MULTI-JURISDICTIONAL HAZARDS MITIGATION PLAN

SHELBY COUNTY ALABAMA 2022 PLAN UPDATE

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SECTION 1
EXECUTIVE SUMMARY

1.1 INTRODUCTION

Natural hazards pose a threat to every citizen and community within Shelby County on some level and frequency. Often, the reality of potential hazards to a community are not fully understood or realized until a major disaster occurs. It is then that a community experiences the extreme hardship of significant human and economic losses. The process of hazard mitigation planning is a critical part of any community's planning program. Because most hazards occur infrequently, mitigation programs for hazards are usually initiated and funded as a reaction to recover from the most recent disaster event. This form of hazard mitigation response is costlier, both in property and human losses than is pre-disaster planning and mitigation.

Shelby County and its jurisdictions prepared a countywide hazard mitigation plan in 2016 that re-shaped Shelby County and local communities into a more resilient framework, enabling it to recover more quickly and easily from disasters.

Local Mitigation Plans must be updated and resubmitted to FEMA for approval every five (5) years in order to continue eligibility for FEMA hazard mitigation assistance programs. The mitigation planning regulation at 44 CFR §201.6(d)(3) states:

"A local jurisdiction must review and revise its plan to reflect changes in development, progress in local mitigation efforts, and changes in priorities, and resubmit it for approval within five (5) years in order to continue to be eligible for mitigation project grant funding. Plan updates must demonstrate that progress has been made in the past 5 years for Local Mitigation Plans to fulfill commitments outlined in the previously approved plan. This involves a comprehensive review and update of each section of the Local Mitigation Plan and a discussion of the results of evaluation and monitoring activities detailed in the Plan Maintenance section of the previously approved plan. Plan updates may validate the information in the previously approved plan, or may involve a major plan rewrite."

1.2 HAZARD MITIGATION LEGISLATIVE BACKGROUND

1.2.1 Disaster Mitigation Act of 2000

To support the expanded role of emergency management, Congress passed the Disaster Mitigation Act of 2000, (DMA2K). Section 322, an amendment to the Act deals with the development of local hazard mitigation plans. DMA2K was signed into law on October 30, 2000 (Public Law 106-390). The Interim Final Rule for planning provisions (44 CFR Part 201) was published in the Federal Register in February 2002, and again in October 2002. Local hazard mitigation planning requirements are implemented in 44 CFR Part 201.6. The purpose of DMA2K is to amend the Stafford Act to establish a national program for pre-disaster mitigation, streamline administration

of disaster relief and control federal costs of disaster assistance. Congress envisioned that implementation of these new requirements would result in the following key benefits:

- Reduction of loss of life and property, human suffering, economic disruption, and disaster costs.
- Prioritization of hazard mitigation planning at the local level, with an increased emphasis placed on planning and public involvement, assessing risks, implementing loss reduction measures, and ensuring critical services/facilities survive a disaster.
- Establishment of economic incentives, awareness and education to state, tribal, and local governments that result in forming community based partnerships, implementing effective hazard mitigation measures, leveraging additional non-federal resources, and establishing commitments to long-term hazard mitigation efforts.

1.2.2 Regulation 44CFR Part 201

FEMA has implemented the various hazard mitigation-planning provisions through regulations at 44 CFR Part 201. These regulations reflect the need for States, Tribal, and local governments to closely coordinate mitigation planning and implementation efforts. A Hazard Mitigation Plan is a condition of pre- and post-disaster assistance. State, local and Tribal governments must have a FEMA-approved Local Mitigation Plan in order to receive FEMA hazard mitigation assistance and to apply for and/or receive project grants under the following assistance programs:

- Hazard Mitigation Grant Program (HMGP)
- Building Resilient Infrastructure and Communities (BRIC)
- Flood Mitigation Assistance (FMA)

Each hazard mitigation plan must be submitted to and approved by the state and FEMA. Each plan must, at minimum, address or include the following items:

- Plan Adoption by All Jurisdictions
- Planning Process including Public Involvement
- Hazard Identification and Risk Assessment
- Mitigation Strategy
- Plan Implementation and Maintenance Procedures
- Any Specific State Requirements

Shelby County will continue to comply with all applicable federal and state statutes and regulations related to hazard mitigation planning. In addition, Shelby County will amend its plan whenever necessary to reflect changes in countywide hazard mitigation.

1.3 PLAN PURPOSE

The key purposes of this 2022 plan update are:

- To involve members of the county, cities, townships, public and other agencies to draft and adopt a mitigation action plan that serves as the blueprint for future development and preparedness activities across the county

- To identify the possible risks and hazards, beyond what the 2016 plan did, that may affect Shelby County through a systematic hazard identification and risk assessment process;
- To revise the 2016 plan in light of local mitigation efforts;
- To revise the 2016 plan to reflect changes in mitigation priorities;
- To prioritize loss reduction and emergency preparedness activities for disasters;
- To determine areas within Shelby County that may be vulnerable to various hazards;
- To develop strategies and the best practices to avoid and mitigate the impact of hazards.

1.4 PLAN SCOPE

This Hazard Mitigation Plan will be updated and maintained by Shelby County Emergency Management and the assigned mitigation committee to continually address hazards determined to be of high and moderate risk through the detailed risk assessment. Other hazards that pose a low or negligible risk will continue to be evaluated for future updates to the Plan. The geographic scope for the Plan includes all incorporated and unincorporated areas of Shelby County with the exception of the cities of Birmingham, Hoover, Leeds and Vestavia Hills that are primarily located in Jefferson County, Alabama and are included in the Jefferson County, Alabama Mitigation plan.

Table 1.1 Participating Jurisdictions, Agencies and Departments	
Participating Jurisdictions	
Shelby County, Alabama	Town of Indian Springs Village
City of Alabaster	City of Montevallo
City of Calera	City of Pelham
City of Chelsea	Town of Vincent
City of Columbiana	Town of Westover
Town of Harpersville	Town of Wilsonville
City of Helena	Town of Wilton
Participating Agencies/Departments	
Alabama Cooperative Extension Services	Shelby County EMA
Department of Public Health	Shelby County Department of Education
Alabama Department of Agriculture	Shelby County Chamber of Commerce
Alabama Forestry Commission	Shelby County IT/GIS/Planning Department
Alabama EMA	Shelby County Sheriff's Office
American Red Cross, Shelby County	Shelby County Tax Commissioners Office
NGO, VOAD	Shelby County Volunteer Fire Departments
Shelby County 911	Shelby County Independent Water Systems
Shelby County Development Services	University of Montevallo

1.5 PLAN AUTHORITY

This 2016 Plan Update was developed in accordance with Federal, state and local rules and regulations governing local hazard mitigation plans. The Plan authority will be routinely monitored and revised to maintain compliance with the below provisions, rules, and legislation:

Table 1.2 Plan Authorities		
Authority	**Authority Description**	**Authority Date**
Federal	The U.S. Congress established the National Flood Insurance Program (NFIP) with the passage of the National Flood Insurance Act of 1968	1968
Federal	Flood Mitigation Assistance Program (FMA) was created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101)	1994
Federal	Section 322, Mitigation Planning, of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as enacted by Section 104 of the Disaster Mitigation Act of 2000 (P.L. 106-390)	10/30/2000
Federal	Pre-Disaster Mitigation (PDM) Program was authorized by section 203 of the 2000 Stafford Act, 42 USC (Public Law 106-390).	10/30/2000
Federal	FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, updated October 1, 2003 and October 28, 2003 with Final Rule published October 1, 2013	10/01/2013
State	Alabama Executive Order No. 19 (EO 19).	02/24/2004
County	Shelby County Resolution	01/15/2008

1.6 PLAN OUTLINE

Section 1: Executive Summary provides an introduction and overview of the plan including the purpose, scope, authorities and section summaries.

Section 2 Shelby County Profile describes the jurisdictions in terms of geography, history, population, economy and significant characteristics. This section also provides descriptions of the general makeup of Shelby County and its local jurisdictions, including prevalent geographic, demographic, economic characteristics and land use patterns. Shelby County recognizes that social, environmental, and economic factors have a role in determining vulnerability to hazards.

Section 3: The Planning Process describes the process used to develop the updated Shelby County Multi-Jurisdictional Multi Hazard Mitigation Plan. The description provides a general overview of local hazard mitigation planning and the specific procedures used by Shelby County to prepare this Plan. It includes who was involved as members of the planning team, and documents the outcomes of meetings. It also demonstrates the opportunities for the public and other stakeholders to participate in the plan development process. Finally, Section 3 documents how each section of the previous plan was reviewed and identifies specifics on how each section was updated.

Section 4: Hazard Risk Assessment - Hazard Identification identifies hazards that have and may, in the future impact Shelby County and its participating jurisdictions. Specifically Hazard Identification identifies the hazard threats that have historically occurred in and across the county as well as hazards that may impact Shelby County communities in the future. Hazard Identification provides background information for these hazards. All hazards, including hazards identified in the State Plan, were initially considered for relevance as the mitigation committee advanced through the hazard mitigation planning process.

Section 5 Hazard Risk Assessment - Hazard Profiling focuses on hazards that are of significant concern to Shelby County and its communities. The profiles provide specific historical event information and identify the potential for a hazard event to occur in the future. This includes

identifying location and spatial extent of the event and best available data regarding the impact on the county and participating jurisdictions.

Section 6: Risk Assessment - Assessing Hazard Vulnerability consists of Hazard Risk and Vulnerability assessments that builds on available historical data from past hazard occurrences, establishes hazard loss profiles. A Loss Estimation Methodology is used in evaluating some known hazard risks by their relative long-term cost in expected damages. The vulnerability assessment also defines any hazard risks that may uniquely or exclusively affect the individual municipal jurisdictions. Communities must determine the most appropriate mitigation actions to pursue and implement as this information enables communities to prioritize and focus their efforts on those hazards of greatest concern and those structures or areas facing the greatest risk.

This section also includes a Land Use and Development Trend Analysis that identifies and describes future land use based on growth and jurisdiction planning.

Section 7: Shelby County Mitigation Strategy consists of a capability assessment and a comprehensive mitigation strategy. The capability assessment provides a comprehensive examination of Shelby County and participating local jurisdictions' capacity to implement meaningful mitigation strategies and identifies existing opportunities to increase and enhance that capability. Capabilities addressed in this section include planning and regulatory capability, technical capability, and fiscal capability. Information was obtained through the use of detailed survey questionnaires and an inventory and analysis of existing plans, ordinances, and relevant documents. The purpose of this assessment is to identify any existing gaps, weaknesses, or conflicts in programs or activities that may hinder mitigation efforts, and to identify those activities that should be built upon in establishing a successful and sustainable hazard mitigation program.

The comprehensive mitigation strategy is a list of strategic goals, objectives and mitigation actions. The strategic goals consist of broad, goal statements for each local jurisdiction participating in the planning process to strive to achieve. The comprehensive strategy provides the foundation for identifying and prioritizing mitigation actions. Mitigation actions are specific to each local jurisdiction, and link proposed mitigation strategies to locally assigned implementation mechanisms and target implementation dates. This section makes the Plan both strategic, through the identification of long-term goals, and functional, by identifying short-term and immediate actions that will guide day-to-day decision-making and project implementation.

Section 8 Plan Monitoring, Maintenance and Updating contains plan monitoring, maintenance and updating strategies that Shelby County and its participating jurisdictions will take to ensure the Plan's continuous long-term implementation. The maintenance procedures include the manner in which the Plan will be regularly evaluated and updated to remain a current and meaningful planning document.

Section 9 Appendices contains acknowledgements, Mitigation meetings information and Adoption Resolutions

Annex 1: Supporting Information Annex: Includes detailed hazard historic information and lists of critical, Tier II and Terrorist Target facilities, which is considered sensitive information. Reference Maps are also included in this section along with documents supporting the planning and adoption process.

Individual Mitigation Action Plans contains individual municipal mitigation plans that are made up of

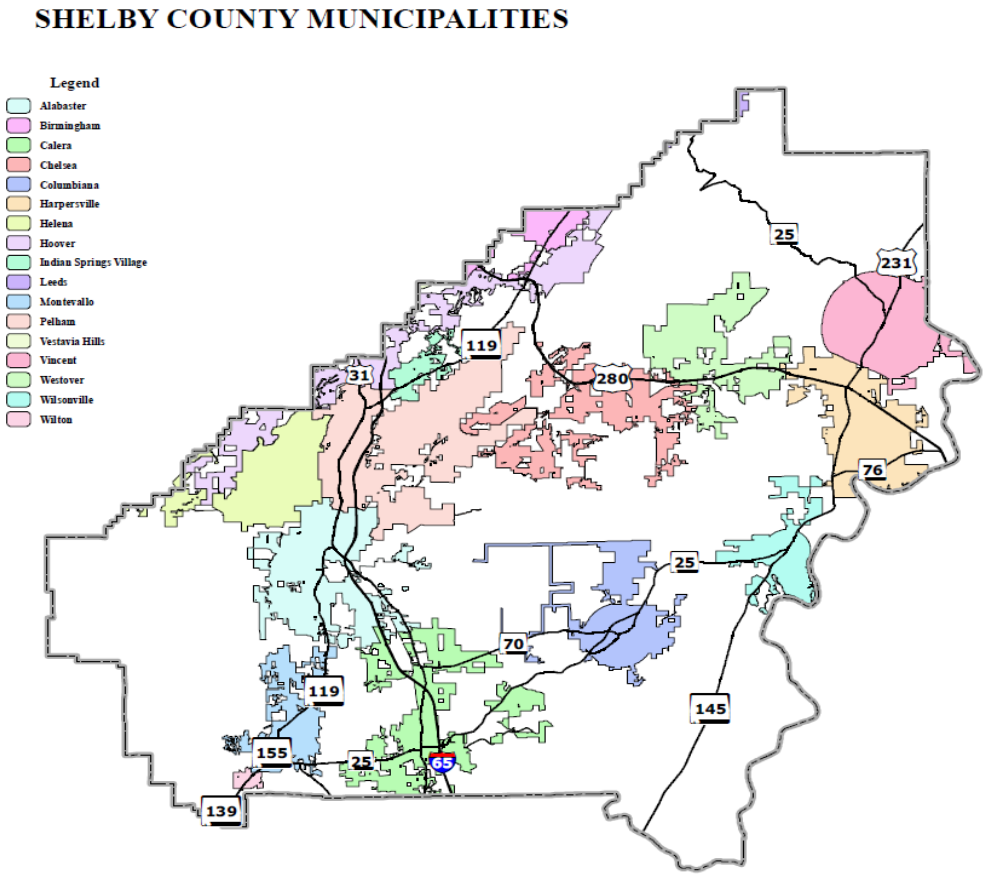
- Individual jurisdiction profiles, which describe each municipality's geography and history and provides information on its population, demographics, households, earnings and employment.
- Individual capability assessments that provides a comprehensive examination of the participating local jurisdictions' capacity to implement meaningful mitigation strategies and identifies existing opportunities to increase and enhance that capability. Capabilities addressed in this section include planning and regulatory capability, technical capability, and fiscal capability. Information was obtained through the use of detailed survey questionnaires for local officials and an inventory and analysis of existing plans, ordinances, and relevant documents. The purpose of this assessment is to identify any existing gaps, weaknesses, or conflicts in programs or activities that may hinder mitigation efforts, and to identify those activities that should be built upon in establishing a successful and sustainable community hazard mitigation program.
- Individual comprehensive mitigation plans that contain a mitigation strategy for each participating jurisdiction. The mitigation strategy consists of specific goals, objectives and action items for each jurisdiction participating in the planning process. The strategy provides the foundation for identifying and prioritizing mitigation actions. Mitigation actions are specific to each local jurisdiction, and link proposed mitigation actions to locally assigned implementation mechanisms and target implementation dates. This section makes the Plan both strategic, through the identification of long-term goals, and functional, through the identification of short-term and immediate actions that will guide day-to-day decision-making and project implementation.

SECTION 2
JURISDICTION PROFILE

2.1 INTRODUCTION

In this section the Shelby County jurisdiction is profiled. Shelby County is comprised of 17 jurisdictions. The cities of Birmingham. Hoover, Vestavia Hills, and Leeds partially reside in Jefferson County and are included in the Jefferson County, Alabama mitigation plan and are not included in this Shelby County 2022 mitigation plan.

Figure 2.1 Shelby County Municipality Map



Source:
Shelby County Comprehensive Plan

2.2 SHELBY COUNTY PROFILE

2.2.1 Shelby County Geography and History

Shelby County is the geographic center of the state of Alabama. It is one of seven counties comprising the Birmingham-Hoover Metropolitan Area. The others are Jefferson, Blount, St. Clair, Bibb, Chilton, and Walker. Jefferson and St. Clair counties bound Shelby County to the

north, Talladega and Coosa counties to the east, and Chilton and Bibb counties to the south and southwest. The marker for the geographic center of the state of Alabama is on the steps of Main Hall at the University of Montevallo. The actual geographic center is said to be in the Richardson-Randall Cemetery, about 2 miles east of Montevallo.

The first settlers of Shelby County were Indians of the Creek nation, specifically the Uchies, Natchez and Alabama tribes. Creek villages were concentrated along the Coosa and Cahaba Rivers, near Wilsonville and in North Shelby County respectively. The Asi-Lanipi Village on Yellowleaf Creek near Chelsea was the longest remaining village and was not removed until 1836 during the Second Indian War. Other Creek Villages include Assuanapi on Yellowleaf Creek, Osoonee on the east side of the Cahaba River approximately two miles above the influx of Shades Creek; and Tulavahaja on the west side of the Cahaba River south of Birmingham.

Shelby County, Alabama was created February 7, 1818 by an act of the Alabama Territorial General Assembly, before Alabama became a state on December 14, 1819, from former Creek Indian territory ceded in the Treaty of Fort Jackson on August 9, 1814.
The county was formed out of the northern portion of Montgomery County. Originally, Shelby County was one of the largest counties in the state. However, the state legislature soon began carving up the area to create other counties, including St. Clair County, Jefferson, Talladega, and Chilton counties. The county was named for Isaac Shelby, a hero of the King's Mountain Battle during the Revolutionary War. Also, he was the first governor of the state of Kentucky.

Most of the first settlers came from South Carolina, Alabama, and Kentucky and returned to this region after the victorious Battle of Horseshoe Bend in 1814. The first settlements in the area were at Montevallo, then known as Wilson's Hill, Harpersville, Wilsonville, and Shelbyville.

Early settlers held their lands by virtue of what was known as Squatter Sovereignty. The government in 1821 granted titles to their holdings.

The first courthouse was located at Shelbyville, believed to have been located within the modern-day City of Pelham. Thomas Rogers, Alabama’s first Secretary of State, who along with his neighbor George Phillips represented the county in the state’s first Constitutional Convention in 1819, built the first courthouse. It was selected as the county seat in 1820. The Shelbyville courthouse was used until 1826, when the decision was made to move the courthouse and the county seat to Columbia, later named Columbiana.
It was only a matter of time before the early inhabitants started exploiting the county’s plentiful iron and coal resources. The first blast furnace was completed in Shelby County in 1846.
Sources: Jackson, Harvey H., III. - Rivers of History Tuscaloosa, Alabama; The University of Alabama Press, 1995. Owen, Thomas McAdory - History of Alabama and Dictionary of Alabama Biography; Chicago: S.J. Clarke Publishing Co., 1921. Seales, Bobby Joe - History of Shelby County; AlaGenWeb, 2003.

2.2.2 Shelby County Significant Characteristics

Shelby County's diverse terrain offers many opportunities for recreational activities. The County is blessed with almost 50 parks. Oak Mountain State Park in the northern part of the county is

Alabama's largest state park. It encompasses almost 10,000 acres and provides visitors with such diverse activities as golfing, hiking, camping, canoeing, horseback riding, fishing, swimming, and mountain biking. Oak Mountain State Park hosts the XTerra World Championships.

The Cahaba River Wildlife Management Area located on County Road 91 west of Helena consists of 41,500 acres and offers excellent opportunities for hunting and fishing.

Lay Lake, a 12,000-acre lake, has 289 miles of shoreline and has served as the host site for the Bass Masters Tournament.

One of the state's most unique tourist attractions is the American Village, near Montevallo, which is a living-history colonial village and park on 113 acres. The village contains historical replicas of Mount Vernon, George Washington's home, as well as the nation's first executive mansion in Philadelphia and the White House Oval Office.

The Karl C. Harrison Museum of George Washington, in nearby Columbiana, contains one of the largest privately owned collections of George and Martha Washington memorabilia outside of Mount Vernon. Columbiana is also home to the Shelby County Museum and Archives, located in the 1854 Courthouse. This museum displays artifacts and memorabilia from the early days of Shelby County and is the repository for many of the county's old court records dating as far back as 1818.

Other points of interest include the Aldrich Coal Mine Museum near Montevallo, the Heart of Dixie Railroad Museum in Calera, Old Town Helena, the Shelby Iron Works near Columbiana, and the Shelby Springs Confederate Cemetery between Columbiana and Calera.

Shelby County has some of the Southeast's best selection of golf courses. Even mixtures of public and private courses provide the tailored experience a true golfer seeks. Several courses host annual PGA events.

The Pelham Civic Complex is conveniently located next to the Oak Mountain Amphitheatre-Live Nation with easy access to I-65. The complex is perfect for conventions, sporting-events, trade shows and includes two indoor ice skating rinks.

The Pelham Racquet Club is a public tennis facility consisting of 20 clay courts and five hard courts, all lighted with above tournament grade lighting. The entire facility is beautifully landscaped on three tiers providing function and visibility to all courts. The facility hosts approximately 15 tournaments each year including the USTA Pro-Tennis Challenger featuring participants from 27 nations.

Veterans Park-Pelham features 5K/8K cross country courses and four beach volleyball courts.

Veterans Park - Hoover features a professionally developed cross-country course and is host to the Great American Cross Country Race.

Veterans Park - Alabaster is a 90-acre facility with five youth baseball/softball fields, a concession stand and press box, two miles of lighted walking tracks, a regulation size skate-park, a bluebird trail, two playground areas, restrooms, nine pavilions available for rental, several play meadows, batting cages, and an arbor.

At the University of Montevallo the Robert M. McChesney Student Activity Center (SAC) is a 90,000 square foot state-of-the-art recreation and athletic center. It includes facilities for weight/cardio training, racquetball, volleyball, walking, and swimming. The cardio area has a five- television cardio theatre accessed through personal FM receivers. The Peoples Bank and Trust Company Arena is the home court for the University's intercollegiate Volleyball and Women and Men's Basketball teams. An eighteen-hole Disc Golf Course has recently been added to the area outside the facility.

The Shelby County Arts Council serves the entire community at all economic levels, ages and races and benefits the community by improving the quality of life and making the community a better place to live and work.

2.2.3 Climate

Shelby County has a mild, temperate climate. Summers are generally hot and humid with an average temperature of 76 degrees Fahrenheit. The average mid-afternoon relative humidity is 60 percent. Winters are relatively mild with an average temperature of 42 degrees Fahrenheit. Average annual rainfall precipitation is approximately 60 inches per year and snowfall averages less than an inch per year. Source: Flood Insurance Study of Shelby County, Alabama.

2.2.4 Geology

Shelby County is the most geologically diverse county in the state. Most of the county lies in the Alabama section of the Ridge province, located east and south of County Road 17, and is comprised of shale, siltstone, sandstone, dolomite, limestone and cherty limestone formations. The Cumberland Plateau section of the Appalachian Plateaus province is found west and north of County Road 17. This region contains the Pottsville formation that contains many coal deposits, sandstone, siltstone and shale. South of Highway 25, between Calera and Columbiana, lies the Ashland Plateau section of the Piedmont province which contains slate, phyllite and marble formations. The Coastal Plain, containing ancient, fossilized marine sediments, is located south of Montevallo and Calera.

