	Yes	Updated yearly through Emergency Management
Continuity of Operations Plan		
Transportation Plan	Yes 2019	GRADD regional transportation plan
Storm water Management Plan	Yes	Ohio Co. Road dept responsible for storm water
Community Wildlife Protection Plan	Yes	Animal control officer
Other Special Plans: Brownfields, disaster recovery, etc.		

Capability Assessment Worksheet

Jurisdiction: Ohio County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	No	
Building Code Effectiveness Grading Schedule (BCEGS) Score	No	Score:
Fire Department ISO Rating	Yes	Rating: 9 FD's in Ohio County. Each have their own ISO Rating
Site Plan Review Requirements		
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	No	
Subdivision Ordinance		
Floodplain Ordinance	Yes	In accordance with state guidelines..
Natural Hazard Specific Ordinance (Storm water, etc.)		
Flood Insurance Rate Maps	Yes 2013	
Acquisition of Land for open space and public recreation uses	yes	
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Ohio County

Administrative & Technical For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.		
Administration	**Yes/No**	**Describe Capability Is coordination effective?**
Planning Commission	No	
Mitigation Planning Committee	Yes	GRADD
Maintenance program to reduce risk (ie. tree trimming/clearing drainage)		
Mutual Aid Agreements	Yes	FEMA Region IV, KY EM
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official		
Floodplain Administrator	Yes	Charlie Shields
Emergency Manager	Yes	Charlie Shields, EM Director
Community Planner	Yes	Savanna Vaughn
Civil Engineer		
GIS Coordinator	Yes	Charlie Shields
Other		
Technical	Yes	Chris Rumans
Warning Systems/Services	Yes	(17) Sirens County Wide
Hazard Data & Information		
Grant Writing		
Hazus Analysis	Yes	KY Division Water Hazard Mitigation
Other		
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Ohio County

Financial Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.		
Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	Yes	
Authority to levy taxes for specific purposes		
Fees for water, sewer, gas, or electric services	Yes	
Storm water utility fee	No	
Incur debt through general obligation bonds?	yes	Jail
Incur debt through private activities	No	
Community Development Block Grant	Yes	McHenry Fire, Beaver Dam Fire
Other federal funding programs	yes	HMGP
State funding programs	Yes	Solid Waste Program
How can these capabilities be expanded and improved to reduce risk?		

Capability Assessment Worksheet

Jurisdiction: Ohio County

Education and Outreach

Identify methods already in place that could be used to implement mitigation activities and communicate hazard information

Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.		
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	Yes	Volunteer FD visits to schools
Natural disaster of safety related school programs	Yes	Ohio County EM work w/ school system
Storm Ready certification		
Firewise Communities certification		
Public-private partnership initiative addressing disaster related issues		
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: UNION COUNTY

Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan	YES	FLOOD MITIGATION
Capital Improvements Plan	YES	
Economic Development Plan	YES	
Local Emergency Operations Plan	YES	
Continuity of Operations Plan	YES	
Transportation Plan	YES	
Storm water Management Plan	YES	
Community Wildlife Protection Plan	YES	
Other Special Plans: Brownfields, disaster recovery, etc.		

Planning & Regulatory

Capability Assessment Worksheet

Jurisdiction: UNION COUNTY

Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	YES	Version/Year:2018
Building Code Effectiveness Grading Schedule (BCEGS) Score	NO	Score:
Fire Department ISO Rating		Rating:
Site Plan Review Requirements		
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	YES	
Subdivision Ordinance	YES	
Floodplain Ordinance	YES	
Natural Hazard Specific Ordinance (Storm water, etc.)	NO	
Flood Insurance Rate Maps	YES	
Acquisition of Land for open space and public recreation uses	YES	
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: UNION COUNTY

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	YES	INCLUDES MEMBERS FROM COUNTY AND CITIES
Mitigation Planning Committee	YES	GRADD HAZARD MITIGATION
Maintenance program to reduce risk (ie. tree trimming/clearing drainage)	YES	
Mutual Aid Agreements	YES	FEMA REGION 4 / KYEM
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official		
Floodplain Administrator	YES	
Emergency Manager	YES	
Community Planner	YES	
Civil Engineer	YES	Sean Sheffer, Yes
GIS Coordinator	YES	
Other		
Technical		
Warning Systems/Services	YES	
Hazard Data & Information	YES	
Grant Writing	YES	GRADD
Hazus Analysis	YES	
Other		

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: UNION COUNTY

Financial Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.		
Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	NO	
Authority to levy taxes for specific purposes	NO	
Fees for water, sewer, gas, or electric	YES	
Storm water utility fee	NO	
Incur debt through general obligation bonds?	YES	
Incur debt through private activities	YES	
Community Development Block Grant	YES	
Other federal funding programs	YES	HMGP
State funding programs	YES	

How can these capabilities be expanded and improved to reduce risk?

Capability Assessment Worksheet

Jurisdiction: UNION COUNTY

Education and Outreach

Identify methods already in place that could be used to implement mitigation activities and communicate hazard information

Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.		
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)		
Natural disaster of safety related school programs		
Storm Ready certification	YES	NWSS
Firewise Communities certification		
Public-private partnership initiative addressing disaster related issues		
Other		

How can these capabilities be expanded and improved to reduce risk?