Due to its location at the intersection of the Appalachian mountain range and the southern coastal plain, Shelby County has a very diverse topography. Its elevation ranges from 1,500 feet in the foothills of the Appalachians in the northeast, to 400 feet in the southern coastal plain regions.

2.2.5 Ecosystem

Shelby County has a complex natural environment composed of many specialized habitats located within two primary forest ecosystem regions, described as the Basin Region, referring to the Coal Basin area of the Cumberland Plateau and the Coosa Valley Region. The Basin Region is dominated by dry oak pine forest on most uplands and ridges, with more oak or other

hardwood-dominated woodlands on lower areas. Beech and other hardwood species of the oak-hickory forest type may dominate sheltered slopes, rich coves and areas along streams.

Shelby County's aquatic systems deserve additional consideration as specialized habitat. Two major systems comprise all the drainages in Shelby County: the Coosa River system and the Cahaba River system. Both rivers originate above the Fall Line, which has limited upstream migration of animal species from the Coastal Plain.

The Cahaba River heads in the southern end of the Ridge and Valley hypsographic province. This has resulted in the upper end of this drainage becoming very isolated, permitting it to develop a unique assemblage of organisms. In fact, the Cahaba River is home to several species formally listed as Endangered or Threatened under the U.S. Endangered Species Act of 1970. The Coosa River originates in the southern Blue Ridge physiographic province in northern Georgia and does not reach the Fall Line until reaching Elmore County. Its unique animal population is not only a result of isolation, but also of the influence of the southern Blue Ridge. Like the Cahaba River, the Coosa River and its tributaries are home to several listed species. *Source: Shelby County 2004 Comprehensive Plan.*

2.2.6 Hydrology and Aquifers

Shelby County is located within the Alabama River watershed but is drained by two separate major river basins. The eastern two-thirds of the county is in the Coosa River Basin. Major streams draining this part of the county include Waxahatchee Creek, Yellowleaf Creek and Kelly Creek. Important smaller tributaries include Shoal Creek (in the north end of the county), Bear Creek, Muddy Prong and Clear Prong. The western one-third of the county is in the Cahaba River Basin. Major tributaries to the Cahaba include Little Cahaba River and Buck, Piney Woods and Shoal Creeks.

Most of Shelby County is located in the Alabama Valley and Ridge groundwater province. A small area in the southern portion of the county is in the Piedmont Upland groundwater province. Five aquifer systems are present in the county. Large volumes of groundwater are available in water-bearing dolomites and limestone in the Cahaba Valley physiographic district and in the eastern portion of the Coosa Valley district. These waters are part of the Valley and Ridge aquifer system and the Fort Payne/Tuscumbia Aquifer. The remainder of the county has only small amounts of groundwater available. The Pottsville Aquifer serves these areas.

2.2.7 Population and Demographics

As of the 2020 Census, the county covers 808 square miles and there were 223,024 people. The population density was 276.02 people per square mile. The racial makeup of the county was 80.12% White, 12.12% Black or African American, 0.34% Native American, 2.06% Asian, 0.02% Pacific Islander, 3.32% from other races, and 2% from two or more races. 5.85% of the population was Hispanic or Latino of any race. 91.77% of town residents speak English while Spanish is spoken by 5.19% of the population.

According to the 2019 American Community Survey, there were 79,630 households out of which 19,886 had children under the age of 18 living with them, 47,423 were married couples living together, 7,034 had a female householder with no spouse present, and 22,964 were non-families.

27.20% of all householders were made up of individuals and 10.8% had someone living alone who was 65 years of age or older. The average household size was 2.64% and the average family size was 3.2. Mobile homes made up 6.10% of structures.

In the city the population was spread out with 23.10% under the age of 18, 8.4% from 18 to 24, 38.8% from 15 to 44, 26% from 45 to 64, and 16.2% who were 65 years of age or older. The median age was 39.5 years. For every 100 females there were 93.40 males.

Awareness of populations with access and functional needs is critical to planning and. As of 2019, 3.6% of the county's population had a hearing difficulty, 1.8% vision difficulty, 4.7% cognitive difficulty, 5.3% ambulatory difficulty, 1.9% self-care difficulty, and 4.9% an independent living difficulty. 11.3% of the population had some type of disability.

Year	2010	2020	Change
Population	195,085	223,024	8.75%
Source: US Bureau of the Census			

2.2.8 Economy

The median income for a household in the county was $77,799 and the median income for a family was $95,848. Males had a median income of $60,291 versus $38,538 for females. The per capita income for the county was $49,022. About 7.48% of the population were below the poverty line, including 8.54% of females and 6.36% of males.

The top 10 Employers in Shelby County are:

Table 2.3 Shelby County Top Ten Employers	
Company	**Employees**
Shelby County Board of Education	2,491
Regions	1,706
Wal-Mart	1,647
EBSCO Industries	1,254
Baptist Medical Center Shelby	1,125
Publix	1,047
Shelby County Government	559
University of Montevallo	438
Alabaster Healthcare	400
Sysco Food Service of Central Alabama	378

2.2.9 Housing

According to the 2020 Census, there are a total of 89,139 housing units in Shelby County. 23.1% had children under the age of 18 living with them.

2.2.10 Infrastructure

Government: Shelby County government consists of a representative nine-member commission. There is a total of 17 incorporated communities within the boundaries of the county, each having a mayoral or mayor/council form of government.

Public Safety: Shelby County is served by twelve law enforcement agencies. Eleven of these are city police departments and serve areas within their jurisdictional boundaries. In addition to providing police support to unincorporated Shelby County, the cities of Chelsea, Westover, Wilsonville and Wilton have a contract with the County Sheriff's Office to provide law enforcement.

The Sheriff's Office staffs two police stations and three substations. The main station located at the county adult jail in Columbiana is fully manned and the North Shelby station at 280 County Services Building operates with clerical support and a cyclical officer presence. The remaining substations are located at the Shelby County Airport, and the Chelsea Westover and Wilsonville City Halls. Each jurisdiction with a police department has a main station. In addition to the main police station, Hoover and Alabaster have substations in their jurisdictional areas.

Each of the police departments participates in the D.A.R.E. (Drug Abuse Resistance Education) and provide one or more School Resource officers. The School Resource Office provides a police presence on the school campus and provides a positive role model. The county also participates in a Drug Task Force with Montevallo, Columbiana, Pelham and Alabaster that operates separate from the main police force to create an environment free of illegal drugs within Shelby County and its communities, schools and places of work.
The county has two detention facilities, the Shelby County Jail and the County Regional Juvenile Detention Center. The Shelby County Jail is a newly built facility completed in 2004 and has a capacity of 512 inmates requiring minimum to maximum security. The Juvenile Detention center can house 34 juveniles and provides a restricted environment while legal action is pending. Both county facilities are located in Columbiana.

Fire Safety: Shelby County is served by 31 fire departments. Fourteen districts are municipal fire departments, which cover about 332 square miles with a few cities covering areas beyond their limits. Twelve departments serving 283.02 square miles are volunteer fire departments with informal response area agreements; volunteer companies are not created by law and can only request dues within their service areas. Five departments are legally created entities, whose districts cover 106.54 square miles, and are funded by mandated dues collection within their respective boundaries. The remaining 30.60 square miles of the county have no first response fire protection (response not guaranteed) with 7.73 square miles having secondary response arrangements. The Alabama Forestry Commission responds to forest fires throughout the county no matter the location but does not have the equipment to fight structure fires.

Water Service: ShelbyCounty is served by 20 public water systems. This includes twelve municipal water systems, six rural water authorities, The University of Montevallo water system, and the Shelby County water system.

The Shelby County water system was developed to provide a dependable water supply for the various public water distribution systems in the County. Shelby County provides retail water service to more than 5,000 accounts and wholesale water service to the water systems of Alabaster, Pelham, Sterrett, Vandiver, Westover Water Authority, and Vincent. A meter is in place for the City of Leeds. In addition, a mutual aid agreement is in effect between the Shelby County water system and the Birmingham Water Works Board. With the exception of the Shelby County and Birmingham systems, all of the County's water systems are dependent upon water supplied from wells and springs. Municipal systems include: City of Alabaster; Birmingham Water & Sewer Board; City of Calera; City of Columbiana; Town of Harpersville; City of Helena; City of Hoover City of Leeds; City of Montevallo; City of Pelham; Town of Vincent; Town of Wilsonville; and Town of Wilton.

The rural water authorities include Bethel Water Authority; Dunnavant Valley Water Authority; Little Waxie Water Authority; Spring Creek Water Authority; Sterrett / Vandiver Water Authority; and Westover Water Authority.

Wastewater Service Systems: Wastewater collection systems are available in the cities on Alabaster, Calera, Columbiana, Helena, Hoover, Montevallo, Pelham, and Wilsonville. Additionally, Shelby County and the Birmingham Water Works and Sewer Board operate collection systems that serve portions of north Shelby County. There are two private systems serving the population along U.S. Highway 280; Southwest Water Company.

The Shelby County, City of Alabaster, City of Hoover, and City of Pelham School Boards of Education are the primary educators of school age children in Shelby County. These school boards are recognized statewide for excellence in academics and athletics. The systems employ approximately 2,022 teachers and administrators who serve more than 30,773 students in 22 elementary and intermediary schools and 18 middle and high schools. The University of Montevallo, a liberal arts college founded in 1896, is the county's only four-year institution of higher learning, with an enrollment of approximately 2,800 students. Jefferson State, a two-year institution, has a campus in North Shelby County.

Table 2.4 Shelby County Education									
PK - 5		**Elementary**		**Intermediate**		**Middle**		**High**	
Number	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**
6	124	12	6,887	3	2,320	7	4,988	7	6,582
Table 2.4 Alabaster Board of Education									
PK - 5		**Elementary**		**Intermediate**		**Middle**		**High**	
Number	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**
Included in Elementary numbers		2	1,872	1	892	1	1,435	1	2,167
Table 2.4 Pelham Board of Education									
PK-5		**Elementary**		**Intermediate**		**Middle**		**High**	
Number	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**
		2	1,578			1	770	1	1,118
Private		**College/University**		**Vocational**		**Special Needs**		**Child Care**	
Number	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**	**Number**	**Students**
10	3,012	2	4,250			0	0	60	1,031

Table 2.5 Shelby County Healthcare							
Hospitals		**Free Standing ED**	**Clinics**	**Assisted Living Facilities**		**Doctors**	**Dentists**
Number	**Beds**		**Number**	**Number**	**Beds**	**Number**	**Number**
1	191	1	25	12	716	122	75

Transportation route Interstate 65 runs southward to Mobile, Alabama and northward to Chicago Illinois runs through the western portion of Shelby County. Interstate 459, providing a bypass route around Birmingham, is located just northwest of the county line. U.S. Highways 31 and 280 are the other major highway transportation routes. Numerous county roads provide access to the unincorporated regions of the county.

Table 2.6 Shelby County Transportation				
	General Aviation	**Commercial Aviation**	**Highways/Waterways**	
Location	Calera, 10mi NW	Birmingham-25mi. N	Interstate	I65
Runway length	1524/5000	7100/12002	U.S.	31, 231, 280
Runway surface	Asphalt	Asphalt	State	70, 76, 119, 155, 261
Communications	CTAF/UNICOM 122.7	UNICOM/ATIS 122.95	Waterway	Coosa River
Lighting	Dusk to Dawn	Dusk to Dawn	Railroads	CSX, Southern, Shelby
Fuel	100LL JET-A	100LL Jet-a	Bus Service	Greyhound
Repairs	NOTAM-D	NOTAM-D	Common Carriers	20
Daily Flights	Public/Private	379		

Table 2.7 Shelby County Communications and Utilities			
Telephone	**Newspaper**	**Radio**	**TV/Cable/Satellite**
AT&T	The Birmingham News	WJOX, WDJC	Charter, DirecTV
Sprint	Shelby County Reporter	WAPI, WLPH, WYDE	WABM (MyNetworkTV)
Nextel	Montgomery Advertiser	WERC, WQCR, WLJR	WVTM (NBC)
Verizon		WGIB, WQEM, WBPT	WBRC (FOX)
Charter		WBHK, WZZK-FM	WCFT (ABC)
T-Mobile		WBHM	WIAT (CBS)
			WBIQ (Public)
Electricity		**Water**	**Sewage/Landfill**
Alabama Power Company	Alabama Gas Corporation	Columbiana Water Works	Shelby County Landfill
Coosa Valley Electric COOP		14 local systems	

2.2.11 Land Usage

Residential, commercial, and industrial uses are predominant along the I-65 / US Highway 31 and the US Highway 280 corridors from one county line to the other with a heavy residential swath existing between the two corridors north of Oak Mountain State Park, which shows as Recreational. Intense commercial concentrations occur within these corridors along their northern segments. Although rural in nature, residential uses exist along the State Highway 25

corridor that stretches from Wilton to Leeds with commercial uses centered in the downtowns along the route. Timberlands, a component of Agricultural uses, exist in the western, central, and northeastern areas, and mining of limestone and coal occurs in the southwestern area. Institutional uses include government properties, uses comprise private and public facilities involved with electric, water, and sewer networks as well as transportation facilities.

The Shelby County Economic Development Corporation (58 INC) is the catalyst for developing the economic base of Shelby County. Created by Shelby County, 58 INC is governed by a five-member board of directors appointed by the Shelby County Commission. 58 INC supports programs to develop and sell industrial sites, disseminate demographic and statistical information, assist existing employers and promote tourism.

Shelby West Corporate Park is a 400-acre industrial development on Interstate 65, Exit 234. The park is less than 30 miles from downtown Birmingham, Alabama. The park is strategically located within the center of a large available workforce and situated with easy interstate access. Park attributes include:

- Frontage on Interstate 65, with easy access to Alabama's extensive interstate network
- Borders the Shelby County Airport
- Located about 50 miles from Honda Manufacturing of Alabama in Lincoln, about 45 miles from Mercedes Benz U.S. International, Inc. and about 65 miles from Hyundai Motor Manufacturing of Alabama.

SECTION 3
THE MITIGATION PLANNING PROCESS

3.1 INTRODUCTION

This section of the Plan describes the mitigation planning process undertaken by Shelby County in preparation of the Hazard Mitigation Plan. It consists of nine additional subsections:

- Overview Of Hazard Mitigation Planning
- Plan Adoption By Local Governing Bodies
- Multi-Jurisdictional Planning Participation
- Mitigation Planning Process
- The Mitigation Planning Team
- Mitigation Planning Community Meetings And Workshops
- Involving The Public In Mitigation Planning
- Involving Stakeholders In Mitigation Planning
- Review And Incorporation Of Existing Plans

3.2 PLANNING PROCESS OVERVIEW

Local hazard mitigation planning is the process of organizing community resources, identifying and assessing hazard risks, and determining how to best minimize or manage those risks. Mitigation planning offers many benefits, including:

- Saving lives and property;
- Saving money;
- Facilitate recovery following disasters;
- Reducing future vulnerability through wise development and post-disaster recovery and reconstruction;
- Expediting the receipt of pre- and post-disaster grant funding; and
- Demonstrating a commitment to improve community health and safety.

Typically, mitigation planning has the potential to produce long-term and recurring benefits by breaking the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that pre-disaster investments will significantly reduce the demand for post-disaster assistance by lessening the need for emergency response, repair, recovery, and reconstruction. Mitigation practices will enable residents, businesses, and industries to recover in the wake of a disaster to ensure the community economy is re-established quicker and with less interruption.

The benefits of mitigation planning go beyond reducing hazard vulnerability. Measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. Thus, it is vitally important that any local mitigation planning process be integrated with other local planning efforts, and any proposed mitigation strategies be congruent with other existing community goals or initiatives.

3.3 PLAN ADOPTION BY LOCAL GOVERNING BODIES

Adoption by the local governing bodies demonstrates the commitment of Shelby County and each participating jurisdiction to fulfill the mitigation goals, objectives and action items outlined in the Plan. Adoption legitimizes the Plan and authorizes responsible agencies to execute their responsibilities. In order for the multi-jurisdictional plan to be approved, each jurisdiction included in the Plan must have its governing body adopt the Plan. Adoption of the plan:

- Lends authority to the plan to serve as a guiding document for all local and state government officials
- Gives legal status to the plan in the event it is challenged in court
- Certifies that the plan Has been properly approved by the governing authority and considered by the jurisdictions' citizens
- Helps to ensure the continuity of mitigation programs and policies over time as elected officials, staff, and other decision makers can refer to the Plan when making decisions about the community's future

Each participating jurisdiction including the Alabaster, Pelham and Shelby County Boards of Education will proceed with formal adoption proceedings after AEMA and FEMA provides conditional approval of this Plan. Following adoption, each participating jurisdiction will submit a copy of the resolution showing formal adoption of the Plan to AEMA. These will then be submitted to FEMA. Each participating jurisdiction understands that FEMA will transmit acknowledgement of verification of formal plan adoption and the official approval of the plan to the mitigation plan coordinator.

This Hazard Mitigation Plan has been adopted by Shelby County and its municipal jurisdictions in accordance with the authority and powers granted to county, cities and towns as defined by the State of Alabama. The original resolutions supporting the adoption of the plan are included in Appendix 9.3.

Table 3.1 Mitigation Plan Adoption Summary

Jurisdiction	Resolution Number	Adoption Date
Shelby County	2022-03-28-11	3-28-2022
City of Alabaster	031422-A	03-14-2022
City of Calera	2022-09	04-04-2022
City of Chelsea	2022-03-15-981	03-15-2022
City of Columbiana	03-22-01	03-01-2022
Town of Harpersville	20220321-01	03-21-2022
City of Helena	02282022	02-28-2022
Town of Indian Springs Village	03152022-001	03-15-2022
City of Montevallo	02282022-355	03-14-2022
City of Pelham	2022-03-21-07	03-21-2022
Town of Vincent	2022-03-01	03-01-2022
City of Westover	2022-02-15-2065	02-15-2022
Town of Wilsonville	220307	03-07-2022
Town of Wilton	3122	03-01-2022

3.4 MULTI-JURISDICTIONAL PLANNING PARTICIPATION

To satisfy multi-jurisdictional participation requirements, each of the local jurisdictions, agencies and departments was required to perform the following tasks:

- Designate appropriate officials to serve on the Mitigation Planning Committee;
- Participate in all mitigation planning meetings and workshops;
- Provide best available data for the risk assessment portion of the Plan;
- Complete the Capability Assessment Survey and provide copies of any mitigation or hazard-related documents for review and incorporation into the Plan;
- Support the development of a countywide mitigation strategy, including the design and adoption of general goal statements for all jurisdictions to pursue and develop a Mitigation Action Plan with specific mitigation actions for its jurisdiction;
- Review and provide timely comments on all draft components of the Plan;
- Adopt the Shelby County Multi-Jurisdictional, All Hazards Mitigation Plan.

Through the completion of these tasks plan participant will have fully participated in the development of this Plan.

Table 3.2 Mitigation Plan Participating Jurisdictions, Agencies and Departments	
Shelby County, Alabama	Town of Indian Springs Village
City of Alabaster	City of Montevallo
City of Calera	City of Pelham
City of Chelsea	Town of Vincent
City of Columbiana	Town of Westover
Town of Harpersville	Town of Wilsonville
City of Helena	Town of Wilton
Alabama Cooperative Extension Services	Shelby County EMA
ADEM	Jefferson County EMA
Department of Public Health	Shelby County Board of Education
Alabama Department of Agriculture	Shelby County Chamber of Commerce
Alabama Forestry Commission	Shelby County IT/GIS/Planning Dept
Alabama EMA	Shelby County Sheriff's Office
American Red Cross, Shelby County	Shelby County Tax Commissioner's Office
NGO, VOAD	Shelby County Fire Departments
Shelby County 911	Shelby County Independent Water Systems
Shelby County Development Services	University of Montevallo
ALDOT	Alabama Fire College
Shelby County Amateur Radio	Rescue Services/Ambulances
Hospitals	

3.5 MITIGATION PLANNING PROCESS

In preparing this 2022 update to the 2016 plan, Shelby County utilized a multi-jurisdictional planning process consistent with FEMA's (Publication Series 386). These standards are based upon FEMA's Interim Final Rule as published in the Federal Register on February 26, 2002, in Part 201 of the Code of Federal Regulations. An associated Local Mitigation Plan Crosswalk

provides a summary of FEMA's current minimum standards of acceptability for compliance with the Disaster Mitigation Act of 2000 and notes the location where each requirement is met within this plan update.

Guidance was also used from the National Flood Insurance Program. Participation in the NFIP is based on an agreement between communities and the Federal Government. If a community adopts and enforces a floodplain management ordinance to reduce future flood risk to facilities in floodplains, the Federal Government will make flood insurance available as a financial protection against flood losses.

The Shelby County mitigation committee also used guidance from the Flood Mitigation Assistance Program (FMA), created as part of the National Flood Insurance Reform Act (NFIRA) of 1994 (42 U.S.C. 4101), with the goal of reducing or eliminating claims under the NFIP.

Shelby County also applied the Community Rating System (CRS) 10-step planning process to Hazard Mitigation Plan development. CRS is consistent with the multi-hazard planning regulations; therefore FEMA also encourages jurisdictions to integrate the CRS planning steps into their multi-hazard mitigation plans. This means that an approved multi-hazard mitigation plan that addresses floods will automatically qualify for the minimum CRS credit. Shelby County performed the additional steps within each phase as outlined in the CRS criteria within each phase (Planning Process, Risk Assessment, Mitigation Strategy, and Plan Maintenance) of the multi-hazard mitigation planning regulations. This qualifies Shelby County and its participating jurisdictions to qualify for more CRS points, thus possibly lowering insurance rates.

3.6 THE MITIGATION COMMITTEE

A community-based mitigation committee developed this Plan update in cooperation with the Alabama Emergency Management Agency (AEMA) and consulting company EM Assist.

The Mitigation Committee assembled to oversee the development of the Plan consisting of representatives from Shelby County participating jurisdictions and supporting agencies and departments. The committee engaged government officials and other stakeholders in local meetings and planning workshops to discuss and complete tasks. In addition to regular meetings, this working group coordinated all aspects of the plan development process. Members routinely communicated and were kept informed through a dedicated e-mail distribution group. Additional participation and input from county residents and other identified stakeholders were solicited through the distribution of public notices and the facilitation of public meetings. The Planning Committee was charged with the following:

- Review goals from the 2016 Update to ensure current goals are relevant and correspond to State goals;
- Establish a timeline for completion of the Updated Plan;
- Ensure that the Updated Plan meets the requirements of DMA 2000 and FEMA and AEMA
- Solicit and encourage the participation of regional agencies, a range of stakeholders, and citizens in the Plan development process;

- Assist in gathering information for inclusion in the updated Plan, including the use of previously developed reports and data;
- Organize and oversee the public involvement process;
- Develop, revise, adopt, and maintain the updated Plan.

The designated primary and alternate points of contact for Shelby County were the Shelby County Emergency Management Director and the Emergency Management Coordinator. These points of contact provided the interface for Shelby County Emergency Management and the Shelby County Hazard Mitigation Committee.