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: Webster County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Plans	Yes/No Year	Does the Plan Address Hazards? Does the plan identify projects to include in the mitigation strategy? Can the plan be used to implement mitigation actions?
Comprehensive/Master Plan		
Capital Improvements Plan	YES 2019	INCLUDED IN ANNUAL BUDGET
Economic Development Plan	YES	INCLUDED IN COMPREHENSIVE PLAN
Local Emergency Operations Plan	Yes 2019	Yes No No
Continuity of Operations Plan	In progress	
Transportation Plan	YES 2019	GRADD REGIONAL TRANSPORTATION PLAN
Storm water Management Plan		
Community Wildlife Protection Plan		
Other Special Plans: Brownfields, disaster recovery, etc.		

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: Webster County

Planning & Regulatory Please indicate which of the following your jurisdiction has in place.		
Building Code, Permits, Inspections	**Yes/No Year**	**Are codes adequately enforced?**
Building Code	No	
Building Code Effectiveness Grading Schedule (BCEGS) Score		
Fire Department ISO Rating	YES	Varies by Dept
Site Plan Review Requirements		
Land Use Planning & Ordinances	**Yes/No**	**Is the ordinance an effective measure for reducing hazard impacts? Is the ordinance adequately administered and enforced?**
Zoning Ordinance	No	
Subdivision Ordinance	No	
Floodplain Ordinance	YES]	YES—STRATEGIES AND GOALS CLEARLY DESCRIBED
Natural Hazard Specific Ordinance (Storm water, etc.)		
Flood Insurance Rate Maps	YES	YES YES
Acquisition of Land for open space and public recreation uses	No	
Other		
How can these capabilities be expanded and improved to reduce risk?		
More funding to improve ISO ratings, county wide. Expand fire districts as needed. Update enhance plans not in place and those needed to be updated. Funding to improve drainage/reduce flood loss, Improve storm water systems, Implement planning and zoning as needed, create comprehensive/master plan		

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: Webster County

Administrative & Technical

For smaller jurisdictions without local staff resources, if there are resources at the next higher level of government, please indicate.

Administration	Yes/No	Describe Capability Is coordination effective?
Planning Commission	No	
Mitigation Planning Committee	YES	GRADD HAZARD MITIGATION COUNCIL
Maintenance program to reduce risk (i.e. tree trimming/clearing drainage)	Yes	Ditch plan, Tree trimming by district yearly
Mutual Aid Agreements	YES	KENTUCKY EMERGENCY MANAGEMENT MUTUAL AID AGREEMENT
Staff	**Yes/No FT/PT**	**Is staffing adequate to enforce regulations? Is staff trained on hazards and mitigations? Is coordination between agencies and staff effective?**
Chief Building Official		
Floodplain Administrator	YES PT	Yes, yes, yes
Emergency Manager	YES PT	Yes, yes, tes
Community Planner	Yes FT	Community / Economic Dev Director, no, no, yes
Civil Engineer	No	
GIS Coordinator	YES	GRADD
Other		
Technical	No	
Warning Systems/Services	YES	(20) SIRENS, half over 40 years old
Hazard Data & Information		
Grant Writing	YES FT	GRADD
Hazus Analysis	YES	KENTUCKY DIVISION OF WATER HAZARD MITIGATION PLAN
Other		

How can these capabilities be expanded and improved to reduce risk?

Upgrate warning siren system, coordinate grant writing and needs assessments

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: Webster County

Financial

Identify whether your jurisdiction has access or is eligible to use the following funding resources for hazard mitigation.

Funding Resource	Access Eligibility Yes/No	Has the funding resource been used in the past and for what type of activities? Could the resource be used to fund future mitigation actions?
Capital improvements project funding	YES	Replace , upgrade culverts
Authority to levy taxes for specific purposes	YES	Ambulance Board established
Fees for water, sewer, gas, or electric services	YES	Upgrade water/sewer systems
Storm water utility fee		
Incur debt through general obligation bonds?	YES	JAIL
Incur debt through private activities		
Community Development Block Grant	YES	
Other federal funding programs	YES	HMGP, Generators, storm shelters
State funding programs	YES	Generators, improve draining systems/culverts

How can these capabilities be expanded and improved to reduce risk?

Appendix W

CURRENT CAPABILITY ASSESSMENT

Jurisdiction: Webster County

Education and Outreach

Identify methods already in place that could be used to implement mitigation activities and communicate hazard information

Program/Organization	Yes/No	Describe program/organization & how relates to disaster resilience and mitigation. Could the program/organization help implement future mitigation activities?
Local citizen groups or non-profits focused on environmental protection, emergency preparedness, access and functional needs populations, etc.	Yes	CERT Team trained to respond to disasters. Food Bank helps those in need and provide food during disasters
Ongoing public education or information program (i.e. responsible water use, fire safety, household preparedness, environmental education)	Yes	Continued community education year round to include all areas of emergency preparedness/ fire safety. LEPC also educates on chemical dangers
Natural disaster of safety related school programs	Yes	Earthquake / severe weather education and drills.
Storm Ready certification	No	Currently pursuing
Firewise Communities certification	No	
Public-private partnership initiative addressing disaster related issues		
Other		

How can these capabilities be expanded and improved to reduce risk?

Continue to provide and improve community outreach in all areas of safety/disaster topics