The mitigation committee consisted of the following representatives:

State of Alabama

- Josh Therrien, Alabama Department of Environmental Management (ADEM), Field Coordinator, Shelby County LEPC Representative
- Tim Williams, Alabama Deportment of Transportation (ALDOT), District Administrator for Shelby County
- Summer Danzer, Alabama Fire College Liaison to Shelby County Regional Fire Training Center
- Andrew Nichols, Alabama Forestry Commission, State Forester assigned to Shelby County
- Eric Bradley, Alabama Fire College Representative

Shelby County

- Hub Harvey, Emergency Management Director
- Mindy Nash, Emergency Management Coordinator
- Hank Helmers, Shelby County Highway Department Operations Superintendent
- Terry Dillard, Shelby County Amateur Radio Emergency Services Coordinator
- Loren Russell, Shelby County 911 Deputy Director
- Alan Campbell, Shelby County 911 Director
- Mark Bishop, Captain, Shelby County Sheriff's Office, Administrative Div. Commander
- Nick Johnson, Investigator, Shelby County Sheriff's Office
- John Saminiego, Sheriff, Shelby County Sheriff's Office
- Shane Lovett, Senior Civil Engineer, Shelby County Water Services
- Tamara Lewis, Comptroller, Shelby County Commission

NGO

- Barry Gladstone, Shelby Baptist Association, VOAD Representative for Disaster Relief
- Rick Harmon, Columbiana Latter Day Saint Church, VOAD Representative for Disaster Relief
- Ken Clements, North Alabama United Methodist Committee on Relief (UMCOR), VOAD Representative
- Damon Summers, Red Cross, Operations Manager Central Alabama Chapter

Private Sector

- Gerson Pickett, Alabama Power Company/Southern Company Compliance Officer

- Andy Foster, Alabama Power Company Project Manager
- Mike Williams, Colonial Pipeline Environmental Specialist
- Philip Willis, Alabama Power, Gaston Steam Plant, Compliance Safety Officer
- Chris Bunn, Colonial Pipeline, Operations

Hospitals
- Mary Mueller, Shelby Baptist Medical Center Emergency Management Coordinator
- Daniel Listi, Shelby Baptist Medical Center Chief Executive Officer

City of Alabaster
- Tim Love, Alabaster Fire Chief
- Curtis Rigney, Alabaster Police Chief
- Scott Brakefield, Mayor

City of Calera
- Sean Kendrick, Calera Fire Chief
- David Hyche, Calera Police Chief
- John Graham, Mayor

City of Columbiana
- David Mitchell, Mayor
- Jeff Bowers, Columbiana Police Chief
- Johnny Howard, Columbiana Fire Chief

City of Chelsea
- Joe Lee, Chelsea Fire Chief
- Tony Picklesimer, Mayor

Town of Harpersville
- Theo Perkins, Mayor
- Heath Confer, Harpersville Fire Chief
- Diane McCain, Harpersville Police Chief

City of Helena
- Pete Valenti, Helena Fire Chief
- Brad Flynn, Helena Police Chief
- Brian Puckett, Mayor

City of Montevallo
- Brad Davis, Montevallo Fire Chief
- Jeremy Littleton, Montevallo Police Chief
- Rusty Nix, Mayor

City of Pelham

- Mike Reid, Pelham Fire Chief
- Pat Cheatwood, Pelham Police Chief
- Gretchen DiFante, City Manager

Town of Indian Springs Village

- Randy Sipe, North Shelby Fire Chief
- Brenda Bell-Guercio, Mayor
- Joan Downs, Indian Springs Village Town Clerk
- Herb Robins, Indian Springs Village Town Council Place #1
- Richard Harley, Indian Springs Village Town Council Place #3

Town of Vincent

- Jim Latimer, Mayor
- Mike Smiley, Vincent Fire Chief
- James Srygley, Vincent Police Chief

City of Westover

- Larry Riggins, Mayor
- Micah Woodley, Westover Fire Chief

Town of Wilsonville

- Davy Edwards, Wilsonville Fire Chief
- Ricky Morris, Mayor

Town of Wilton

- Jessica Martin, Mayor

Fire Departments

- Jon Lord, Rocky Ridge Fire Chief
- Michael Bartlett, Rocky Ridge Fire Chief
- Kevin Lucas, Dry Valley Fire Chief
- Tony Miller, Kingdom Fire Chief
- Cain Reed, Shelby Fire Chief
- Gary White, West Shelby Fire Chief
- Jeff Jones, Summer Hill Fire Chief
- John Entrekin, Four Mile Fire Chief
- Jonathan Hensley, Saginaw Fire Chief
- Dennis Brasher, Vandiver Fire Chief
- Ben Kirkland, Dunnavant Fire Chief
- Spruce McRee, Brierfield Fire Chief
- Buddy Wilks, Cahaba Valley Fire Chief

Rescue Services/Ambulance

- Matt Rush, Southeast Shelby Rescue Assistant Chief
- Marley Rainey, RPS (Regional Paramedical Services) Operations Manager
- Michael Minor, BREMSS (Birmingham Regional Emergency Medical Services System) Executive Director

Board of Education

- Jeff Atkins, Alabaster City Board of Education Chief Operations Officer
- Adam Moseley, Alabaster City Board of Education Board President
- Scott Cofield, Pelham City Board of Education Superintendent
- Bob Lavett, Pelham City Board of Education
- Thomas Dunnaway, Pelham City Board of Education Transportation Supervisor
- Lewis Brooks, Shelby County Board of Education Superintendent
- Jennifer Cofer, Shelby County Board of Education Student Services Supervisor

3.7 MITIGATION PLANNING COMMUNITY MEETINGS AND WORKSHOPS

The preparation of this 2022 update to the 2016 plan required a series of meetings and workshops for facilitating discussion and data collection efforts with the mitigation committee and local community officials. The meetings and workshops prompted continuous input and feedback throughout the drafting stages of the Plan. Below is a summary of the key meetings and community workshops for the Shelby County Hazard Mitigation Committee. Additional meetings were held by the participating jurisdictions to accomplish planning tasks specific to their community, such as specific mitigation actions for inclusion in their Mitigation Action Plan. Public notices and and/or minutes of mandatory meetings are scanned into this plan and can be found in the Appendices.

Table 3.3 Mitigation Plan Committee And Mandatory Public Meetings		
Meeting	**Date**	**Attendees**
Annual Mitigation Plan Review Meeting	**2/12/2017**	**18**
Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign sheets in Section 9.2. During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.		
Meeting	**Date**	**Attendees**
Annual Mitigation Plan Review Meeting	**2/13/2018**	**19**

Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign sheets in Section 9.2.

During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

Meeting	Date	Attendees
Annual Mitigation Plan Review Meeting	**2/13/2019**	**27**

Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign sheets in Section 9.2.

During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

Meeting	Date	Attendees
Annual Mitigation Plan Review Meeting	**2/22/2020**	**28**

Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign in sheets are attached in Section 9.2.

During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

Meetings	Date	Attendees
Mitigation Plan Individual Jurisdiction Data Collection Meetings	**11/30/21 to 2/7/22**	**Varied**

Meetings were held with Individual Jurisdictions (Alabaster, Calera, Chelsea, Columbiana, Harpersville, Helena, Town of Indian Springs Village, Montevallo, Pelham, Vincent, Westover, Wilsonville & Wilton) by phone and in person. Jurisdictional capabilities, geographic and demographic data, strategies, hazard priorities, mitigation goals, objectives, actions and projects were reviewed and updated.

Meeting	Date	Attendees
Annual Mitigation Plan Review Meeting	**2/9/2021**	**22**

Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign in sheets are attached in Section 9.2.

During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

Meeting	Date	Attendees
Annual Mitigation Plan Review Meeting	**2/8/2022**	**14**

Annual Mitigation Plan Review Meetings were held as part of regularly scheduled public meetings of the Shelby County Local Emergency Planning Committee (LEPC), the second Tuesday of the second month of each quarter at 11:30 am. The public is invited to these meetings where a broad range of stakeholders always attend. Sign in sheets are attached in Section 9.2.

During this meeting, we reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

Meeting		
Initial Mitigation Plan Planning Meeting	**Jan. 20, 2022**	**20**

The Initial Meeting was held with officials from Shelby County. Hub Harvey, Emergency Management Director represented Shelby County. Elected Officials, City/Town Clerks, Career & Volunteer Fire Departments, Independent Water Systems, the Shelby County Sheriff's Office, all local Police Departments, Hospitals, Alabaster, Pelham and Shelby School Boards, Public Works Departments and the public were invited to attend.

Discussions focused on reviewing and updating strategies, hazard priorities and mitigation projects. There have been several declared disasters since the last update, 2017 Hurricane Irma (3389), 2017 Hurricane Nate (3394), 2020 COVID-19 (3472), 2020 Hurricane Sally (3545), 2020 COVID-19 PANDEMIC (4503), March 25th, 2021 Tornadoes (4596) and October 6-7, 2021 Severe Storm & Flooding (4632). The primary natural hazards remain the same from the last plan update.

The overall project approach placed emphasis on the steps necessary to meet the requirements of the DMA2K and 44 CFR Part 201 and building on work already completed at the state and local level. Discussions also focused on the specific roles and responsibilities for all parties involved in the planning process.

Citizen Input on Hazard Mitigation Planning surveys were passed out to members of the public. Also, online versions of the surveys were made available at hmpsurvey.shelbyal.com. Individual jurisdictions were encouraged to distribute this website by any means possible to include social media. Completed surveys were returned and input gathered for future meetings. Shelby County EMA is receiving weekly updates on the online plan.

The planning committee went over updated population, demographic and housing information for Shelby County. In addition, the committee reviewed in detail capabilities, mitigation goals and objectives.

Also discussed and voted upon were hazard mitigation funding opportunities for the 4503 and 4596 declared disasters.

Shelby County was allocated approximately $633,000 in HMGP funds for 4596. The Committee voted unanimously to forward Letters of Intent for multiple Community Safe Room applications across Shelby County. This list was in priority order based upon a number of factors to include the CDC Social Vulnerability Index.

4503 is a statewide competition for hazard mitigation funds. Acquisition and Elevation of repetitive flood properties damaged after the Oct. 6-7, 2021 Severe Storms and Flooding are considered a high priority for Shelby County, Alabama EMA and FEMA. A priority list of Letters of Intent was created by the City of Pelham and this list was approved unanimously.

Meeting	Date	Attendees
Mid Mitigation Planning Meeting & Opportunity for Public Comment	**02/8/2022**	**21**

During this meeting held from 11:30 AM to 1:00 PM, the planning committee went over updated population, demographic and housing information for Shelby County. In addition, the committee reviewed in detail capabilities, mitigation goals and objectives.

We also reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.

A Mandatory Public meeting was held from 1:00 PM to 2:00 PM at the same building for public comment. Members of the public and Committee members further discussed the plan but no changes were put forth.

Notice of both meetings, inviting public comment on construction of a countywide mitigation plan was publicized on the ema.shelbyal.com website. The intent of the meetings was to educate the public on the mitigation planning process and to explain DMA2K multi-jurisdictional planning requirements. A presentation of the mitigation planning process, the concept of hazard mitigation and details of the mitigation planning process to be followed were presented.

Meeting	Date	Attendees
Final Mitigation Planning Meeting & Opportunity for Public Comment	**02/16/2022**	**21**

The Final Hazard Mitigation Planning meeting was held from 9:00 AM to 10:30 PM at the 280 County Services Building. All elements of the plan were reviewed including capabilities, mitigation goals and objectives for each individual plan and the Shelby County Plan. There being no further comments or questions from the Committee or Public, a motion and second to approve the Shelby County 2022 Multi-Jurisdictional Hazard Mitigation Plan were made. A vote of the Committee was held and the plan was approved unanimously.

A Mandatory Public meeting was held from 10:30 AM to Noon at the same building for public comment. Members of the public and Committee members further discussed the plan but no changes were put forth.

Notice of both meetings, inviting public comment on construction of a countywide mitigation plan was publicized on the ema.shelbyal.com website and social media. The intent of the meetings was to educate the public on the mitigation planning process and to explain DMA2K multi-jurisdictional planning requirements. A presentation of the mitigation planning process, the concept of hazard mitigation and details of the mitigation planning process to be followed was presented.

Meetings	Date	Attendees
City & Town Council Plan Adoption Meetings & Shelby County Commission Plan Adoption Meeting	**2/15/22 to 4/6/2022**	**Varied**

The Shelby County Commission and all Individual Jurisdictions, Alabaster, Calera, Chelsea, Columbiana, Harpersville, Helena, Town of Indian Springs Village, Montevallo, Pelham, Vincent, Westover, Wilsonville & Wilton, during regularly scheduled County Commission, City or Town Council meetings, formally adopted the Draft Shelby County Hazard Mitigation Plan Update 2022 by signed resolutions.

Copies of each resolution is attached in Section 9.3 of this document.

3.8 INVOLVING THE PUBLIC IN MITIGATION PLANNING

3.8.1 Public Participation During Plan Update Construction

A fundamental component of Shelby County's community-based mitigation planning process involves public participation. Citizen involvement provided the Mitigation Committee with a greater understanding of local concerns and ensures a higher degree of mitigation success by developing community "buy-in" from those directly affected by the planning decisions of public officials. Annual reviews during public LEPC meetings ensured stakeholder and public involvement.

All county stakeholder meetings were open to the public along with public meetings advertised on the Shelby EMA website and through social media. A Public Participation Survey was provided by paper at meetings and available at all times at hmpsurvey.shelbyal.com. Despite the ongoing pandemic, as many meetings as possible were conducted in person with some available by teleconference. Public response was similar to the 2016 Plan Update and was used to shape the plan as a whole, evaluate mitigation actions and review draft plans.

Survey Results:

The number of inputs were 209 from 20 unique zip codes. The overall consensus was citizens are most often affected by high winds, storms which cause power outages of more than 2-3 hours and winter weather. Flooding considerations are a distant fourth.

45.3% of responders have a NOAA weather radio. The overwhelming majority of responders, 85.4% can receive emergency warning information on wireless devices. 57.5% (122) are signed up for the free ShelbyAlerts Everbridge service at ema.shelbyal.com. 72.2% have a family emergency plan in case of a disaster. 69.8% (148) have a safe place in or around their home.

CITIZEN INPUT ON SHELBY COUNTY HAZARD MITIGATION PLAN

Where in the County do you live (Which city or township?) Zip Code optional.	

Which of these emergency events have occurred at your home or in your neighborhood during the past five years? Which of these events are you concerned about in the next year?

		Past 5 years		Next year	
	EVENT	YES	NO	YES	NO
A	Flooding?				
B	Wildfire?				
C	High Winds, Severe thunderstorm, Tornado?				
D	Extreme Temperatures?				
E	Winter Weather?				
F	Hail?				
G	Drought?				
H	Power failure for more than two or three hours?				
I	Earthquake, landslide, or sinkhole?				
J	Other…please describe.				

Did you have to leave your home because of any of these events?
If so, which ones? List by letter designation: _____

Did you lose time from work or school because of any of these events?
If so, which ones? List by letter designation: _____

Of the concerns listed in question above, please list the ones that you think are most likely to happen. List in priority by letter designation: _____

Of the concerns that you think are most likely to happen, which one do you think would affect most of the population of Shelby County? _____

Do you own a NOAA weather radio? YES _____ NO _____

If yes, is it on right now? YES _____ NO _____

Is it programmed? YES _____ NO _____

Can you receive emergency warning information on your pager, cell phone, or wireless messaging devices?
YES _____ NO _____ If no, would you like to? YES ___ NO ___

Do you have a family emergency plan in the event of a disaster? YES ____ NO _____

Do you have a disaster supply kit in the event of a disaster? YES ____ NO _____

Do you have a safe place for shelter in or around your home? YES____ NO_____

Have you signed up for the free ShelbyAlerts Everbridge program at EMA.SHELBYAL.COM?
YES ____ NO _____

Natural hazards can have a significant impact on a community, but planning for these events can help lessen the impacts. The following statements will help determine citizen priorities regarding planning for natural hazards in Shelby County.

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

We would like to know what specific types of community assets are most important to you.

Community Assets	Very Important	Somewhat Important	Neutral	Not Very Important	Not Important
Elder-care facilities	☐	☐	☐	☐	☐
Schools (K-12)	☐	☐	☐	☐	☐
Hospitals	☐	☐	☐	☐	☐
Major Bridges	☐	☐	☐	☐	☐
Police/Fire Stations	☐	☐	☐	☐	☐
Museums/Historic Buildings	☐	☐	☐	☐	☐
Major employers	☐	☐	☐	☐	☐
Small business	☐	☐	☐	☐	☐
College/University	☐	☐	☐	☐	☐
City Hall/Courthouse	☐	☐	☐	☐	☐
Parks	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐
Other: _____	☐	☐	☐	☐	☐

Questions?

Shelby County Emergency Management
First Floor - Ray Building
504 Highway 70
Columbiana, AL 35051
PHONE: (205) 669-3999

FAX: (205) 669-3871
EMAIL: shelbyema@shelbyal.com

3.8.1.1 Public Participation During Mitigation Plan Update Final Approval

The completed plan was available for public review and comments both prior and during the regularly scheduled meetings.

During the formal adoption meetings an overview of the Plan, including purpose and content, was presented to the attendees, followed by a question and answer session. All comments were documented in the meeting minutes and provided to the Mitigation Planning Committee.

3.9 INVOLVING STAKEHOLDERS IN MITIGATION PLANNING

A range of stakeholders, from each jurisdiction in Shelby County and surrounding Counties, public and private nonprofits, general public and neighboring communities, to include Jefferson EMA, St. Clair EMA, Talladega EMA , Coosa EMA, Chilton EMA, and Bibb EMA were invited and encouraged to participate in the development of the Hazard Mitigation Plan.

Stakeholder involvement was encouraged through notifications and invitations to agencies and individuals to participate. These included representatives from Shelby County and each participating jurisdiction, LEPC, private sector businesses, voluntary agencies, citizens and surrounding counties.

Shelby County encouraged open and widespread participation in the mitigation planning process through the publication of website and social media notices before planning and open public meetings.

3.10 REVIEW AND INCORPORATION OF EXISTING PLANS

An important aspect of the planning process involved the review of existing federal, state, and local plans, studies, reports, and technical information, as well as the ordinances, regulations, and resolutions of each participating jurisdiction for incorporation into the Shelby County Hazard Mitigation Plan 2022 Update.

In some cases, these documents identified areas for needed mitigation actions; for example, review of the Shelby County Emergency Operations Plan made clear the need for updating and expanding this plan, and goals/actions were written to mitigate this weakness. After review of the ordinances, regulations, and resolutions of each jurisdiction, the Legal and Regulatory Capabilities Summary Table was prepared. This summary identified that some jurisdictions lacked ordinances and regulations to control hazards and reduce risk. By incorporating data from existing programs into this mitigation plan, the County was able to identify the relevance of mitigation planning to these existing programs.

3.10.1 Local Data

The Planning Committee reviewed and incorporated existing data and plans to support the mitigation plan. A number of electronic and hard copy documents were made available to support the planning process. These documents are listed below:

Table 3.4 Local Plan Incorporation
Jurisdictional ordinances, regulations, and resolutions
Municipal Comprehensive Plans
Shelby County Emergency Operations Plan
Shelby County Mass Clinic Plan
Shelby County Emergency Evacuation Plan
Shelby County Schools Emergency Response/Crisis Management Plan
Electric Risk Management Plan
Water and Reclamation Risk Management Plan
Water Utility Emergency Plan
SARA Title II facilities reporting documents and site emergency plans
Alabama One Call System Emergency Responder Handbook for Pipeline Emergencies
The Pipeline Group Emergency Response Manual
Local Community Emergency Action Plan for Hazardous Material Incidents
Shelby County Comprehensive Plan
Alabaster Comprehensive Plan
Chelsea Comprehensive Plan
Harpersville Comprehensive Plan
Montevallo Comprehensive Plan
Pelham Comprehensive Plan
Shelby County Flood Insurance Study
Shelby County 2016 Hazard Mitigation Plan
Jurisdictions Flood Ordinance Resolutions

3.10.2 Federal and State Data

State and federal response and homeland security documents were referenced to ensure Shelby County's goals supported these plans and promoted compliance with requirements. The State of Alabama Hazard Mitigation Plan formed the basis for identifying and analyzing the natural hazards that could affect Shelby County and participating jurisdictions. The Shelby County Emergency Operations Plan provided insight into the jurisdictional response to disasters and was used to develop and validate mitigation goals, objectives, and actions Federal and State data was collected and used throughout the mitigation process including:

Table 3.5 State and Federal Plan Incorporation
State of Alabama Hazard Mitigation Plan
Governor's Office of Homeland Security "A Strategy for Alabama"
FEMA Local Mitigation Planning Handbook
National Incident Management System
U.S. Department of Homeland Security National Response Plan (Base Plan and Appendices)
FEMA National Flood Insurance: Program Description
National Weather Service: Operations Present and Future
FEMA State and Local Mitigation Planning Guides
US Census data
FEMA and local disaster reports
Long range transportation plans/growth projections from the Regional Planning Commission
Flood Insurance Studies and Flood Insurance Rate Maps
Dam Inundation Studies

Data from the National Weather Service (NWS)
Data from the National Oceanic and Atmospheric Administration (NOAA)
2016 Natural Hazard Mitigation Plan for Shelby County
Department of Natural Resources
Alabama Data Center demographic and economic reports
Public laws and other programs such as the NFIP were examined to complete this Plan.

These documents, on file at Shelby County Emergency Management Agency in electronic or hard copy format, provided valuable guidance in the planning process.

4
RISK ASSESSMENT – HAZARD IDENTIFICATION

4.1 INTRODUCTION

According to the Federal Emergency Management Agency (FEMA) Guidance 386-2, "risk assessment is the process of measuring the potential loss of life, personal injury, economic injury and property damage resulting from natural hazards by assessing the vulnerability of people, buildings and infrastructure to natural and manmade hazards**.** The risk assessment process used for this Updated Plan is consistent with the process and steps presented in the Federal Emergency Management Agency (FEMA) 386-2, State and Local Mitigation Planning How-to-Guide, Understanding Your Risks – Identifying Hazards and Estimating Losses (FEMA, 2001).

The first step of the risk assessment process is to identify the hazards of concern. FEMA's current regulations only require an evaluation of natural hazards. Natural hazards are natural events that threaten lives, property, and many other assets. Often, natural hazards can be predicted, where they tend to occur repeatedly in the same geographical locations because they are related to weather patterns or physical characteristics of an area.

The primary source for identifying manmade hazards was the Department of Homeland Security (DHS) website and the FEMA guide "Integrating Manmade Hazards into Mitigation Planning**".**

4.1.2 2022 Plan Update

Section 4 – Risk Assessment Hazard Identification has been significantly enhanced to include all-natural hazards identified in the State plan and manmade hazards hazardous materials incident, Illegal Methamphetamine laboratories, Terrorism and Urban Fires Also included is the Pandemic hazard. This section contains a comprehensive description of the hazards including in many cases pictures or figures that assist in identifying the hazard.

The below table documents the hazards included in the 2016 plan and their disposition in Section 4, Section 5 and Section 6 of the 2022 mitigation plan update.

Table 4.1 2016 Mitigation Plan Hazards/2022 Updated Plan Hazard Status

2022 Hazard	Exp	Risk/Threat	2016 Plan Status	2022 Updated Plan Status
Drought	Yes	Moderate Slight	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Earthquake	Yes	Low Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Extreme Temperature	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment

Flooding	Yes	Moderate High	Identified as tropical Storms/Hurricanes, Thunderstorms, Dam/Levee Failure, profiled and detailed vulnerability assessment	Identified as tropical Storms/Hurricanes, Thunderstorms, Dam/Levee Failure, profiled and detailed vulnerability assessment
Hail	Yes	Moderate Minimal	Identified under Thunderstorms	Identified/profiled some vulnerability assessment
High Winds	Yes	High High	Identified as tropical Storms/Hurricanes, Thunderstorms, Tornadoes, profiled and detailed vulnerability assessment	Identified as tropical Storms/Hurricanes, Thunderstorms, Tornadoes, profiled and detailed vulnerability assessment
Ice/Snow Storms	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Land Subsidence	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Landslides Mudslides	Yes	Low Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Lightning	Yes	Moderate Low	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Wildfires	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Exp = Exposure, Risk = Probability of Occurrence, Threat = Impact on loss of life and property damage				

4.2 HAZARD IDENTIFICATION METHODOLOGY

FEMA's current regulations only require identification, profiling and evaluation of natural hazards that threaten lives, property, and other assets. However, FEMA strongly suggests including manmade hazards in jurisdiction hazard mitigation plans.

Shelby County is vulnerable to a wide array of hazards that threaten life and property. The Hazard Identification section provides background information for these hazards. It is important that all natural hazards be initially considered for relevance in advancing through the hazard mitigation planning process. Subsequent sections of the updated Plan—the Hazard Profiles and the Vulnerability Assessment—address the hazards of specific concern to the County. The Shelby County Hazard Mitigation Committee considered and evaluated all natural hazards in terms of their potential risk to Shelby County and its citizens.

4.3 SHELBY COUNTY HAZARD SUMMARY

Shelby County has been included in a total of 11 federal disaster declarations from 2000 through 2022. These declarations are listed in Table 4-2, from FEMA, Region IV. All of these events did not necessarily occur within the boundaries of Shelby County. When major damage from a natural disaster occurs, FEMA, as a matter of practice, includes a "buffer" area of adjoining counties in the event it later determines the damage was more widespread. Specific instances of this practice are discussed as they are encountered in the following hazard profiles.

Table 4.2 Shelby County Disaster Declarations			
Disaster Number	**Disaster Type**	**Date**	**Comments**
1971	Tornado	4/27/2011	
1019	Severe Storms, Tornado & Flooding	1994	
2278	Fire	9/18/1999	Chelsea
1442	Severe Storms & Tornadoes	2002	
1466	Severe Storms, Tornadoes & Flooding	2003	
1549	Hurricane	2004	Ivan
1593	Hurricane	2005	Dennis
3237	Hurricane Evacuation	2005	Katrina
3292	Hurricane	2008	Gustav
3319	Severe Storms, Tornadoes, & Straight-Line Winds	2011	
1971	Severe Storms, Tornadoes, Straight-Line Winds	2011	
3389	Hurricane	2017	Irma
3394	Hurricane	2017	Nate
3472	Covid-19	2020	FEMA
3545	Hurricane	2020	Sally
4503	Covid-19	2020	FEMA
4596	Severe Storms	2021	FEMA
4632	Severe Storms/Flooding	2021	FEMA

In addition to the federally declared disasters for Shelby County, a listing of disasters the county has experienced since 1950 are listed in The Table below.

Table 4.3 Shelby County Other Major Disaster Events		
Type	**Year**	**Description**
Flooding	1964	Flooding occurred along Buck Creek in Alabaster and in Green Park South Trailer Park in Pelham
Flooding	1993	Flooded Green Park South Trailer Park and other communities in North Shelby County
Flooding	1993	Chandalar South bridge closed and damaged
Flooding	2002	Flooding along Hwy 261
Hurricane	10/4/1995	Opal caused flooding
Severe Wind	1995	Scattered homes throughout the county were damaged
Subsidence	12/1972	Large sinkhole developed in Calera 300’ in diameter, 100 ft in depth

Table 4.3 Shelby County Other Major Disaster Events		
Type	**Year**	**Description**
Tornado	4/27/1973	A F4 tornado path up highway 25, 1 fatality, 63 injuries, 25 million in property damage
Tornado	2/10/90	Damage at Plantation Pipe tanks in Pelham
Tornado	3/27/1994	A F2 tornado in North Selby County 53 injuries, 5M in damage to several homes
Tornado	1999	A tornado hit Pelham along 119 with extensive damage
Wildfires	1988	On Shades Crest Road
Winter Storm	1986	3î-4î of snow cause power outages
Winter Storm	1981	Ice storm damage trees and power lines lost power for 5-7 days
Winter Storm	3/5/1993	Snow up to 18”

4.4 NATURAL HAZARDS IDENTIFICATION

4.4.1 Drought Identification

The National Weather Service (NWS) Climate Prediction Center (CPC) defines drought as a deficiency of moisture that results in adverse impact on people, animals, or vegetation over a sizeable area. Drought is a normal, recurrent feature of climate. It occurs almost everywhere, although its features vary from region to region. In general, drought originates from a deficiency of precipitation over an extended period of time, resulting in a water shortage for some activity, group, or environmental sector.

Other climatic factors, such as high temperatures, prolonged high winds and low relative humidity, can aggravate the severity of a drought. These conditions are caused by anomalous weather patterns when shifts in the jet stream block storm systems from reaching an area. As a result, large high-pressure cells may dominate a region for a prolonged period, thus reducing precipitation. According to Institute for Catastrophic Loss Reduction (ICLR), this natural hazard differs from others in several ways. First, there is no universally accepted definition of drought. Second, drought onset and recovery are usually slow. Third, droughts also can cover a much larger area and last many times longer than most other natural hazards. Fourth, they are part of the natural climate variability. Due to these differences many communities have neglected to include this hazard in their disaster management plans (ICLR, 2005). Unlike hurricanes and flooding, a drought crisis is usually not an “instantaneous” catastrophe; therefore, some communities neglect to include drought in their disaster management plans (Shallcross, 2008).

According to the Federal Emergency Management Agency (FEMA), the National Drought Mitigation Center (NDMC) and the NWS, there are four ways that drought can be defined:

Meteorological drought is a measure of departure of precipitation from normal. It is defined solely on the degree of dryness. Due to climatic differences, what might be considered as a drought in one location of the country may not be considered as a drought in another location.

Agricultural drought links various characteristics of meteorological drought to agricultural impacts, focusing on precipitation shortages, differences between actual and potential evapotranspiration, soil water deficits, reduced ground water or reservoir levels, etc. It occurs

when there is not enough water available for a particular crop to grow at a particular time. Agricultural drought is defined in terms of soil moisture deficiencies relative to water demands of plant life, primarily crops.

Hydrological drought is associated with the effects of periods of precipitation (including snowfall) shortfalls on surface or subsurface water supply and occurs when these water supplies are below normal. It is related to the effects of precipitation shortfalls on stream flows and reservoir, lake and groundwater levels.

Socioeconomic drought is associated with the supply and demand of some economic good with elements of meteorological, hydrological, and agricultural drought. This differs from the aforementioned types of drought because its occurrence depends on the time and space processes of supply and demand to identify or classify droughts. The supply of many economic goods depends on weather (e.g., water, forage, food grains, fish, and hydroelectric power). Socioeconomic drought occurs when the demand for an economic good exceeds supply as a result of a weather-related shortfall in water supply.

4.4.2 Earthquake Identification

An earthquake is sudden motion or trembling caused by an abrupt release of accumulated strain in the tectonic plates that comprise the earth's crust." These rigid plates, known as tectonic plates, are some 50 to 60 miles in thickness and move slowly and continuously over the earth's interior. The plates meet along their edges, where they move away, past or under each other at rates varying from less than a fraction of an inch up to five inches per year. While this sounds small, at a rate of two inches per year, a distance of 30 miles would be covered in approximately one million years (FEMA, 1997). The tectonic plates continually bump, slide, catch, and hold as they move past each other which causes stress to accumulate along faults. When this stress exceeds the elastic limit of the rock, an earthquake occurs, immediately causing sudden ground motion and seismic activity.

The vibration or shaking of the ground during an earthquake is described by ground motion. The severity of ground motion generally increases with the amount of energy released and decreases with distance from the fault or epicenter of the earthquake. Ground motion causes waves in the earth's interior, also known as seismic waves, and along the earth's surface, known as surface waves. The following are the two kinds of seismic waves:

P (primary) waves are longitudinal or compressional waves similar in character to sound waves that cause back-and-forth oscillation along the direction of travel (vertical motion), with particle motion in the same direction as wave travel. They move through the earth at approximately 15,000 mph.

S (secondary) waves, also known as shear waves, are slower than P waves and cause structures to vibrate from side-to-side (horizontal motion) due to motion at right angles to the direction of wave travel. Un-reinforced buildings are more easily damaged by S waves.

There are also two kinds of surface waves, Raleigh waves and Love waves. These waves travel more slowly and typically are significantly less damaging than seismic waves.

The location of an earthquake is commonly described by its focal depth and the geographic position of its epicenter. The focal depth of an earthquake is the depth from the Earth's surface to the region where an earthquake's energy originates (the focus or hypocenter). The epicenter of an earthquake is the point on the Earth's surface directly above the hypocenter (Shedlock

and Pakiser, 1997). Earthquakes usually occur without warning and their effects can impact areas a great distance from the epicenter (FEMA, 2001).

4.4.3 Extreme Temperatures Identification

Extreme temperatures include both cold and hot events, which can have a significant impact to human health, commercial/agricultural businesses and primary and secondary effects on infrastructure (e.g., burst pipes and power failure). Based on what the population is accustomed to, what constitutes "extreme cold" or "extreme heat" varies across different areas of the country**.**

4.4.3.1 Extreme Heat

Temperatures that hover 10 degrees or more above the average high temperature for a region and last for several weeks are defined as extreme heat by the CDC. A heat wave is a prolonged period of excessively hot weather, which may be accompanied by high humidity. There is no universal definition of a heat wave because the term is relative to the usual weather in the area. Temperatures that people from a hotter climate consider normal can be termed a heat wave in a cooler area if they are outside the normal climate pattern for that area. Also, the term is applied both to routine weather variations and to extraordinary spells of heat, which may occur only once a century.

4.4.3.2 Extreme Cold

What constitutes extreme cold and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered extreme cold. Extreme cold events are when temperatures drop well below normal in an area. Extremely cold temperatures often accompany a winter storm, so individuals may have to cope with power failures and icy roads. Although staying indoors as much as possible can help reduce the risk of car crashes and falls on the ice, individuals may also face indoor hazards. Many homes will be too cold—either due to a power failure or because the heating system is not adequate for the weather. As people use space heaters and fireplaces to stay warm, the risk of household fires and carbon monoxide poisoning increases. Exposure to cold temperatures can lead to serious or life-threatening health problems such as hypothermia, cold stress, frostbite or freezing of the exposed extremities such as fingers, toes, nose and ear lobes.

4.4.4 Flooding Identification

Flooding is an overflowing of water onto normally dry land and is one of the most significant and costly of natural disasters. The principle types of floods are dam or levee failure, flash floods, riverine floods and storm surge flooding.

Dam/Levee Failure floods usually result from intense rainfall or snow melt that produces water quantities that breach dams or levees because of faulty design, construction, or operational inadequacies. Levee failures also are a result of storm surge in coastal areas.

Flash floods result from quickly rising streams after heavy rain or rapid snowmelt, ice jams (ice that accumulates at a natural or human-made obstruction and slows the flow of water) or the absence or overflow of storm sewers in a relatively small drainage area and produce localized

floods of great volume and short duration. Flash floods usually result from tropical storm/hurricane or thunderstorm weather events.

Riverine floods result from precipitation or snowmelt over large areas and occur in river systems and tributaries that may drain large geographic areas. The precipitation usually results from tropical storm/hurricane or thunderstorm weather events.

Storm Surge Flooding resulting from tropical storm/ hurricane weather events.

Other flood related Definitions:

Floodplain - Any land area susceptible to inundation by floodwaters from any source.

100/500 -Year Floodplain is defined as the area adjoining a river, stream, or watercourse covered by water in the event of a 100/500-year flood.

"The term "100-year flood" is misleading. It is not a flood that will occur once every 100 years. Rather, it is the flood elevation that has a 1 percent chance of being equaled or exceeded each year. Thus, the 100-year flood could occur more than once in a relatively short period of time. The 100-year flood, which is the standard used by most federal and state agencies, is used by the National Flood Insurance Program (NFIP) as the standard for floodplain management and to determine the need for flood insurance. A structure located within a special flood hazard area shown on a map has a 26 percent chance of suffering flood damage during the term of a 30-year mortgage. One hundred year floodplains have been identified, mapped and used for further analysis using the county's Geographic Information System (GIS).

The 500-year standard (0.2-percent-annual-chance) follows the same logic as the 100- year flood definition."

Floodway - The channel of a river or watercourse and the adjacent areas that must be reserved in order to discharge the 100-year flood without cumulatively increasing the water surface elevation more than one foot.

Flood Fringe - That portion of the floodplain outside the floodway that is inundated by floodwaters in which encroachment is permissible**.**

Encroachment - Any man-made obstruction in the floodplain that displaces the natural passage of floodwaters**.**

Surcharge - An increase in flood elevation due to destruction of the floodplain that reduces conveyance capacity**.**

Described below are the major causes of natural hazard flooding: tropical storms/hurricanes, thunderstorms and storm surge.

4.4.4.1 Flooding Tropical Storm/Hurricane Identification

As a tropical storm/hurricane nears land, it usually brings torrential rains that can last for days. These torrential rains cause dam/levee failure, riverine and flash flooding**.**

A Tropical Storm is an organized system of strong thunderstorms with maximum sustained winds between 34 to 63 knots (39 to 73 mph) (FEMA, 2007). In time, the storm becomes more organized and begins to become more circular in shape, resembling a hurricane.

A Hurricane is an intense tropical cyclone with wind speeds reaching a minimum constant speed of 74 mph (FEMA, 2004). It is a category of tropical cyclone characterized by thunderstorms and defined surface wind circulation. They are caused by the atmospheric

instability created by the collision of warm air with cooler air. They form in the warm waters of tropical and sub-tropical oceans, seas, or Gulf of Mexico (NWS, 2000). Hurricanes begin when areas of low atmospheric pressure move off the western coast of Africa and into the Atlantic, where they grow and intensify in the moisture-laden air above the warm tropical ocean. Air moves toward these atmospheric lows from all directions and circulates clock-wise under the influence of the Coriolis effect, thereby initiating rotation in the converging wind fields. When these hot, moist air masses meet, they rise up into the atmosphere above the low-pressure area, potentially establishing a self-reinforcing feedback system.

4.4.4.2 Flooding Thunderstorm Identification

Thunderstorms are associated with heavy rains that can lead to riverine, dam/levee failure and flash flooding. Thunderstorms are formed from a combination of moisture, rapidly rising warm air, and a force capable of lifting air (such as a sea breeze, a warm and cold front, or a mountain). Thunderstorms may occur singly, in clusters, or in lines. The most severe weather occurs when a single thunderstorm affects one location for an extended time.

Thunderstorms affect relatively small-localized areas. Thunderstorms can strike in all regions of the U.S.; however, they are most common in the central and southern states. The atmospheric conditions in these regions of the country are most ideal for generating these powerful storms (NVRC, 2006). More than 100,000 thunderstorms occur each year in the U.S., however, only about 10% are classified as severe.

4.4.4.3 Flooding Storm Surge Identification

Storm Surge is water that is pushed toward the shore by the force of the winds swirling around a tropical storm or hurricane. This advancing surge combines with the normal tides to raise the water level. Wind driven waves are superimposed on the storm surge. A rise in water level can cause severe flooding in coastal areas, particularly when the storm tide coincides with the normal high tides. The storm surge creates a large dome of water, often 50 to 100 miles wide that sweeps across the coastline near where the hurricane makes landfall.

The stronger the hurricane and the shallower the offshore water, the higher the storm surge will be (NWS, 2000). Storm surges are particularly damaging when they occur during a high tide, combining the effects of the surge and the tide. As the water slams into shoreline structures, even well built structures quickly can be demolished. As the waters move inland, carrying debris, it can cause further damage.

Because storm surge is produced by the high winds circulating a tropical/storm or hurricane the resulting storm surge can occur from any direction where the hurricane is over the ocean or large bodies of waters such as bays.

4.4.5 Hail Identification

Hailstones are products of thunderstorms and are developed by downdrafts and updrafts that develop inside cumulonimbus clouds of a thunderstorm, where super cooled water droplets exist. The transformation of droplets to ice requires a temperature below 32 degrees and a catalyst in the form of tiny particles of solid matter, or freezing nuclei. Continued deposits of super cooled water cause the ice crystals to grow into hailstones.

The size of hailstones varies and is related to the severity and size of the thunderstorm that produced it. The higher the temperatures at the Earth's surface, the greater the strength of the updrafts, and the greater the amount of time the hailstones are suspended, giving the hailstones more time to increase in size. Hailstones vary widely in size. Penny size or larger hail is considered severe**.**

Hailstorms occur most frequently during the late spring and early summer, when the jet stream moves northward across the Great Plains. During this period, extreme temperature changes occur from the surface up to the jet stream, resulting in the strong updrafts required for hail formation**.**

4.4.6 High Winds Identification

Wind is defined as the motion of air relative to the earth's surface. In the mainland United States the mean annual wind speed is reported to be eight to 12 mph, with frequent speeds of 50 mph and occasional wind speeds greater than 70 mph. High Winds are generally the result of thunderstorms, tornadoes and tropical storms/hurricanes.

4.4.6.1 High Winds Tropical Storm/Hurricane Identification

Tropical Storm/Hurricane Wind Damage is the force of wind that can quickly decimate the tree population, down power lines and utility poles, knock over signs, and damage/destroy homes and buildings. Flying debris can also cause damage to both structures and the general population. When hurricanes first make landfall, it is common for tornadoes to form.

A Tropical Storm is an organized system of strong thunderstorms with maximum sustained winds between 34 to 63 knots (39 to 73 mph) (FEMA, 2007). In time, the storm becomes more organized and begins to become more circular in shape, resembling a hurricane.

A Hurricane is an intense tropical cyclone with wind speeds reaching a minimum constant speed of 74 mph (FEMA, 2004). It is a category of tropical cyclone characterized by thunderstorms and defined surface wind circulation. They are caused by the atmospheric instability created by the collision of warm air with cooler air. They form in the warm waters of tropical and sub-tropical oceans, seas, or Gulf of Mexico (NWS, 2000). Hurricanes begin when areas of low atmospheric pressure move off the western coast of Africa and into the Atlantic, where they grow and intensify in the moisture-laden air above the warm tropical ocean. Air moves toward these atmospheric lows from all directions and circulates clock-wise under the influence of the Coriolis Effect, thereby initiating rotation in the converging wind fields. When these hot, moist air masses meet, they rise up into the atmosphere above the low-pressure area, potentially establishing a self-reinforcing feedback system.

4.4.6.2 High Winds Thunderstorm Identification

High winds can result from thunderstorm inflow and outflow, or downburst winds when the storm cloud collapses, and can result from strong frontal systems, or gradient winds from high or low-pressure systems. Thunderstorms produce downdraft winds, which are defined as a small-scale column of air that rapidly sinks toward the ground, usually accompanied by precipitation as in a shower or thunderstorm. A downburst is the result of a strong downdraft. The downburst can cause damage equivalent to a tornado. The outflow of cool or colder air can

also create damaging winds at or near the surface. As these downburst winds spread out they are often referred to as straight-line winds, which exceed 130 miles per hour.

Thunderstorms are formed from a combination of moisture, rapidly rising warm air, and a force capable of lifting air (such as a sea breeze, a warm and cold front, or a mountain). Thunderstorms usually occur singly and affect relatively small-localized areas; however, they may in clusters, or in lines. The most severe weather occurs when a single thunderstorm affects one location for an extended time.

4.4.6.3 High Winds Tornado Identification

Tornadoes are violent windstorms characterized by a twisting, funnel-shaped cloud. A tornado is spawned by a thunderstorm or hurricane and produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. A funnel does not need to reach to the ground for a tornado to be present. Tornados occur at any time of the year; however, the season is generally March through August.

The most violent tornadoes are capable of tremendous destruction with wind speeds of 250 mph or more. Damage paths can be in excess of 1 mile wide and 50 miles long. Even with advances in meteorology, adequate warning time for tornadoes is short or sometimes not possible. A debris cloud beneath a thunderstorm is all that is needed to confirm the presence of a tornado. The damage from a tornado is a result of the high wind velocity and wind-blown debris.

4.4.7 Ice/Snow Storm Identification

Winter storms produce an array of hazardous weather conditions including heavy snow, blizzards, freezing rain, ice pellets, and extreme cold. The extreme cold associated with winter storms is a deceptive killer as it indirectly causes injury and death resulting from exhaustion and overexertion, asphyxiation, hypothermia, and frostbite from wind chill. Severe winter storms are extra-tropical cyclones (storms that form outside of the warm tropics) fueled by strong temperature gradients and an active upper-level jet stream. The definitions of winter weather include:

Blizzards: The occurrence of the following conditions lasting for three hours or longer: 1) wind speeds of 35 miles per hour (mph) or more; 2) considerable falling and/or blowing snow (reducing visibility frequently to less than ¼ mile); and 3) generally temperatures of 20 degrees Fahrenheit (F) or lower. A severe blizzard has: 1) wind speeds of 45 mph or more; 2) a great density of falling and/or blowing snow (reducing visibility to near zero); and 3) temperatures of 10 degrees F or lower.

Ice and Sleet Storms: A storm that generates sufficient quantities of ice or sleet to result in hazardous conditions and/or property damage. Ice Storm (freezing rain), probably the most serious of the ice storms, occurs during a precipitation event when warm air aloft exceeds 32o while the surface remains below the freezing point. When precipitation originating as rain or drizzle contacts physical structures on the surface, ice forms on all surfaces creating issues for traffic, utility lines and tree limbs. Sleet forms when precipitation originating as rain falls through a large layer of the atmosphere that has below freezing temperatures allowing raindrops to freeze before reaching the ground. Sleet is also referred to as ice pellets. Sleet storms are usually of shorter duration than freezing rain and generally create fewer problems.

4.4.8 Landslides/Mudslides Identification

Landslides (rockslides, mudslides, etc.) are among the most common natural hazards. Unlike most natural hazards, however, most damage is not caused by extreme events, but by uncounted (and often unreported) minor events.

Slumps usually damage utilities within or below the slide mass, but seldom cause a threat to life.

Flows, around well-built structures causing damage from water and mud.

Translational slides can be the most catastrophic. In addition to presenting a hazard to structures and utilities, they can cause damage and death both far from and slightly below the source.

The hazards associated with landslides are as diverse as the types of failure. Falls may damage roads or buildings at the base of a steep slope, injure climbers, or remain on a road as a hazard to transportation.

In addition to the direct hazards of a landslide moving out from under or onto structures or utilities, there is a major indirect hazard. Large slides generally do not stop moving until they reach the bottom of a valley where they block streams, usually resulting in flooding and damage to the ecology.

4.4.9 Land Subsidence Identification

Subsidence is a phenomenon that combines soil compaction and geological/tectonic forces. Subsidence is the formation of depressions, cracks, and sinkholes in the earth's surface, which normally occurs over many days to a few years usually a result of Karst topography. Karst topography develops when beds of relatively soft limestone and dolomite are present. The diluted organic acids present in water percolates downward and dissolves these formations. In such places, rock is honeycombed with cracks, fissures and potentially large caverns that can collapse. Subsidence results from a number of factors including: compaction/consolidation of shallow strata caused by the weight of river delta deposits, soil oxidation, and aquifer draw-down (shallow component); consolidation of deeper strata (intermediate components); and tectonic effects (deep component). This last element was only recently quantified, and research indicates that it accounts for 50% or more of subsidence.

In some areas natural drainage occurs below ground rather than surface streams. These underground passages are commonly connected to the surface by funnel-shaped depressions called sinkholes. The formation of these sinkholes often leads to ground subsidence or collapse. This results from the settlement or collapse of overlying materials into openings beneath the surface, such as caves or enlarged joints. Sinkhole development is usually a slow process; however, they may occur suddenly. In addition to sinkholes Land Subsidence also occurs when abandoned mines, mine shafts, and tunnels give way.

4.4.10 Lightning Identification

Lightning is generally associated with thunderstorms and is an electrical discharge that results from the buildup of positive and negative charges. When the buildup becomes strong enough, lightning appears as a "bolt." This flash of light usually occurs within the clouds or between

the clouds and the ground. A bolt of lightning reaches a temperature approaching 50,000 degrees in a split second.

Lightning casualties can happen at the beginning of an approaching storm; however, more than half of lightning deaths occur after a thunderstorm has passed. The lightning threat diminishes after the last sound of thunder, but may persist for more than 30 minutes. When thunderstorms are in the area, but not overhead, the lightning threat can exist when skies are clear. Lightning has been known to strike more than 10 miles from the storm in an area with clear sky above.

According to the National Oceanic and Atmospheric Administration (NOAA), an average of 20 million cloud-to-ground flashes has been detected every year in the continental United States. About half of all flashes have more than one ground strike point, so at least 30 million points on the ground are struck on the average each year. In addition, there are roughly 5 to 10 times as many cloud-to-cloud flashes as there are to cloud-to-ground flashes (NOAA, July 7, 2003).

4.4.11 Tsunami Identification

A tsunami is the generation of an extreme ocean wave breaking on-shore generally as a result of extremely high winds or a seismic event occurring in adjacent oceans.

Along the West Coast, the Cascadia Subduction Zone threatens California, Oregon, and Washington with devastating local tsunamis. Earthquakes of Richter scale magnitude of 8 or more have happened in the zone, and there is a 35 percent chance that an earthquake of this magnitude could occur before 2045. The Alaska and Aleutian Seismic Zone that threatens Alaska has a predicted occurrence (84 percent probability between 1988 to 2008) of an earthquake with magnitude greater than 7.4 in Alaska. If an earthquake of this magnitude occurs, Alaska's coastlines can be expected to flood within 15 minutes.

Characteristics of Tsunamis

Debris: As the tsunami wave comes ashore, it brings with it debris from the ocean, including man-made debris like boats, and as it strikes the shore, creates more on-shore debris. Debris can damage or destroy structures on land.

Distance from shore: Tsunamis can be both local and distant. Local tsunamis give residents only a few minutes to seek safety and cause more devastation. Distant tsunamis originating in places like Chile, Japan, Russia, or Alaska can also cause local damage.

High tide: If a tsunami occurs during high tide, the water height will be greater and cause greater inland inundation, especially along flood control and other channels.

Outflow: Outflow following inundation creates strong currents, which rip at structures and pound them with debris, and erode beaches and coastal structures.

Water displacement: When a large mass of earth on the ocean bottom sinks or uplifts, the column of water directly above it is displaced, forming the tsunami wave. The rate of displacement, motion of the ocean floor at the earthquake epicenter, the amount of displacement of the rupture zone, and the depth of water above the rupture zone all contribute to tsunami intensity.

Wave run-up: is the height that the wave extends upon steep shorelines, measured above a reference level (the normal height of the sea, corrected to the tide at the time of wave arrival).

Wave strength: Even small wave heights can cause strong, deadly surges. Waist-high surges can cause strong currents that float cars, structures, and other debris.

The following factors will affect the severity of a tsunami:

Coastline configuration: Tsunamis impact long, low-lying stretches of linear coastlines, usually extending inland for relatively short distances. Concave shorelines, bays, sounds, inlets, rivers, streams, offshore canyons and flood control channels may create effects that result in greater damage. Offshore canyons can focus tsunami wave energy, and islands can filter the energy. The orientation of the coastline determines whether the waves strike head-on or are refracted.

Coral reefs: Reefs surrounding islands in the western North Pacific and the South Pacific generally cause waves to break, providing some protection to the islands.

Earthquake characteristics: Several characteristics of the earthquake that generates the tsunami contribute to the intensity of the tsunami, including the area and shape of the rupture zone

Fault movement: Vertical movements along a fault on the seafloor displace water and create a tsunami hazard. Earthquakes with greater magnitude cause more intense tsunamis. Shallow-focus earthquakes also have greater capacity to cause tsunamis.

Human activity: With increased development, property damage increases, multiplying the amount of debris available to damage or destroy other structures.

4.4.12 Wildfires Identification

A wildfire is any instance of uncontrolled burning in grasslands, forests, and brush land. A Wildfire is further defined as an uncontrolled fire spreading through vegetative fuels, possibly consuming structures (FEMA, 2001). Wildfires often begin unnoticed and spread quickly. The Federal Emergency Management Agency's (FEMA) Fire Management Assistance Grant Program (FMAGP) indicates that a wildfire is also known as a forest fire, vegetation fire, grass fire, or brush fire, is an uncontrolled fire requiring suppression action.

Common causes of wildfires include lightning, negligent human behavior and arson. Many sources indicate that arson, defined as an intentional and willful "crime of setting a fire for an unlawful or improper purpose", is one of the leading causes of wild-land fires in most states.

FEMA indicates that there are four categories of wildfires that are experienced throughout the U.S. These categories are defined as follows:

Interface or intermix fires – Urban wild-land interface fires are wildfires in a geographical area where structures and other human development meet or intermingle with wild-land or vegetative fuels. Vegetation and the built-environment provide fuel to Urban/wild-land fires.

Firestorms – events of such extreme intensity that effective suppression is virtually impossible. Firestorms occur during extreme weather and generally burn until conditions change or the available fuel is exhausted.

Prescribed fires and prescribed natural burns – fires that are intentionally set or selected natural fires that are allowed to burn for beneficial purposes (FEMA, 1997).

Wild-land fires are wildfires in an area where development is essentially nonexistent except for roads, railroads, power-lines, and similar facilities. Wild-land fires are fueled almost exclusively by natural vegetation. Wild-land fires can be classified as surface fires, ground fires, and/or crown fires. Surface fires are the most common type and burn along the floor of a forest, moving slowly and killing or damaging trees. A ground fire (muck fire) is usually started by lightning or human carelessness and burns on or below the forest floor. Crown fires are spread rapidly by wind and move quickly by jumping along the tops of trees.

The potential for wildfire depends upon fuel characteristics, climate conditions, meteorological conditions, and fire behavior. Hot, dry summers and dry vegetation increase susceptibility to fire. The potential for wildfire, and its subsequent development and severity, is determined by the area's topography, the presence of fuel, and weather.

Topography can have a powerful influence on wildfire behavior. The movement of air over the terrain tends to direct a fire's course. Gulches and canyons can funnel air and act as a chimney, intensifying fire behavior and inducing faster spread rates. Saddles on ridge tops tend to offer lower resistance to the passage of air and will draw fires. Solar heating of drier, south-facing slopes produces upslope thermal winds that can complicate behavior.

Slope is an important factor. If the uphill slope doubles, the rate at which the wildfire spreads will most likely double. On steep slopes, fuels on the uphill side of the fire are closer physically to the source of heat. Radiation preheats and dries the fuel, thus intensifying fire behavior. Terrain can inhibit wildfires: fire travels down slope much more slowly than it does upslope, and ridge tops often mark the end of wildfire's rapid spread (FEMA, 1997).

Fuels are classified by weight or volume (fuel loading) and by type. Fuel loading can be used to describe the amount of vegetative material available. If these doubles, the energy released can also double. Each fuel type has a burn index, which is an estimate of the amount of potential energy that may be released. Different fuels have different burn qualities. Grass releases relatively little energy but can sustain very high rates of spread (FEMA, 1997). According to the U.S. Forest Service, a forest stand may consist of several layers of live and dead vegetation in the understory (surface fuels), midstory (ladder fuels), and overstory (crown fuels). Fire behavior is strongly influenced by these fuels.

Surface fuels consist of grasses, shrubs, litter, and woody material lying on the ground. Surface fires burn low vegetation, woody debris, and litter. Under the right conditions, surface fires reduce the likelihood that future wildfires will grow into crown fires.

Ladder fuels consists of live and dead small trees and shrubs, live and dead lower branches from larger trees, needles, vines, lichens, mosses, and any other combustible biomass located between the top of the surface fuels and the bottom of the overstory tree crowns.

Crown fuels are suspended above the ground in treetops or other vegetation and consist mostly of live and dead fine material. When historically low-density forests become overcrowded, tree crowns may merge and form a closed canopy. Tree canopies are the primary fuel layer in a forest crown fire (U.S. Forest Service, 2003).

4.4.13 Flooding Dam/Levee Failure Identification

A dam is a barrier constructed across a watercourse for the purpose of storage, control, or diversion of water. A levee is a barrier constructed along the side of a watercourse or along a coastal or bay shoreline for the purpose of preventing water-flow to extend beyond the watercourse or an ocean or bay. Dams and levees generally fall into the following categories**:**

Earth Dams/Levees make up the vast majority of dams and levees and are safe if properly constructed and maintained.

Concrete Gravity Dams/Levees are designed to resist sliding and overturning.

Buttress Concrete Dams/Levees have a strong foundation and are resistant to sliding, overturning and overflowing.

Arch Concrete Dams are used to narrow sites and have strong abutments.

Gravity Arch Concrete Dams are a conservative design of the Arch.

Stone Masonry Dams are constructed of stone or block with masonry joints.

Dam/levee failure floods are usually associated with intense rainfall or rapid snowmelt. Coastal levees also fail as a result of storm surge. Dam/levee failure may be caused by faulty design, construction and operational inadequacies, or a flood event larger than the dam/levee design.

The degree and extent of damage from a dam failure depends on the size of the dam or levee. The greatest threat to people and property is in the area immediately below a dam since the volume of water decreases as the flood wave moves downstream.

The degree and extent of damage from a levee failure depends on the height and length of the levee preventing water from inundating the area protected by the levee and the elevation of the land or structures at risk. The greatest threat to people and property is in the area immediately adjacent to the waterway, ocean or bay. A levee failure resulting from storm surge would have a similar effect as a dam break where-as a levee failure along a watercourse generally affects an area over with a lower volume of water over a longer time.

Section 5
RISK ASSESSMENT – HAZARD PROFILES

5.1 INTRODUCTION

The second step of risk assessment is to profile for each hazard that is of particular concern and relevance to Shelby County. The Hazard profile selection for mitigation planning is primarily based on the historic occurrence of a disaster in a jurisdiction unless a particular hazard has been eliminated or mitigated. However, as new developments occur and the environment changes, new hazards may become evident and must be considered for inclusion in a mitigation plan.

Table 5.1 2022 Mitigation Plan Hazards

Hazard	Exp	Risk/Threat	2016 Plan Status	2022 Updated Plan Status
Drought	Yes	Moderate Slight	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Earthquake	Yes	Low Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Extreme Temperature	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Flooding	Yes	Moderate High	Identified as tropical Storms/Hurricanes, Thunderstorms, Dam/Levee Failure, profiled and detailed vulnerability assessment	Identified as tropical Storms/Hurricanes, Thunderstorms, Dam/Levee Failure, profiled and detailed vulnerability assessment
Hail	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
High Winds	Yes	High High	Identified as tropical Storms/Hurricanes, Thunderstorms, Tornadoes, profiled and detailed vulnerability assessment	Identified as tropical Storms/Hurricanes, Thunderstorms, Tornadoes, profiled and detailed vulnerability assessment
Ice/Snow Storms	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Land Subsidence	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Landslides Mudslides	Yes	Low Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Lightning	Yes	Moderate Low	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Wildfires	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment

Exp = Exposure, Risk = Probability of Occurrence, Threat = Impact on loss of life and property damage

5.2 HAZARD PROFILES METHODOLOGY

The hazard profile identifies the areas of the jurisdiction that are most severely affected by each hazard and describes the analysis or sources used to determine the probability, likelihood, or

frequency of occurrence as well as the severity or magnitude of future hazard events. All data limitations are identified.

Each type of hazard has unique characteristics that vary from event to event. That is, the impacts associated with a specific hazard can vary depending on the magnitude and location of each event (a hazard event is a specific, uninterrupted occurrence of a particular type of hazard).

Further, the probability of occurrence of a hazard in a given location impacts the priority assigned to that hazard. Finally, each hazard will impact different communities in different ways, based on geography, local development, population distribution, age of buildings, and mitigation measures already implemented.

The Individual Hazard Profiles included in this section includes the descriptions of those hazards and summarizes the information from the detailed events found in this Section. It provides a detailed list of historic hazard events that includes:

- Sources of information used or consulted for assembling a history of past occurrences
- Date and Duration of occurrence
- Location of event
- Description and severity (i.e., flood depth, wind speeds, earthquake intensity, etc.);
- Damages that occurred (e.g., costs of recovery, property damage, and lives lost) to the extent available;

Included in this section are discussions of:

The location or geographical areas in the community that would be affected by the incident.
The extent (magnitude/severity) of a potential hazard is identified using technical measures specific to a hazard. Through the use of scientific scales, such as the Fujita Scale, Richter Scale, Beaufort Wind Scale, Saffir-Simpson Scale, and the Palmer Index or by using quantitative measurements such as: miles per hour, flood depth, inches of rain, fire danger rating, and acres burned, a magnitude or severity that could be experienced is identified for specific hazards.

The probability of the likelihood that the hazard event would occur in an area is identified through the use of an identified scale that is identified and discussed for specific hazards. In some cases, the extent and/or probability of hazard events are classified using the terms high, medium, or low or a 1-3 or 1-5 measure where 1 is low.

A discussion of past occurrences of hazard events in or near the community
The profile section also provides a discussion of conditions, such as topography, soil characteristics, meteorological conditions, etc., in the area that may exacerbate or mitigate the potential effects of hazards. Where possible, the hazard profile also identifies on a map the areas affected by each identified hazard.
The hazards profiled include those that have occurred in Shelby County in the past and may occur in the future. A variety of sources were used including national, regional and local sources, including Web sites, published documents, newspapers, databases, maps, a review of

the citizen survey and a discussion with the Steering Committee. The selected hazards are profiled below.

5.3 NATURAL HAZARDS PROFILED

5.3.1 Drought Profile

A drought is an extended dry climate condition when there is not enough water to support urban, agricultural, human, or environmental water needs. It usually refers to a period of below-normal rainfall, but can also be caused by drying bores or lakes, or anything that reduces the amount of water available. Droughts are a cumulative result of numerous meteorological factors. Most droughts in Alabama begin with decreased precipitation during the winter and spring, when soil moisture is being recharged. Adequate soil moisture is important during early summer because mid- to late summer is the time of least precipitation and greatest evapo-transpiration.

If a subtropical high-pressure cell, called the Bermuda High, and a weak jet stream persist over the State, then the stable, subsiding air inhibits the normal development of thunderstorms. Wave troughs positioned west of the Bermuda High divert storm tracks either north or south of the region. The combination of decreased precipitation and cloudiness, increased solar radiation, and extreme heat dries and hardens the soil.

Location

Drought is possible throughout the planning area. The Palmer Drought Severity Index indicates that Shelby County is in a “mid-range” area in being susceptible to drought conditions.

Extent

The drought extent countywide affecting all Shelby County jurisdictions is D4 exceptional drought. A drought’s severity depends on numerous factors, including duration, intensity, and geographic extent as well as regional water demands by humans and vegetation. The severity of drought can be aggravated by other climatic factors, such as prolonged high winds and low relative humidity. Due to its multi-dimensional nature, drought is difficult to define in exact terms and also poses difficulties in terms of comprehensive risk assessments. Drought can cause extensive damage to the foundations of commercial and residential structures, and the framing and walls, as well as agricultural crops, roads, bridges, pipelines, utilities and railroads. There were 16 drought events from 2016 through 2022. No deaths, injuries or damages were reported.

Future Probability

Shelby County experiences short to medium length droughts. Historically 16 droughts have occurred in the last 6 years an average of 2.67 every year. This frequency is expected to continue and may increase due to global warming. Severe droughts have only occurred 3 times. The risk of an extreme drought condition is low and the vulnerability is medium

Historic Occurrences

The NOAA NCDC database identified 16 droughts impacting Shelby County and its participating jurisdictions since 2016.

Table 5.2 Jurisdiction Historic Drought Events								
Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc.	Fatalities	Injuries	# of Assets Damaged	Structure Loss	Other Loss or Cost Loss Amount	Type
08/01/2016	Shelby	Drought	0	0	0	0	0	
09/01/2016	Shelby	Drought	0	0	0	0	0	
10/01/2016	Shelby	Drought	0	0	0	0	0	
11/01/2016	Shelby	Drought	0	0	0	0	0	
12/01/2016	Shelby	Drought	0	0	0	0	0	
01/01/2017	Shelby	Drought	0	0	0	0	0	
02/01/2017	Shelby	Drought	0	0	0	0	0	
03/01/2017	Shelby	Drought	0	0	0	0	0	
04/01/2017	Shelby	Drought	0	0	0	0	0	
01/23/2018	Shelby	Drought	0	0	0	0	0	
02/01/2018	Shelby	Drought	0	0	0	0	0	
07/23/2019	Shelby	Drought	0	0	0	0	0	
08/01/2019	Shelby	Drought	0	0	0	0	0	
09/01/2019	Shelby	Drought	0	0	0	0	0	
10/01/2019	Shelby	Drought	0	0	0	0	0	
11/01/2019	Shelby	Drought	0	0	0	0	0	
16		TOTALS	0	0	0	0	0	
Data Sources		**USGA, Al Dept of Geology**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion

A federal disaster resulting from drought was declared on July 20, 1977. Alabama farmers suffering from this summer's drought and low prices should receive some financial assistance through the $8.7 billion agriculture disaster package that recently passed the Senate.

Dry Conditions in Central and South Alabama in March 2004. Most of the Southeastern United States experienced record dryness. The affected areas included the southern two-thirds of Georgia, the southern half of Alabama, all of the Florida panhandle, and extreme southern Mississippi and extreme southeast Louisiana. These areas received less than 20% of their normal monthly rainfall for the month of March. Within the Birmingham National Weather Service office's area of responsibility, which includes parts of Central and South Alabama, the most impacted counties were south of Interstate 85 and east of Interstate 65, where less than a ½ inch of rain fell. Shelby County had the third driest March since 1887.

From the summer of 2006 through the summer of 2008 Shelby County experienced a drought. An extended period of low rainfall led to the development of a severe drought condition. Agricultural and hydrologic impacts were felt. 78 percent of Alabama's pastures are in poor or very poor condition, along with 48 percent of peanuts and 68 percent of the cotton crop. Water restriction regulations were put into effect in many cities.

5.3.2 Earthquake Profile

An earthquake is a sudden release of energy from the earth's crust that creates seismic waves. Tectonic plates become stuck, putting a strain on the ground. When the strain becomes so great that rocks give way, fault lines occur. At the Earth's surface, earthquakes may manifest themselves by a shaking or displacement of the ground.

Location

The location of an earthquake is described by its focal depth and the geographic position of its epicenter. The focal depth of an earthquake is the depth from the Earth's surface to where an earthquake's energy originates (the focus or hypocenter). The epicenter of an earthquake is the point on the Earth's surface directly above the hypocenter (Shedlock and Pakiser, 1997). Earthquakes usually occur without warning and can impact areas a great distance from the epicenter.

Earthquakes epicenters in Alabama have been recorded throughout most of the state. Recent seismograph records indicate that earthquakes are more frequent than past records indicate, but are often not strong enough to be felt by people. Although an earthquake can occur anywhere at anytime in Alabama, most are likely to do little or no damage Three zones of frequent earthquake activity affecting Alabama are the New Madrid Seismic Zone (NMSZ), the Southern Appalachian Seismic Zone (SASZ) (also called the Eastern Tennessee Seismic Zone), and the South Carolina Seismic Zone (SCSZ)

Extent

The risk of a significant, damage-causing earthquake in Shelby County is minor with the strongest magnitude expected to be 5.2.

Figure 5.1 U. S. Geological Survey Shaking Hazard Map 2022

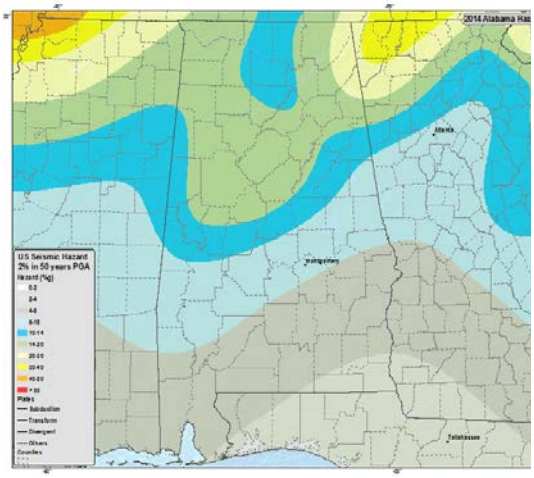


Table 5.3 Mercalli Scale of Earthquake Intensity And The Corresponding Richter Scale				
Scale	**Mercalli (Intensity)**	**Description of Effects**	**Maximum Acceleration**	**Richter Scale (Magnitude)**
I	Instrumental	Detected only on seismographs	<10	
II	Feeble	Some people feel it	<25	<4.2

III	Slight	Felt by people resting	<50	
IV	Moderate	Felt by people walking	<100	
V	Slightly Strong	Sleepers awake; church bells ring	<250	<4.8
VI	Strong	Trees sway/objects fall off shelves	<500	<5.4
VII	Very Strong	Walls crack; plaster falls	<1000	<6.1
VIII	Destructive	Cars uncontrollable; poorly constructed buildings damaged	<2500	
IX	Ruinous	Houses damaged/ground cracks/pipes break	<5000	<6.9
X	Disastrous	Ground cracks profusely; many buildings destroyed; liquefaction and landslides	<7500	<7.3
XI	Very Disastrous	Most buildings collapse; pipes/roads, bridges, railways destroyed; triggers other hazards	<9800	<8.1
XII	Catastrophic	Total destruction; trees fall; ground rises and falls in waves	>9800	>8.1

Future Probability

According to the Center for Earthquake Research and Information at the University of Memphis, there is a 40 to 60 percent probability of a "damaging" NMSZ earthquake in the magnitude 6.0 to 6.3 range in the next 15 years and an 86 to 97 percent probability of a similar size quake in the next 50 years. In addition, there is a 19 to 29 percent probability of a "great earthquake" in the magnitude 7.6 range. Shelby County is susceptible to a New Madrid earthquake. Most of the risk in this area would be to non-structural items (light fixtures and bookshelves falling, etc.), but structural damages to weaker buildings and utilities (pipelines) could also occur. Damage in Shelby County could also result from a large earthquake in the SASZ. Most of the earthquakes in the SASZ have had magnitudes ranging between 2 and 3, but one of magnitude 5.8 has been recorded in Virginia. The potential exists for widespread damage and disruption in Shelby County from another earthquake in the SCSZ. The future probability of an earthquake of sufficient intensity occurring in Shelby County is low. The risk of significant damage caused by an earthquake is the county is moderate. A large earthquake could cause serious damage to populated areas and may trigger more devastating events like landslides. The probability of a significant earthquake event in Shelby County is low however, should a 6.0 earthquake event or greater occur the vulnerability would be rated as high.

Historic Occurrences

No earthquakes have occurred in Shelby County since 2005. (Alabama Geological Survey 2022).

Major Historic Occurrences Discussion

The largest known earthquake in Alabama happened October 1916 at 4 PM in northern Shelby County. Intensity was VII on the Modified Mercalli Scale, indicating a strong earthquake. The epicenter was at 33.5 degrees Latitude and 86.5 degrees Longitude. Near the epicenter, chimneys were knocked down, windows broken, and frame buildings "badly shaken."

The earthquake caused buildings to sway in downtown Birmingham and tied up all phone lines in the city with 25,000 calls recorded at the main exchange in the hour following the quake. Two additional weaker tremors were reported that evening. It was noted by residents in seven States and covered 100,000 square miles. The epicenter is in an area that was rural at the time

of the earthquake. Today this area is highly populated and many structures are situated on steep hillsides susceptible to landslides. Another earthquake of the same magnitude in this area would cause considerable damage today.

5.3.3 Extreme Temperatures Profile

Temperatures that hover ten degrees or more above the average high temperature for the region and last for several weeks are defined as extreme heat. Humid or muggy conditions occur when a dome of high atmospheric pressure traps hazy, damp air near the ground. What constitutes extreme cold and its effects can vary across different areas of the country. In regions relatively unaccustomed to winter weather, near freezing temperatures are considered "extreme cold. Extreme cold events are when temperatures drop well below normal in an area.

Location

Summers in Alabama and Shelby County are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the summer in the entire state making extreme heat fairly common during the summer months. Winters are generally mild in Shelby County, with average low temperatures around 32° F.

Extent

According to the Birmingham National Weather Service, Shelby County experienced the extent of hot weather on August 14, 2007 at 105 degrees with heat indexes of 105+ degrees and the extent of cold weather in January of 2014 at 9 degrees Fahrenheit with single digit wind chills.

Future Probability

There have been 0 occurrences of extreme temperature events since 2016. This equates to an event approximately every 1 year. The annual probability of extreme temperatures occurring is medium. However, because the impacts are so localized and relatively moderate when compared to other hazards, the site- specific incidence of extreme temperatures is considered to be low.

Historic Occurrences

Table 5.4 Jurisdiction Historic Extreme Temperature (Hot/Cold) Events

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets Damaged, Evacuation, Etc	Fatalities	Injuries	# of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
			0	0	0	0	0	
		TOTALS	0	0	0	0	0	
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						

Table 5.4 Jurisdiction Historic Extreme Temperature (Hot/Cold) Events								
Event Date	**Location or Map Reference**	**Extent Description** Severity, Area Impacted, Assets Damaged, Evacuation, Etc	**Fatalities**	**Injuries**	**# of Assets Damaged**	**Structure Loss**	**Other Loss or Cost Amount**	**Type**
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion

A severe heat wave during the summer of 1995 was responsible for six deaths and $59 million dollars worth of crop damage in Shelby County.

On March 7, 1996 a cold front moved through Shelby County and set record low temperatures in nearly all of the northern two thirds of the State. Crop damages occurred.

In January of 2003 a severe cold snap resulted in one fatality and severe damage to the strawberry crop.

Mid July to Mid September 1980 the hottest day of the summer was July 17th, when over 80 percent of the state reached 100 degrees, and nearly one quarter of the state reached 105. The highest reading on that day in Shelby County was 106 degrees. In the month of July alone, there was an estimated 120 heat-related deaths statewide, along with the loss of more than 200,000 chickens and half the state's corn crop.

5.3.4 Flooding Profile

Flooding occurs when abnormally high stream flow overtops the natural or artificial banks of a watercourse. The three-principle types of floods, which may affect Shelby County, are: dam failure floods flash floods, riverine floods.

5.3.4.1 Flooding Dam/Levee Failure

Dam/levee failure floods are usually associated with intense rainfall or flood conditions. Dam/levee failure may be caused by faulty design, construction and operational inadequacies, or a flood event larger than the dam/levee design.

Dam safety has been an ongoing hazard mitigation issue in the State of Alabama especially with regard to small dams that are privately owned and poorly maintained. Currently a state or federal law to regulate private dams or the construction of new private dams does not exist. Numerous attempts have been made to pass legislation that would require inspection of dams on bodies of water over 50 acre-feet or dams higher than 25 feet. The opposition of agricultural interest groups and insurance companies has hampered enactment.

Location

There are an estimated 2,000 dams of sufficient size that they could pose a threat to property in Alabama. Of these 2,000 dams, approximately 32 hydroelectric, navigation, and flood control project dams are federally regulated and fall under the jurisdiction of the Tennessee Valley Authority, the U. S. Army Corps of Engineers, Alabama Power Company, and Alabama Electric Cooperative, Inc. A number of existing dams have inadequate spillways and embankments and many are poorly maintained. Approximately 186 dams were classified by the Corps of Engineers as high-hazard dams, posing a significant safety hazard.

Extent

The National Inventory of Dams lists forty-one dams in Shelby County, eleven have been categorized in the "high hazard" classification. This classification is assigned to a dam depending upon the urban development directly downstream of the dam.

Table 5.5 High Hazard Dams in or could impact Shelby County		
Dam	**Name**	**Dam Stream**
Belcher Lumber Company Dam	W. A. Belcher	Tributary of Cahaba Valley Creek
Lake Melaken Dam	Ken Peeler	Tributary of Hogpen Creek
Lake Purdy Dam	Bham Municipal Water Service Corp	Little Cahaba River
Oak Mountain Lake Dam Number One	Oak Mt St Park St Of Ala	Tributary of Cahaba Valley Creek
Oak Mountain Lake Dam Number Two	Oak Mt St Park St Of Ala	Tributary of Cahaba Valley Creek
Oak Mountain New Lake Dam	Oak Mt St Park St Of Ala	Tributary of Cahaba Valley Creek
Oak Mountain Old Lake Dam	Oak Mt St Park St Of Ala	Tributary of Dry Brook
Rutherford Dam	Mrs. Willie Rutherford	Tributary of Pea vine Creek
Smyer Lake Dam Number Two	Shelby Lake Corporation	Shoal Creek
Smyers Lake Dam Number One	Hollybrook Lake Corp	Shoal Creek
University of Montevallo Lake Dam	University of Montevallo	Tributary of Shoal Creek
Logan Martin Dam	Logan Martin dam	Coosa River

Alabama Power controls two major power producing dams on the Coosa River that back up significant impoundments of water that could impact Shelby County. Logan Martin dam, which backs up the Coosa River to form Lake Logan Martin, sits on the St. Clair/ Talladega county border. The maximum water storage is 650000 acre-feet with normal storage: 273000 acre-feet. The drainage area is 7700 square miles. The hazard potential is rated high. A failure of the Logan Martin Dam could inundate much of the Town of Vincent in Shelby County.

The areas impacted by a dam failure are analyzed on the basis of “sunny day” failures and failures under flood condition. Typically, the dam-break floodplain is more extensive than the floodplain used for land use development purposes, and few communities consider upstream dams when permitting development. The potential severity of a full or partial dam failure is influenced by two factors: the amount of water impounded, and the density, type, and value of development and infrastructure downstream.

The greatest threat to people and property is in the area immediately below the dam since flood discharges decrease as the flood wave moves downstream. A small dam retaining water in a stock pond may result in little damage, but could result in the loss of irrigation water, causing financial hardship to farmers. Failure of a larger dam failure might bring about considerable loss of property, destruction of cropland, roads, and utilities, and loss of life. Far-reaching consequences can include loss of income, disruption of services, and environmental devastation.

Future Probability

The probability of future occurrences of dam/levee failure is difficult to characterize because of the lack of available information. The probability of a dam failure in Shelby County is rated low and the vulnerability is rated medium.

Historic Occurrences
One reported dam failure occurred in September 2013. There were no injuries or fatalities reported. No reports of damage to homes or infrastructure.

Major Historic Occurrences Discussion
In 1990 from February 3rd to 17th the Holly Brooke Lake Dam was saturated to the point where the front of the dam experienced slumping. A release of pressure on the dam prevented it from a total failure. The Holly Brooke Lake Dam is not considered to be a high-risk dam. Six families were evacuated during this event.
November 24, 2004 a dam failed near the Friendship Community in St Clair County resulting in significant damage, decreased property values, causing environmental damages. Driveways and lawns were covered with mud. It also caused 20% damage to a downstream dam.

5.3.4.2 Flash and Riverine Flooding

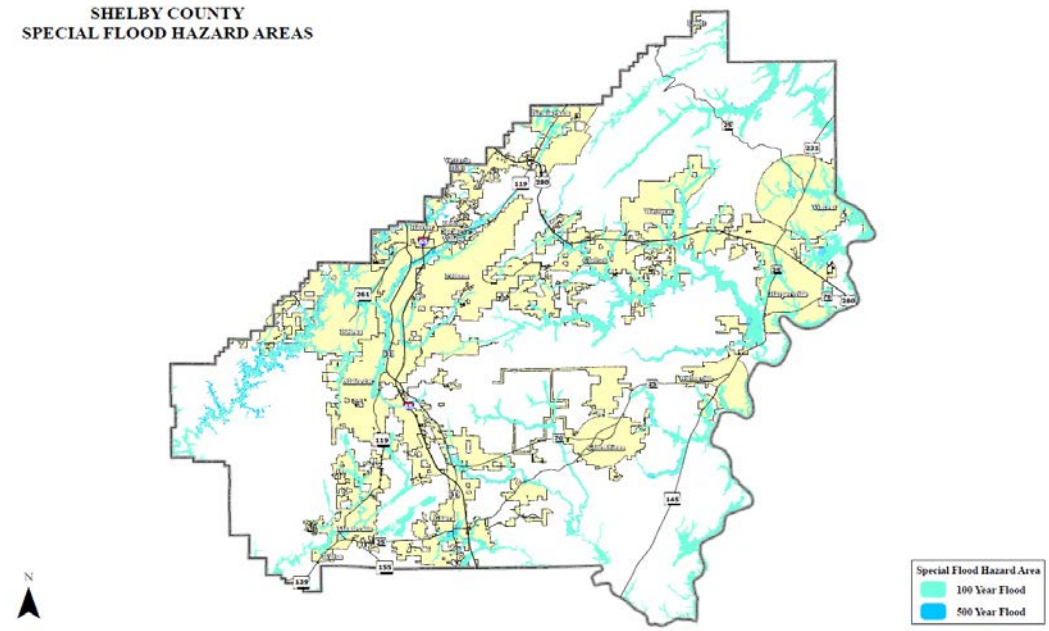
Flash Flooding affects Shelby County in residential or business/industrial areas. Riverine flooding affects Shelby County along rivers, various small streams and lakes. The major causes of these floods in Shelby County are (1) intense precipitation associated with hurricanes, tropical storms, and tropical depressions; (2) thunderstorms; and (3) slow-moving or stationary frontal systems. Alabama receives more annual rainfall than any other state, creating a high potential for riverine and flash flooding Annual precipitation in Shelby County averages about 50 inches. Seasonal rainfall results in more than 50% of the average rainfall between December and May.
The principal sources for the State's moisture are the Gulf of Mexico and the subtropical Atlantic Ocean with occasionally, tropical storms and hurricanes development in the Gulf and summer precipitation from thunderstorms and winter precipitation from frontal systems. Severe weather and large quantities of precipitation can be produced when warm, moist air from the gulf converges with cold, arctic air from the north.
A Tropical Storm is an organized system of strong thunderstorms with maximum sustained winds between 34 to 63 knots (39 to 73 mph) (FEMA, 2007). Tropical Storms occur in Shelby County usually as a result of a hurricane losing wind speed and intensity as it moves inland from the Caribbean or Atlantic oceans. Tropical storms, which generally occur between July and November, commonly produce torrential rains. These torrential rains can last for days and cause dam/levee failure, flash and riverine flooding.
Thunderstorm and frontal flooding tends to occur in Shelby County during anomalous years of prolonged, regional rainfall (such as an El-Nino year) and is typified by increased humidity and high spring/summer temperatures. Thunderstorms produce flash flooding, often far from the actual storm, and water may rise at night when natural warnings may not be noticed. Rains associated with broad cyclonic storms embedded in frontal systems have produced major flooding in Shelby County.

Location of Riverine/Flash Flooding
Flooding caused by rainfall occurs to some extent in almost every part of Shelby County. Flood producing storms over the Cahaba River basin are usually of the frontal type. They usually occur in the winter and spring and last from 2 to 4 days. Normally 5 to 6 inches of intense or general rainfall will cause widespread flooding, but on many smaller streams, 3 to 4 inches of

rainfall are sufficient to produce significant flooding. Flooding potential from surface storm-water runoff is widespread throughout the county but is most prevalent along lower Yellowleaf Creek and tributaries of the Cahaba River. The Coosa River also has been a source for past floods. The waterways contributing to Shelby County flooding are identified in the table below and for detailed flood hazards see Section 5, Appendix 1, Flood Hazard Maps:

Table 5.6 Shelby County Waterways Prone to Flooding	
Little Cahaba River	Yellowleaf Creek
Shades Creek	Spring Creek
Cahaba River	Locust Creek
Buck Creek	Walthall Branch
Beaverdam Creek	Coosa River
Pineywoods Creek	Beeswax and Little Beeswax Creeks
Savage Creek	Mill Creek
Shoal Creek	Waxahatchee Creek
Kelly Creek	Buxahatchee Creek

Figure 5.2 Shelby County Flood Plain



Source: Shelby County GIS

Extent of Riverine/Flash Flooding

According to ncdc.noaa.gov storm events data, Shelby County's extent of flooding during this plan's study period is several feet deep flood water which occurred on October 6, 2021.

The Cities of Pelham and Alabaster have the most risk of flooding from the Cahaba River tributaries. The major areas prone to flooding in Pelham are along Bishop Creek, Buck Creek and Peavine Creek. These floodplains generally follow a northeastern to southwestern direction through the valleys; however, the flood prone areas are not static, and can expand as land uses

change over time. Developments increase the number of impervious surfaces, which serve to increase the rate and velocity of surface water runoff into the streams and creeks of Pelham. The Flooding impact of Yellowleaf Creek is a familiar feature of the Chelsea area.

Future Probability of Riverine/Flash Flooding

There have been 10 occurrences of major flooding resulting from Tropical Storms/Hurricanes since 1979 a period of 29 years. Historical events show that flooding from tropical storms/hurricanes will cause significant damage in Shelby County approximately once every 3 years resulting in a probability rating of medium with vulnerability rating of high.

There have been 27 flooding events caused by thunderstorms or strong fronts since 1961 a period of 47 years or a major flooding event approximately every 1.74 years. It is expected that the frequency and severity of these events will continue into the future resulting in a risk assessment of high and a vulnerability assessment of high.

Historic Occurrences of Riverine/Flash Flooding

The NCDC/Sheldus databases and the Birmingham National Weather Services have documented 12 flooding events resulting from thunderstorms or strong weather fronts resulting in no fatalities or injuries and structure loses totaling no dollars at time of writing. However, the October 6th, 2021 Elvira flood resulted in a major disaster declaration with hundreds of structures affected, FEMA Individual Assistance and numerous NFIP claims. Numerous Letters of Intent have been submitted to Alabama EMA for Hazard Mitigation funds for Acquisition of Repetitive Loss and Severe Repetitive Loss Properties in Shelby County.

NOTE: After a thorough search of NOAA, NWS, Sheldus and other sources, there is not enough historical concurrent data on the depth of flooding to be noted in this plan.

Table 5.7 Historic Riverine/Flash Flooding Thunderstorm/Frontal System

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
7/15/2017	Paramount		0	0	0	0	0	
8/23/2019	Acton		0	0	0	0	0	
2/6/2020	Coalmont		0	0	0	0	0	
2/10/2020	Gurnee Jct		0	0	0	0	0	
4/19/2020	Shelby		0	0	0	0	0	
6/29/2020	New Hope		0	0	0	0	0	
5/4/2021	Gurnee Jct		0	0	0	0	0	
6/7/2021	Quito		0	0	0	0	0	
7/20/2021	Nelson		0	0	0	0	0	
7/27/2021	Scotrock		0	0	0	0	0	
9/18/2021	Acton		0	0	0	0	0	
10/6/2021	Elvira		2	0	0	0	0	
12		Totals	0	0	0	0	0	
Data Sources	NOAA/NWS, Sheldus, Local Sources							

Table 5.7 Historic Riverine/Flash Flooding Thunderstorm/Frontal System								
Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
Loss Type	A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup							

Major Historic Occurrences Discussion of Riverine/Flash Flooding
Hurricane Frederic in September 1979 affected a relatively small area but, caused by far the greatest historical property damage-in Shelby County estimated at about $1 million.

During February-March 1961, a succession of low-pressure systems from the Gulf of Mexico moved northward and produced several intense storms. This series of storms caused rainfall totals of 16-18 inches in central Alabama including Shelby County. The Alabama River at Selma had a record peak discharge of greater than a 100-year recurrence interval, and the river remained above flood stage for 17 days (Bames and Somers, 1961).

The flood of March and April 1979 was the most extensive in Shelby County. Central Alabama and Shelby County was the most severely affected. The flooding was caused by a series of early spring storms that produced extremely moist soil conditions.
On June 17, 2003, the north side of Pelham was under water after 3 to 4 inches of rain fell. The Pelham Civic Complex opened as a night shelter to serve families displaced by the flooding.

Hurricane Ivan made landfall on September 16, 2004 in Gulf Shores, on the coast of Baldwin County Alabama as a strong Category 3 hurricane with 130 mph winds and a storm surge estimated to be between 10 and 13 feet high. Ivan caused flash flooding in Shelby County.

Tropical Storm Isidore in September 25-27, 2002 moved onshore along the Louisiana Coast during the early morning hours of Thursday, September 26, 2002. Ahead of and east of the center of the storm heavy rain bands and gusty winds moved inland from the coastal regions of Alabama and eventually rotated through Alabama. Storm Total rainfall amounts ranged from nearly 12 inches along the Alabama Gulf Coast...to 2 to 6 inches in Shelby County.

On July 26, 2005, Tropical Storm Fay caused heavy rains to fall in Shelby County causing water up to 4 feet deep across several roadways. Many vehicles were stalled in high water and damaged. Many streets and creeks flooded in Pelham. Many were without power during the storms. Fire departments performed 11 swift water rescues.

During the evening of the October 6th, 2021, a north to south low-level boundary set up along the Interstate 65 corridor that became the focus for back-building thunderstorms and heavy rainfall. Over the course of just a few hours, a wide swath of 6-10 inches of rain occurred. Numerous roads became submerged and impassable. Countless water rescues were performed as travelers either became trapped by or drove into flood waters. Flood water several feet deep impacted parts of neighborhoods and townhomes. Several businesses were damaged by flooding. Extreme runoff also caused creeks and other waterways to rapidly swell. There was at least one report of a partial landslide in Pelham, sending dirt, rocks, and pine trees onto the

road. A Flash Flood Watch had already been in place for a few days, highlighting the potential for flooding rainfall. A Flash Flood Warning was issued for north Shelby County early in the evening. At least four rounds of thunderstorms occurred, with ongoing and forecast impacts pushing the event to the highest level of flash flooding, a Flash Flood Emergency. Scanner traffic became nonstop with public calls for help and first responder needs for mutual aid and resources. Even after the rain subsided later in the evening hours, flooding persisted for several more hours. Two deaths occurred when a vehicle was swept off the roadway and into a creek.

5.3.5 Hail Profile

The size of hailstones varies and is related to the severity and size of the thunderstorm that produced it. The higher the temperatures at the Earth's surface, the greater the strength of the updrafts, and the greater the amount of time the hailstones are suspended give hailstones more time to increase in size.

Location

Hailstorms occur throughout Shelby County, most frequently during the late spring and early summer, when the jet stream moves northward across the Great Plains. During this period, extreme temperature changes occur from the surface up to the jet stream, resulting in the strong updrafts required for hail formation.

Extent

Shelby County experienced 8 hail events in a 6-year period resulting in a greater than 1 per year probability that a hail event will occur on an annual basis. The total amount of damages for the 8 hail events was zero dollar damage reported. The referenced hail events are the ones that resulted in the most damages during the past six-year period and serve as the extent/range of magnitude or severity that could be experienced by Shelby County due to a hail event with a ranking of minor.

Shelby County's worst extent of hail during this plan's study period of six years occurred on May 22, 2020 with 1.75-inch size hail.

Future Probability

The annual probability of hail occurring somewhere in the Shelby County is clearly quite high. However, the site-specific incidence of hail is considered low because of the localized nature of the hazard. The probability rating for Hail is high, however the vulnerability is low.

Historic Occurrences

The NCDC and Sheldus databases have recorded 8 hail events in Shelby County.

Table 5.8 Historic Hail Events								
Event Date	Location or Map Reference	**Extent Description** Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
4/5/2017	Quito		0	0	0	0	0	
6/22/2019	New Hope		0	0	0	0	0	
6/22/2019	Argyle		0	0	0	0	0	
6/22/2019	Simmsville		0	0	0	0	0	
2/5/2020	Argyle		0	0	0	0	0	
5/22/2020	Alabaster Shelby ARP		0	0	0	0	0	
5/22/2020	Dargin		0	0	0	0	0	
5/22/2020	Dargin		0	0	0	0	0	
8		Totals	0	0	0	0		
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion
There have not been any major occurrences or significant losses from hail events in Shelby County that warrant discussion.

5.3.6 High Winds Profile

Wind is defined as the motion of air relative to the earth's surface. In the United States the mean annual wind speed is reported to be eight to 12 mph, with frequent speeds of 50 mph and occasional wind speeds greater than 70 mph. High Winds are generally the result of thunderstorms, tornadoes and tropical storms/hurricanes.

5.3.6.1 High Winds Tropical Storm/Hurricane

Tropical storms and hurricanes are large-scale systems of severe thunderstorms that develop over tropical or subtropical waters and have a defined, organized circulation. Tropical storms have wind speeds of 39 mph to 74 mph. Hurricanes and tropical storms get energy from warm waters.

Location
The central Gulf of Mexico coastline is among the most hurricane-prone locations in the U.S. While the Atlantic Basin hurricane season officially extends from June 1 to November 30. The peak hurricane activity in the Alabama and Shelby County occurs in September. Hurricanes and tropical storms bring severe winds, extreme amounts of rainfall, thunderstorms, lightning and tornadoes. The entire area of Shelby County and its participating jurisdictions received significant impact from the high winds associated with Tropical Storms/Hurricanes.

Extent

Shelby County is at a low risk for a direct hit from a hurricane. Although Shelby County does not feel the effects of a storm surge, other effects including heavy rain, flooding, winds and tornadoes often have significant impacts. The most severe being Hurricane Katrina in August of 2005 knocking down numerous trees and power lines. Power outages were widespread and many homes sustained roof damage.

The inland extent of Tropical Storm/Hurricane winds as well as wind strength increases with the strength of the hurricane at landfall and the actual forward motion of the storm. Shelby County is capable of receiving winds in excess of 58 mph for a Tropical Storm/Hurricane category 4 storm as demonstrated in the below figure even a typical Category 2 hurricane is capable of spreading tropical storm force winds (>39 mph) over Shelby County.

Table 5.9 Beaufort and Saffir-Simpson Scales of Wind Damage

Name	Wind speed	Expected Property Damage
Strong gale	47-54 mph	Chimneys blown down, slate tiles torn from roofs
Whole gale	55-63 mph	Trees broken or uprooted
Storm	64-75 mph	Trees Uprooted, cars overturned
Category 1 Hurricane	74-95 mph	Minimal: Damage is done primarily to shrubbery and trees, unanchored mobile homes are damaged, some signs are damaged, little structure damage
Category 2 Hurricane	96-110 mph	Moderate: Some trees are toppled, some roof coverings are damaged, and mobile homes suffer major damage
Category 3 Hurricane	111-130 mph	Extensive: Large trees are toppled, roof structural damage, mobile homes are destroyed, some structural damage to small homes/utility buildings.
Category 4 Hurricane	131-155 mph	Extreme: Extensive damage is done to roofs, windows, and doors; roof systems on small buildings completely fail; some curtain walls fail.
Category 5 Hurricane	>155 mph	Catastrophic: Roof damage is considerable and widespread, window and door damage is severe, extensive glass failures, and entire buildings could fail.

The typical damage to structures from the different storm categories is shown in the table below. The Beaufort scale applies to high winds. The Saffir-Simpson Scale is for hurricane winds.

High winds impact facilities, utilities and transportation and can result in loss of life. Tropical Storm/ Hurricane high winds can impose large lateral (horizontal) and uplift (vertical) forces on buildings. Residential buildings can suffer extensive wind damage when they are improperly designed and constructed. High winds can cause damage to rooftops and exterior windows and doors allowing wind-driven rain to penetrate into the interior of both residential and commercial structures.

Future Probability

There have been no reported tropical storms with impacts in Shelby County in the last ten years. The probability of future events is medium and the vulnerability is high.

Historic Occurrences
There are no recorded tropical storm/hurricane events in the NCDC/Sheldus databases as having significant impact on Shelby County in the last 5 years.

Major Historic Occurrences Discussion
In October 1995 Hurricane Opal rushed across the panhandle of Florida and into Alabama, resulting in a presidential disaster declaration for 38 counties including Shelby County.
Tropical storm Isidore moved onshore Thursday, September 26, 2002. Ahead of and east of the center of the storm, heavy rain bands and gusty winds moved inland and eventually rotated through Shelby County. Wind gusts peaked at 50 mph. Downing trees and power lines. The most concentrated area of damage occurred in Jefferson and Shelby Counties.
07/10/05 Hurricane Dennis made landfall as a Category 3 hurricane. Most of the damage was a result of strong winds associated with Dennis' passing rain bands. Trees were knocked down, debris was scattered on roads and power outages were common throughout Shelby County. All but the 20 counties were declared a disaster.

August 30, 2005 Hurricane Katrina produced local effects that were widespread across Shelby County. Numerous trees and power lines were downed; minor to major structural damage occurred and power outages were widespread. Many locations remained without power for a week or more. Storm damage effects across parts of West Central Alabama were worse than what was sustained during Hurricane Ivan in 2004 with winds in excess of 45 mph.

August 25, 2008 Tropical Storm Fay impacted Shelby County. The storm’s passage left six people dead in Alabama and thousands without power. The storm downed trees and power lines across the county. More than half of the Alabama’s counties were declared disaster areas.

5.3.6.2 High Wind Thunderstorm
The NWS classifies a thunderstorm as severe if its winds reach or exceed 58 mph, produces a tornado, or drops surface hail at least 0.75 inches in diameter. High winds can result from thunderstorm inflow and outflow, or downburst winds when the storm cloud collapses, and can result from strong frontal systems, or gradient winds from high or low-pressure systems. Thunderstorms produce downdraft winds, which are defined as a small-scale column of air that rapidly sinks toward the ground. A downburst is the result of a strong downdraft. The downburst can cause damage equivalent to a tornado. The outflow of cool or colder air can also create damaging winds at or near the surface. As these downburst winds spread out they are often referred to as straight-line winds, which exceed 130 miles per hour.

Location
Thunderstorms can strike in all regions of the U.S.; however, they are most common in the central and southern states. The atmospheric conditions in these regions of the country are most ideal for generating these powerful storms. More than 100,000 thunderstorms occur each year in the U.S., however, only about 10% are classified as “severe”. The most favorable conditions for thunderstorm development occur between June and August. July is the peak month for thunderstorms in Shelby County. All jurisdictions in Shelby County have experienced severe

thunderstorms accompanied by high winds. Shelby County resides in Wind Zone III, which can experience wind speeds up to 200 miles per hour.
A typical thunderstorm is 15 miles in diameter and usually lasts 30 minutes. Thunderstorms affect relatively small-localized areas, rather then large regions much like winter storms and hurricane events (NWS, 2005).

Extent
Thunderstorm wind reached damaging force in Shelby County at least 45 times since 2016 resulting in a greater than 12% (7.5/year) probability that a thunderstorm event will occur on an annual basis. Thunderstorm wind events occurred on 22 days and 0 days with property damage. No fatalities or injuries were reported. The extent/range of magnitude or severity that could be experienced by Shelby County due to a thunderstorm wind event is 65 knots.

Future Probability
There have been 45 High Wind thunderstorm events since 2016, a period of 6 years. This results in an average of 7.5 events per year. Overall the frequency of future occurrences of thunderstorms in Shelby County will continue and the risk is considered high. The vulnerability impact of these severe storms is moderate.

Historic Occurrences
The NCDC and Sheldus databases have recorded 45 thunderstorm events in Shelby County in the last six years.

Table 5.10 Historic High Wind Thunderstorm Events

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
02/24/2016	Nelson		0	0	0	0	0	
03/1/2016	Helena		0	0	0	0	0	
04/29/2016	Nelson		0	0	0	0	0	
06/16/2016	Quito		0	0	0	0	0	
06/17/2016	Helena		0	0	0	0	0	
06/17/2016	Vincent		0	0	0	0	0	
07/14/2016	Quito		0	0	0	0	0	
03/10/2017	Simmsville		0	0	0	0	0	
03/10/2017	Nelson		0	0	0	0	0	
06/15/2017	Paramount		0	0	0	0	0	
06/15/2017	Westover		0	0	0	0	0	
06/15/2017	Longview		0	0	0	0	0	
04/14/2018	Coalmont		0	0	0	0	0	
04/22/2018	Coalmont		0	0	0	0	0	
04/22/2018	Quito		0	0	0	0	0	
04/22/2018	Simmsville		0	0	0	0	0	

Table 5.10 Historic High Wind Thunderstorm Events								
Event Date	Location or Map Reference	**Extent Description** Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost Amount	Other Loss or Cost Type
06/27/2018	Columbiana		0	0	0	0	0	
06/28/2018	Simmsville		0	0	0	0	0	
06/28/2018	Calera		0	0	0	0	0	
08/10/2018	Genery		0	0	0	0	0	
08/10/2018	Scotrock		0	0	0	0	0	
04/18/2019	Parmount		0	0	0	0	0	
06/22/2019	Longview		0	0	0	0	0	
06/22/2019	Chelsea		0	0	0	0	0	
06/22/2019	Argyle		0	0	0	0	0	
06/22/2019	Westover		0	0	0	0	0	
06/22/2019	Wilsonville		0	0	0	0	0	
06/22/2019	Vincent		0	0	0	0	0	
08/19/2019	Sterrett		0	0	0	0	0	
08/19/2019	Vandiver		0	0	0	0	0	
08/19/2019	Dunnavant		0	0	0	0	0	
08/19/2019	Dunnavant		0	0	0	0	0	
08/19/2019	Dunnavant		0	0	0	0	0	
01/11/2020	Keystone		0	0	0	0	0	
01/11/2020	Westover		0	0	0	0	0	
01/11/2020	Wilsonville		0	0	0	0	0	
03/31/2020	Alabaster		0	0	0	0	0	
03/31/2020	Pelham		0	0	0	0	0	
06/25/2020	Montevallo		0	0	0	0	0	
07/12/2020	Chelsea		0	0	0	0	0	
07/12/2020	Landmark		0	0	0	0	0	
07/12/2020	Westover		0	0	0	0	0	
12/14/2020	Quito		0	0	0	0	0	
12/14/2020	Quito		0	0	0	0	0	
04/24/2021	Columbiana		0	0	0	0	0	
45		Totals	0	0	0	0	0	
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion

On March 28, 1994 A Thunderstorm that impacted Shelby County was a ""super cell" - an intense, rotating thunderstorm, capable of 100 mph winds. Thirty-nine people were injured in

Pelham. Most of the injuries and damage were in the Chandalar subdivision and several mobile home parks. Seventy-five percent of the Southgate mobile home park sustained damage.
The Bibb/Shelby County storm occurred on February 21, 1997. This storm damaged many mobile homes, and uprooted many trees. The thunderstorm that produced this damage was part of a long, broad band of convection that moved east through Alabama, ahead of a slow-moving cold front. The storm knocked down or snapped several dozen trees, a few of which were blown onto the roofs of nearby homes. Shingles were also ripped off some of these dwellings.
On the morning of 22 February 1998, much of Shelby County and North Alabama was unexpectedly rocked by a period of intense sustained wind, estimated in excess of 60 knots. Moving rapidly northward across the state in a wide band, the strong winds produced squall-like conditions at individual locations. Shingles were ripped off of dozens of roofs, and large trees were toppled onto houses, cars and roads. Structural damage and power outages were widespread across the remainder of central and northern Alabama
A Shelby county microburst occurred late in the afternoon of July 29, 2005. At approximately 500 pm a thunderstorm microburst occurred in the vicinity of the Calera fire department. From that location the microburst spread southward and outward in a fan-like pattern for about a mile. At the widest point...the damage area was about 1.1 miles wide. Throughout this area many trees including mature oak and pecan trees of 3 to 4 feet in diameter were uprooted. The greatest damage in Calera was centered along 16th street...from 20th avenue to 22nd avenue. The winds were estimated at up to 70 mph. At least 4 homes, several fences, sheds and out buildings were damaged. No injuries or fatalities wee reported.
January 29th & 30th, 2008 A strong cold front entered northwest sections of Central Alabama during the evening hours on January 29th and exited in southeast Alabama. As the front moved across the area, the pressure increased some 7 to 10 MB in a 3-hour period. This pressure change created gradient winds of 35 to 45 mph, with a few gusts over 50 mph. Trees and power lines were blown down in numerous locations. The strongest winds occurred behind the front.
A long-lived windstorm produced by severe thunderstorms, known as a derecho, caused a widespread swath of damage across Shelby County and Central Alabama during the early morning hours of February 26, 2008. Although there were some sporadic reports of light tree damage and small hail west of Interstate 65, a more intense and widespread swath of damage started in southern Jefferson and northern Shelby Counties between 3:30 am and 4:00 am. Thunderstorm wind gusts estimated at 60 to 70 mph were widespread in this damage swath, with occasional hurricane force peak wind gusts, estimated just over 100 mph in some areas.

5.3.6.3 High Winds Tornado

A tornado is a rapidly rotating vortex, or funnel, of air extending to the ground from a cumulonimbus cloud. In the United States, approximately 1,000 tornadoes each year are spawned by severe thunderstorms. Although most tornadoes remain aloft, those that touch ground are forces of destruction. Tornadoes are viewed as the most damaging summer storm.

Location

Unlike floods, tornadoes are not confined to any particular local geographic. Among the most unpredictable of weather phenomena, tornadoes can occur at any time of day, in any State, in any season. No community is without risk; any place in the county is considered to have an equal chance of experiencing a tornado or any other of these severe weather elements. The

figure below shows tornado activity in the United States. The map indicates that NOAA has recorded 11-15 tornadoes per 1000 square miles in Shelby County.

The entire county is vulnerable to high winds caused by tornados. The most likely time for tornados is during the months of March through May, with a secondary peak of activity in November. The midsection of the U.S., including Shelby County, experiences a higher rate of tornadoes than other parts of the country because of the recurrent collision of moist, warm air moving north from the Gulf of Mexico with cold fronts moving east from the Rocky Mountains.

Extent

The path length of a tornado can range from a few hundred yards to miles. A tornado typically moves at speeds between 30 and 125 mph and can generate internal winds exceeding 300 mph. The life span of a tornado rarely is longer than 30 minutes. Tornadoes have been known to lift and move objects weighing more than 300 tons a distance of 30 feet, toss homes more than 300 feet from their foundations, and siphon millions of tons of water from water bodies. Tornadoes generate a large amount of debris that becomes airborne shrapnel causing additional damage.

Tornado damage severity is measured by the Enhanced Fujita Tornado Scale. The Enhanced Fujita Scale assigns numerical values based on wind speeds and categorizes tornadoes from zero to five. Tornadoes classified as EF0-EF1 are considered weak, those classified as EF2-EF3 are considered strong, while those classified as EF4-EF5 are considered violent.

The extent of tornadoes in Shelby County is EF1 on the Enhanced Fujita Scale during the past ten-year period.

Table 5.11 Enhanced Fujita Tornado Scale Description Table

F-Scale	Damage	Winds (mph)	Description
EF-0	Light	40-72	Chimney damage, tree branches broken
EF-1	Moderate	73-112	Mobile homes overturned
EF-2	Considerable	113-157	Considerable damage, trees downed, mobile homes demolished
EF-3	Severe	158-206	Roofs/walls torn down, trains and cars overturned
EF-4	Devastating	207-260	Well-constructed walls leveled
EF-5	Incredible	261-318	Homes lifted off foundation and carried considerable distances

Tornadoes are related to larger vortex formations, and therefore often form in convective cells such as thunderstorms or in the right forward quadrant of a hurricane, far from the hurricane eye. A tornado watch is issued for a specific location when thunderstorms capable of producing tornadoes are recognized and arrival is expected in hours. A tornado warning is issued when tornadoes are spotted or when Doppler radar identifies a distinctive “hook-shaped” area in a thunderstorm that is likely to form a tornado.

Damage due to tornadoes can range from minor to major depending on the strength of the tornado and where it strikes. A tornado that occurs in a rural area could cause crop damage and might damage some farm buildings and injure livestock but the damage would typically be less than in populated areas.

Tornadoes have caused 113 fatalities, 1,192 injuries and $10,733,000 in property damage.

Future Probability

Eight tornadoes have impacted Shelby County since 2016, a period of 6 years. This results in a tornado event every 1.3 years resulting in a high risk and high vulnerability. The entire county is at equal risk of future occurrences. While higher population and housing densities in the

municipalities set the stage for increased impact, the potential for property damage and loss of life is equally high for the unincorporated areas of the county due to the large number of mobile homes throughout the rural areas.

Historic Occurrences
The NCDC and Sheldus databases have 8 tornadoes reported since 2016.

Table 5.12 Historic High Wind-Tornado Events

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
2/24/2016	Shelby Spgs	EF0	0	0		0		
6/22/2017	Boothton	EF0	0	0		0		
04/14/2019	Simmsville	EF0	0	0		0		
04/14/2019	Calera	EF0	0	0		0		
12/16/2019	South Newala	EF0	0	0		0		
02/06/2020	Gurnee Jct	EF2	0	0		0		
03/25/2021	Boothton	EF3	0	1	223	842,825.25		
03/25/2021	Roberta	EF3/EF2	0	6	0	0		
8		Totals	0	7	0	842,825.25		
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion
March 21, 1932: Over 250 Alabamians died in tornadoes that sweep the state. More than 1,500 others were injured and damage was estimated at $5 million. The western and north-central parts of the state, especially the towns of Northport, Cullman, and Columbiana, were hardest hit. In Columbiana 40 homes were destroyed and 200 damaged. 20 of the homes were totally leveled.

May 5, 1933 4 people were killed and 150 were injured in Helena. Many structures were demolished.

April 18, 1953 a tornado resulted in 2 fatalities and $3,000,000 worth of damage to the Buck Creek Cotton Mill at Siluria. The storm damage to the mill is expected to throw between 600 and 800 workers out of jobs for four to six months. Several homes and other structures were damaged in Siluria, Alabaster, and near Columbiana.
May 27, 1973 in Greensboro, Brent, Centreville, Montevallo and Mt. Cheaha 72 people were injured and one person was killed. 216 buildings were destroyed, 570 buildings were damaged, 97 mobile homes were destroyed, and 45 businesses were damaged or destroyed. Over 12,000 acres of timber was destroyed.

On January 24, 1964 "Around 7 pm CST, a tornado roared into Harpersville. It left ten dead and six injured. The path of this one was very narrow, ranging from 50 yards to about 125 yards in width, but damage was heavy. This tornado struck without warning. Birmingham radar was monitoring the area, but the line of thunderstorms approaching Harpersville appeared only moderate proof that radar is not foolproof. Harpersville residents reported that no unusual and brilliant display of lightning was seen, and most thought it was just an ordinary thundershower.

3/27/94 thirty-nine people were injured in Pelham. Officials estimate roughly $25 million in storm-damage occurred in Pelham. Most of the injuries and damage were in the Chandalar subdivision and many mobile home parks. 75% of the Southgate mobile home park sustained damage. The storm was a ""super cell" - an intense, rotating thunderstorm. More than 1,000 homes were damaged or destroyed in north Shelby County and 53 people received injuries.

April 4, 2005 Columbiana: The tornado rated an F1 on the Fujita Damage Scale with winds estimated around 75 mph touched down approximately 3 miles northeast of Columbiana, the tornado snapped off and uprooted many trees and knocked over several power poles. Some of the trees were several feet in diameter. Fallen trees significantly damaged one home and minor damage to other homes, destroyed at least 4 vehicles, and destroyed several outbuildings. The tornado damage path was approximately 2.2 miles long and 150 yards wide at its widest point.

April 30, 2005 a tornado began at 522 AM and ended at 523 AM. Its track was from 3.3 SW of Helena to 7.7 NE of Helena. Its length was 12 miles and was100yds wide. The F1 tornado had winds estimated at 75 mph. The tornado first touched down just west of County Road 93 near the Cahaba Wildlife Management Area. The tornado moved eastward and crossed County Road 17, County Road 58, US 31, Interstate 65 and County Road 11 before ending near County Road 39. Initial damage was minor with only a few trees uprooted or snapped off west of County Road 17. As the tornado crossed County Road 17, it intensified and caused its most significant damage near Scurlock Road and County Road 17 then eastward along County Road 58 to just past County Road 95. Several subdivisions were affected including Braelinn Village, Amberley Woods, Navajo Hills, and Port South. Many homes suffered roof and window damage. Many trees and power lines were either blown down or snapped off. Power was unavailable for several hours. A few homes suffered major damage due to fallen trees. Many vehicles and outbuildings were destroyed. A municipal park in Helena sustained minor damage. Near Wal-Mart, many trees and signs were blown down or snapped off. Trees damaged homes just east of US 31.

March 25, 2021 - National Weather Service meteorologists surveyed damage in northern Shelby County and determined that it was consistent with an EF3 tornado, with maximum winds near 140 mph. This tornado originated in Bibb County and crossed into Shelby County along Shades Creek west of River Road. The tornado traveled northeast in a wooded area along the Cahaba River, paralleling County Highway 13. As the tornado moved into Helena, it caused shingle damage to several homes in the neighborhoods near Old Cahaba Parkway and Hillsboro Parkway. A house that was under construction also collapsed. The tornado intensified again as it crossed Buck Creek near Old Town Helena, snapping numerous trees and causing roof damage. A few homes near Cunningham Drive suffered partial roof loss. The tornado weakened as it crossed New Hope Mountain near Pelham High School, but intensified to EF2

intensity along Crosscreek Trail and Wilderness Road in Pelham. Roofs were removed from four homes with collapse of an exterior wall on two of them, with many other homes suffering varying degrees of roof damage. The tornado also caused several trees to fall on homes in the Chandalar neighborhood. The tornado weakened somewhat by the time it crossed Highway 31 but still damaged the roofs of several businesses and mobile homes while uprooting trees. It began to strengthen again after crossing Interstate 65, paralleling Highway 119 through the south side of Indian Springs Village and far northern portions of Oak Mountain State Park. It continued to uproot or snap numerous trees and continued to cause roof damage to residences. Pockets of EF2 damage were found in neighborhoods south of Heardmont Park and near Oak Mountain Elementary and Intermediate Schools, with significant damage to residences from falling trees and partial roof loss. Significant timber damage with some damage to structures was also noted near the lakes at the north gate to Oak Mountain State Park. The most significant structural damage along the path occurred in the Eagle Point neighborhood just before Highway 280. Several homes suffered complete roof loss, a couple homes suffered collapse of exterior walls, and all walls collapsed for one home on Eagle Valley Drive. The majority of the other homes in the path in this neighborhood suffered varying degrees of roof damage, with numerous trees snapped. After crossing Highway 280, the tornado continued to uproot numerous trees as it moved over Oak Mountain. It caused roof damage along Highland View Drive and in the Highland Lakes neighborhood, including complete roof loss to a residence on Grove Park Way. Varying degrees of roof damage also occurred in the Greystone Farms neighborhood, with significant roof loss on several homes. The tornado crossed Dunnavant Valley Road and caused significant timber damage at Shoal Creek Country Club, and complete roof loss for another residence. The tornado then moved into a wooded area as it crossed Double Oak Mountain, continuing to uproot numerous trees. It crossed Highway 25 near Vandiver and then began to parallel Shelby County Highway 43, causing roof damage to residences and completely destroying a manufactured home on Crabapple Lane. The tornado crossed into St. Clair County near Wolf Creek Road.

National Weather Service meteorologists surveyed damage in southeast Shelby County and determined that it was consistent with an EF1 tornado, with maximum winds near 110 mph. A strong, long-track tornado traveled across Hale, Perry, Bibb, Chilton, and Shelby Counties during the afternoon of March 25, 2021. It is estimated that the tornado had a 98-minute life span, with a path length of 80 miles.

The tornado crossed into Shelby County from Bibb County near the intersection of County Road 201 and 128. The tornado moved into the city of Calera, uprooting trees and blowing over an unanchored mobile home along County Road 67. The tornado then crossed Interstate 65 and moved into a large neighborhood along and northeast of Timberline Drive. The majority of structural damage was confined to loss of shingle and siding. However, at least 3 homes had portions of their roofs removed, 2 of them with significant loss. Next, mostly rural areas were hit between the cities of Columbiana and Calera, south of Highway 70. The last area of notable damage was in Columbiana. Numerous trees were uprooted from Mooney Road to Mardis Ferry Road and numerous homes were heavily damaged by fallen trees. Several mobile homes were impacted near the intersection of Alston Farm Road and Mardis Ferry Road. Most sustained roofing damage or were crushed by fallen trees. One unanchored mobile home was destroyed with 2 injuries that required hospitalization. Other structures were damaged along the

path as well. The tornado then quickly weakened, and dissipated as it approached Highway 25 after crossing County Road 7.

5.3.7 Ice/Snow Storm Profile

Ice and Sleet Storms are storms that generate sufficient quantities of ice or sleet to result in hazardous conditions and/or property damage. An ice Storm (freezing rain), probably the most serious of these type storms, occurs during a precipitation event when warm air aloft exceeds 32 degrees while the surface remains below the freezing point. When precipitation originating as rain or drizzle contacts physical structures on the surface, ice forms on all surfaces creating problems for traffic, utility lines and tree limbs. Sleet forms when precipitation originating as rain falls through a rather large layer of the atmosphere that has below freezing temperatures allowing the rain to freeze before reaching the ground. Sleet is also referred to as ice pellets. Sleet storms are usually of shorter duration than freezing rain and create fewer problems.

Location

Ice and Snow affect the entire county equally. The results from this local snowfall study indicates 6 snowfalls of 4” or more in 25 years. The data was compiled from Alabama Climatological Data, produced monthly by the National Climate Data Center. There were a total of 84 cases, or approximately 2.8 events per year. An "event" was defined as a report of at least one half inch of snow.

Extent

Ice/Snow storms in Alabama are not as severe or common as winter storms in the northern states. Typically, an ice/snow storm in Shelby County consists of freezing rain or a few inches of snow that may or may not be accompanied by frozen roadways. However, because the County and it citizens are unaccustomed to these storms, they tend to be very disruptive to transportation and commerce. Trees, cars, roads, and other surfaces develop a coating or glaze of ice, making even small accumulations of ice extremely hazardous to motorists and pedestrians. The most prevalent impacts of accumulations of ice are slippery roads and walkways that lead to vehicle and pedestrian accidents; collapsed roofs from fallen trees and limbs and heavy ice and snow loads; and felled trees, telephone poles and lines, electrical wires, and communication towers.

Ice on roads and power lines can pose economic difficulties and life threatening conditions on Shelby County’s population, which is often without power during these events. Ice and snow posses the ability to immobilize large segments of the County’s population and economy for significant periods of time. Ice and snow removal efforts tax utility resources and can drain local government budgets. Ice/Snow events in Shelby County have resulted in 0 fatalities, 5 injuries and $1,690,940 in property losses.

The extent of Ice/Snow storms in Shelby County is 2.5 inches of snow and ice accumulation.

Future Probability

Sixteen ice/snow storm events have occurred in Shelby County since 1962 a period of 60 years. This results in the probability of an Ice/Snow event occurring about every 4 years. The probability of future winter storm events is moderate to high, with the vulnerability of loss being low. The entire county is at equal risk.

Historic Occurrences

The NOAA/Sheldus databases have recorded 16 Ice/Snow events in Shelby County since 1962

Table 5.13 Historic Ice and Snow Events

Event Date	Location or Map Reference	Extent Description: Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc.	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
			0	0	0	0	0	0
0		Totals	0	0	0	0	0	
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion

A winter storm described as the worst in Alabama history struck on March 12, 1993 and lasted through mid-day March 13, 1993. Snow began falling over north Alabama, then spread southward to Shelby County overnight, reaching all the way to the Gulf Coast. By mid-day Saturday snow had accumulated to 6 to 12 inches in Shelby County. It was estimated that 400,000 homes were without electricity, and many remained so for several days. Compounding the snow and power problems, temperatures fell well into the single digits and teens across much of the state Saturday night. There were at least 14 deaths associated with the exposure or stress due from the storm. Damage estimates ranged from $50 and $100 million. The entire state was declared a Federal Disaster Area.

The 1994 disaster declaration for severe winter storms resulted from storms occurring from January 16 through the 18 and again on February 9, 1994. Cold, dry Arctic air over Shelby County and central/North Alabama cold dry, Arctic air once again moved in with freezing temperatures, causing the wet mud to freeze. On February 9, a stationary cold front retreated northward, bringing moist warmer air behind it. Weak low-pressure cells moving along the boundary between cold and warm air masses pushed the warm, moist air up and over the cold surface air creating a shallow layer of near-freezing air at the ground surface. Precipitation, falling from the warm air layer froze on contact with cold surface objects creating a thick coating of ice. Flooding also occurred when debris- blocked channels could not drain off the water from melting ice and thawing soil. Ten counties were declared a Federal Disaster Area.

November 26, 2000 - Friday's storms knocked out electricity to as many as 17,000 Alabama Power Co. customers in Jefferson and Shelby counties.

December 18, 2000 - Arctic blast brings deep freeze. Stinging cold slapped Shelby County with ice, snow and freezing weather, creating traffic problems and accidents.

January 28, 2005 - A 2 day ice/snow storm cause at least 15 vehicles to slide off the roadways under the icy conditions. Exposed surfaces had ice accumulation of one half of an inch with a

few locations reporting ice accumulations of one inch. Numerous trees, tree limbs, and power lines were knocked down and many of the fallen trees temporarily blocked roadways. The fallen trees damaged several homes and vehicles. Many bridges were iced over and were hazardous for travel. Power outages were widespread with up to 30,000 homes and businesses without power. The rain became freezing rain. Estimated damages form this storm were $500,000.

January 28, 2011 – A snow storm was expected to hit well south of Shelby County and Central Alabama. Alabama EMA, National Guard and state resources were predeployed to areas south of Montgomery. The storm struck Central Alabama and in particular Shelby County on the morning of January 28th. Though the snow was relatively light and dry, ground temps were in the teens. As vehicles drove on the snow, it immediately turned to ice and caused gridlock county and area wide. Approximately 7,000 children could not leave their schools and remained overnight. Hundreds of vehicles were stuck stranding thousands of motorists. Many businesses could not send employees home and employees had to bed down overnight at work. State resources and National Guard Troops had difficulty responding back to central Alabama delaying response to stranded motorist. Roads were blocked for up to three days as temperatures recovered. Thankfully, no trees fell and no power outages were reported.

5.3.8 Landslide/Mudslide Profile

Landslides and mudslides often occur together with other major natural disasters, such as floods, which involve precipitation, runoff, and ground saturation that may be the result of severe thunderstorms or tropical storms. Earthquakes may cause landslides ranging from rock falls and topples, to massive slides and flows. Landslides into a reservoir may compromise dam safety or a landslide may affect the dam itself.

Location

The topography and geology of Shelby County is susceptible to the effects of landslides, according to the Geological Survey of Alabama.

On the adjacent landslide map susceptibility is not indicated where it is same or lower than incidence. Susceptibility to land sliding is defined as the probable degree of response of [the area] rocks and soils to natural or artificial cutting or loading of slopes, or to anomalously high precipitation. High, moderate, and low susceptibility are delimited by the same percentages used in classifying the incidence of land sliding. Some generalization is necessary at this scale, and several small areas of high incidence and susceptibility were slightly exaggerated. The northern and western part of the county has a moderate risk of landslides.

Extent

Mudslides/landslides have not been a significant risk in Shelby County. The effects of landslides are often misrepresented as being the result of the landslide trigger event, such as a flood, earthquake, volcanic eruption, hurricane, or coastal storm. The impact from a landslide can include loss of life, damage to buildings, lost productivity, disruption in utilities and transportation systems, and reduced property values. It is imperative that any major construction project in the county implement prevention and/or mitigation measures to protect against landslides occurring.

The extent of mudslides/landslides in Shelby County is 500 cubic yards of soil moved 25 feet on December 25th, 2015 near County Road 30 near Columbiana.

Future Probability
The probability of future occurrences of landslides in Shelby County is moderate and the vulnerability is low.

Historic Occurrences
According to the Geological Survey of Alabama, only six landslide events have occurred in the county. All of these events have been minor.

Major Historic Occurrences Discussion
As there have been no occurrences in the county that have any significant impact on population or property, there is no historical discussion.

5.3.9 Land Subsidence Profile

Movement of ground water along joints and fractures in these soluble rocks results in solution of the rocks and the development of cavities or openings in the rock. A prerequisite for subsidence is the presence of underground openings in rocks or unconsolidated materials. Cavities may form naturally or they may be manmade. The most significant cavities in terms of subsidence in Shelby County are solution cavities in carbonate rock terrains, although there are known instances of sinkholes forming over abandoned mines. Areas in Shelby County underlain by carbonate rocks and characterized by the presence of subsurface cavities, sinkholes, and underground drainage are called "karst terrains." It is these karst areas that are most susceptible to sinkhole development and subsidence.

Location
In Shelby County, the most common causes of land subsidence are the development of sinkholes in areas underlain by soluble carbonate rocks or ground collapse above abandoned mines. Abandoned coalmines create a hazard in terms of foundation safety because of their widespread occurrence in parts of the state underlain by coal beds of the Pottsville Formation, their often-shallow depth, and the progressive deterioration of remaining supports and overburden. Many areas of the state areas of the state, particularly north Alabama, are underlain by carbonate rocks that are susceptible to solution and the development of subsurface cavities in bedrock. Periods of drought, excessive rainfall, well pumpage, and construction activities increase the potential for sinkhole formation in these areas.

In Shelby County, most sinkholes are caused by a loss of support, roof collapse, and/or raveling.

Loss of Support Ground water provides buoyant support to the roofs of subsurface cavities. Lowering the water table removes this support and may result in the collapse of the roof of the subsurface cavity.

Collapse of unsupported openings - The collapse of an unsupported opening result from the enlargement of the opening beyond the ability of the materials above to bridge it.
Raveling or piping is the slow erosion of unconsolidated sediments into an underground opening.

Extent
All of Shelby County and its jurisdictions have underlying Karst geology, which makes the entire county subject to sinkhole activity. In addition, in the northwestern 1/3 of the county significant limestone and coal mining activities have resulted in areas where overlying ground can collapse into abandon mines.

A change in the local environment affecting the soil mass initiate's sinkhole collapse and land subsidence. This change is called the "triggering mechanism."
Water, either surface or ground water, is generally the most important agent effecting environmental changes that cause subsidence. Triggering mechanisms for subsidence include:

1. Water level decline,
2. Changes in ground-water flow
3. Increased loading
4. Deterioration (relates to abandoned coal mines).

Shelby County has 2 active and 12 abandon underground coal and limestone mines that have the possibility of collapse. However, the majority of these mine hazards are in unpopulated areas and do not have significant risk to population or structures.

The largest sinkhole, Golly Hole, is a large sinkhole which developed near Calera in Shelby County in a matter of seconds in December 1972. The sink is about 300 feet in diameter and 100 feet deep. This sinkhole occurred during a drought when the water table was much lower than normal. Numerous sinkholes have developed in the western and northeastern portions of the county. The towns that are more affected by sinkholes include Alabaster and areas in and around Harpersville and Alabaster. Other large sinkholes have occurred along local highways near Harpersville and near I-65 in Alabaster.
Sinkholes in Shelby County have impacted roads and to a lesser extent structure. Drilling and mining assets have been lost while mining for coal and limestone and drilling for natural gas. Shelby County has suffered 0 fatalities, 0 Injuries and $182,000 in damages from Land Subsidence
The extent of land subsidence in Shelby County is 300 feet in diameter and 100 deep.

Future Probability
All of Shelby County is susceptible to land subsidence in the form of sinkholes especially in the northern and western areas of the county. The western areas of the county are also susceptible to collapsing abandon coal and limestone mines. Shelby County has recorded 12 instances of sinkholes in 47 years an average of an event every 4 years. The future probability of an event is moderate and the vulnerability is low. As population and structure density increases the vulnerability will increase.

Historic Occurrences
There have been no recorded Land Subsidence events in NCDC/Shelby database as having significant impact on Shelby County in the last 5 years.

Major Historic Occurrences Discussion
November 30, 1995 it took several truckloads of concrete and of crushed limestone and several large boulders to fill a sinkhole Friday that opened up along Shelby County 26 in Alabaster. The road didn't collapse, but the sinkhole created a cavern big enough for a two-car garage.

April 18, 2003 a gaping hole in the U.S. 280 roadbed caused major traffic delays when both westbound lanes were closed between Shelby County 41 and Highland Lakes subdivision for a 15-foot-deep, 5-foot wide sinkhole.

December 7, 2003, a sinkhole shut down a stretch of Shelby County 16 bordering the Lafarge cement plant. The area has had a number of sinkholes over the years. The latest one opened up on the side of the highway close to the railroad, but did not present any danger to trains.

June 11, 2008, a sinkhole along Dry Creek sent muddy red clay through the LaFarge limestone quarry and into Shoal Creek in Montevallo.

5.3.10 Lightning Profile

Lightning, which occurs during all thunderstorms, can strike anywhere. Generated by the buildup of charged ions in a thundercloud, the discharge of a lightning bolt interacts with the best conducting object or surface on the ground. The air in the channel of a lightning strike reaches temperatures higher than 50,000 degrees F. The rapid heating and cooling of the air near the channel causes a shock wave, which produces thunder.

Location
Lightning events can occur anywhere in the planning area. Lightning current can branch off to strike a person from a tree, fence, pole, or other tall object. In addition, electrical current may be conducted through the ground to a person after lightning strikes a nearby tree, antenna, or other tall object. The current also may travel through power lines, telephone lines, or plumbing pipes to a person who is in contact with an electric appliance, telephone, or plumbing fixture.

Extent
The lightning hazard component of thunderstorms is measured as the mean annual ground flash density (flashes per square kilometer). Review of Vaisala's National Lightning Detection Network (NLDN) shows the extent of lightning in Shelby County averages from 12 to 20 flashes/sq mile/year.

Lightning is the most dangerous and frequently encountered weather hazard that most people in the United States experience. Lightning is the second most frequent killer in the U.S., behind floods, with nearly 100 deaths and 500 injuries annually. These numbers are likely to underestimate of the actual number of casualties because of the under reporting of suspected lightning deaths and injuries. Cloud-to-ground lightning can kill or injure people by either direct or indirect means. The lightning current can branch off to strike a person from a tree, fence, pole, or other tall object. In addition, electrical current may be conducted through the

ground to a person after lightning strikes a nearby tree, antenna, or other tall object. The current also may travel through power lines, telephone lines, or plumbing pipes to a person who is in contact with an electric appliance, telephone, or plumbing fixture.

Lightning also causes fires. The period 2000-2006 showed 12,000 wild land fires started by lightning per year. This amounts to an average loss of 5.2 million acres annually. (Source: National Interagency Fire Center, 2007). 18% of all lumberyard fires and 30% of all church fires are lightning-related. Source: (Ohio Insurance Institute, Columbus OH. During 2002-2004 U.S. fire departments responded annually to about 31,000 fires caused by lightning with $213,000,000 in direct property damages. (Source: NFPA Report, January 2008).

Looking specifically at storage and processing activities, lightning accounts for 61% of the accidents initiated by natural events; in North America, 16 out of 20 accidents involving petroleum products storage tanks were due to lightning strikes. Plant loss in Louisiana was estimated at $10,000,000. Some 30% of all power outages annually are lightning-related, on average, with total costs approaching $1 billion dollars. The lightning Institute database shows 145 lightning events to privately owned nuclear power plants in the period 1985-2000. (Source: U.S. Nuclear Regulatory Commission, Report March 2001).

Lightning was responsible for only one death and three injuries in Alabama in 1998, about the same as the previous year. Since 1990, lightning has killed 14 people and injured 175 in the state.

In Shelby County only twelve lightning events are reported in the NCDC and Sheldus databases. It is the opinion of the Shelby County Mitigation Committee that lightning events are significantly under reported. Lightning events have resulted in 0 fatalities, 5 injuries and $528,312 in property damage.

Future Probability

Based on reports in the NCDC and Sheldus databases there have been twelve occurrences of lightning events that have resulted in population or property damage since 1961 a period of 61 years. This indicates that a severe lightning event occurs in Shelby County approximately every 5 years resulting in a risk rating of medium and a vulnerability rating of low.

Historic Occurrences

There is one lightning event reported in the NCDC and Sheldus databases in the last 6 years.

Table 5.14 Jurisdiction Historic Lightning Events

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
05/25/18	Saginaw	Lightning	0	0		300,000	0	
		TOTALS	0	0	0	300,000	0	
Data Sources		**NOAA/NWS, Sheldus, Local Sources**						
Loss Type		**A=Agriculture, C=Content, E=Equipment, R=Response/Recovery/Cleanup**						

Major Historic Occurrences Discussion

August 24, 2007, Lightning slightly injured two children in Shelby County Friday afternoon as storms rolled through the Birmingham metro area.

August 18, 2001, Lightning sparks Shelby house fire. A lightening bolt struck a Shelby County house early Saturday afternoon, igniting a fire in the Meadowbrook subdivision.

5.3.11 Tsunami Profile

A tsunami is the generation of an extreme ocean wave that breaks on-shore. A tsunami generally results from extremely high winds, a seismic event or the impact of an asteroid or meteor in an adjacent ocean. Tsunamis impact long, low-lying stretches of linear coastlines, usually extending inland for relatively short distances.

Location

There are some scenarios that could generate a tsunami impacting coastal Alabama. Earthquakes have occurred in both the Gulf of Mexico and the Caribbean Sea. If a high magnitude earthquake occurred in these areas, it could generate a tsunami that may impact the Gulf Coast. The area is also at risk from a tsunami that could be generated elsewhere in the Atlantic Basin. The potentially catastrophic collapse of the Canary Island volcanoes or the impact of an asteroid or meteor could generate a tsunami.

Extent

Conditions That May exacerbate or Mitigate the Effects of Tsunamis are identified below:
Coastline configuration: Concave shorelines, bays, sounds, inlets, rivers, streams, offshore canyons, and flood control channels may create effects that result in greater damage. Offshore canyons can focus tsunami wave energy, and islands can filter the energy. The orientation of the coastline determines whether the waves strike head-on or are refracted from coastlines.
Coral reefs: Reefs surrounding islands in the western North Pacific and the South Pacific generally cause waves to break, providing some protection to the islands.
Fault movement: Several characteristics of the earthquake that generates the tsunami contribute to the intensity of the tsunami, including the area and shape of the rupture zone. Vertical movements along a fault on the seafloor displace water and create a tsunami hazard. Earthquakes with greater magnitude cause intense tsunamis. Shallow-focus earthquakes also have greater capacity to cause tsunamis.
Distance from shore: Tsunamis can be both local and distant. Local tsunamis give residents only a few minutes to seek safety and cause more devastation. Distant tsunamis originating in places like Chile, Japan, Russia, or Alaska can also cause damage.
High tide: If a tsunami occurs during high tide, the water height will be greater and cause greater inland inundation, especially along flood control and other channels.
Debris: As the tsunami wave comes ashore, it brings with it debris from the ocean, including man-made debris like boats, and as it strikes the shore, creates more on-shore debris. Debris can damage or destroy structures on land.
Human activity: With increased development, property damage increases, multiplying the amount of debris available to damage or destroy other structures.
The extent for Shelby County is zero.

Future Probability

The probability of any Tsunami reaching Shelby County is extremely remote so both the risk and vulnerability is low to non-existent.

Historic Occurrences
There are no records of tsunamis impacting Alabama or Shelby County.

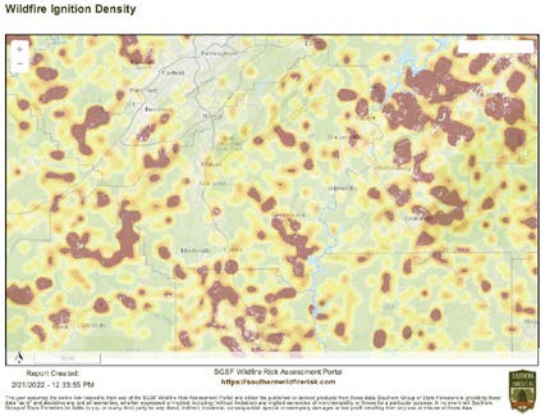
Major Historic Occurrences Discussion
There are no records of tsunamis impacting Alabama or Shelby County.

5.3.12 Wildfire Profile

A wildfire is any instance of uncontrolled burning in grasslands, forests, and brush land. Wildfire is further defined as an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures (FEMA, 2001). Wildfires often begin unnoticed and spread quickly. Naturally occurring and non-native species of grasses, brush, and trees fuel wildfires. The Federal Emergency Management Agency's (FEMA) Fire Management Assistance Grant Program (FMAGP) indicates that a wildfire is also known as a forest fire, vegetation fire, grass fire, or brush fire, is an uncontrolled fire requiring suppression action.

Location
Approximately 94 percent of Alabama's forestlands are privately owned; therefore the vast majority of Wildland fires occur on privately owned lands. Additionally, the majority of the fires occur in areas where homes or structures are endangered. These areas are known as the Wildland urban interface and are defined as areas where development meets Wildland vegetation, both of which provide fuel for fires. The Wildland urban interface areas have increased significantly throughout the U.S. and Alabama, and now face the risk of major losses from wildfires.
In Shelby County, most Wildland urban interface areas are considered "intermixed". Instead of having large forest areas surrounding an isolated town, Shelby County contains many scattered homes and farms spread across the forest areas. Based on an initial analysis by the Alabama Forestry Commission, there are 13 potential Wildland urban interface communities at risk of wildfire damage within the County. Wildfires occur throughout the unincorporated areas of Shelby County. Significant events most often occur in the remote areas of the northwestern section. Lesser events can occur at any location in the county.

Figure 5.3 Wildfire Ignition Density



Extent

Wildfires pose a great threat to life and property, particularly when they move from forest or rangeland into developed areas. More than 140,000 wildfires occur on average each year in the United States (U.S.), causing millions of dollars in damage. Since 1990, more than 900 homes have been destroyed each year as a result of wildfire and even relatively small fires have caused substantial losses (Institute for Business and Home Safety, 2001).

Due to the abundance of vegetation throughout the county, wildfires are a moderate threat in all rural areas. Significant events occur during periods of inadequate rainfall. Lesser events occur annually, usually as a result of escaped controlled burning or arson. The frequency and severity of wildfires is dependent on weather and on human activity. Nearly all wildfires in Alabama are human caused (only 3 percent are caused by lightning), with arson and careless debris burning being the major causes of wildfires. If not promptly controlled, wildfires may grow into an emergency or disaster. During a severe fire situation in 1999-2000, eight wildfires in Alabama were declared Fire Disaster Emergencies by FEMA. Even small fires can threaten lives, damage forest resources and destroy structures.

Each year in addition to affecting people, wildfires may severely impact livestock. Since 2000, wildfires destroyed 6,564 large hay bales, inflicting a severe economic impact on farmers. The forest resources of Alabama feed one of the main industries of the state. Timber loss to fire creates an economic loss to both the private landowner and the State's economy.

The county's municipal and volunteer fire departments respond to a combined average of 100 wild-land fires annually. Many of these fires occur in mixed interface areas and pose threats to occupied structures. Several municipalities have extensive areas of greenbelt and parkland, and brush fires in these cities create a significant urban interface danger. Wildland fires in Shelby County have resulted in 0 fatalities, 0 injuries and $14,318,000 losses in agriculture assets. The extent of wildfires is 746 acres burned across Shelby County.

Future Probability

The probability of future wildfire events is high with the vulnerability low however, as population expands the vulnerability could raise to medium. Historic occurrences

Shelby County fire departments have responded to and suppressed an average of 75 Wildland fires per year over the last 10 years. These are fires that have required assistance by the Forestry Commission to control the blaze.

Table 5.15 Historic Wildland Fire Events

Event Date	Location or Map Reference	Extent Description Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type
			0	0	0	0	0	0
		TOTALS	0	0	0	0	0	
Data Sources		**Department of Forestry, Local Sources**						

Table 5.15 Historic Wildland Fire Events								
Event Date	Location or Map Reference	**Extent Description** Severity, Area Impacted, Assets, Utilities, Roads, Bridges Damaged, Evacuation, Etc,	Fatalities	Injuries	# Of Assets Damaged	Structure Loss	Other Loss or Cost	
							Amount	Type

Major Historic Occurrences Discussion

1983 Southeast Alabaster fire burned for two days, no evacuation was necessary; Forestry dept. was called in for assistance. Total acres burned 25-30 acres. Location of fire was in the southeast area of Alabaster. The only impact was to the out of service of personnel on and off duty to contain fire. The future occurrence has been reduced by some development of the area; there has been some reoccurrences in the area but not to the level before.

August 14-17, 1995, for the hottest four days of the year, the Pelham Fire Department, Alabama Forestry Service and the Alabama National Guard have fought one of the area's most frustrating fires of the year. A brush fire on Double Oak Mountain had consumed at least 120 acres before it was under control.

February 19, 2007, A CSX train causes series of brush fires Firefighters contained a series of small brush fires that stretched across a five-mile area in Pelham apparently caused by sparks from a passing CSX train. The fires started just after 10 a.m., south of Dickerson Road on Shelby County 11. They spread all the way to Kendrick Road, near the Chelsea line, Sides said. There were no evacuations or injuries.

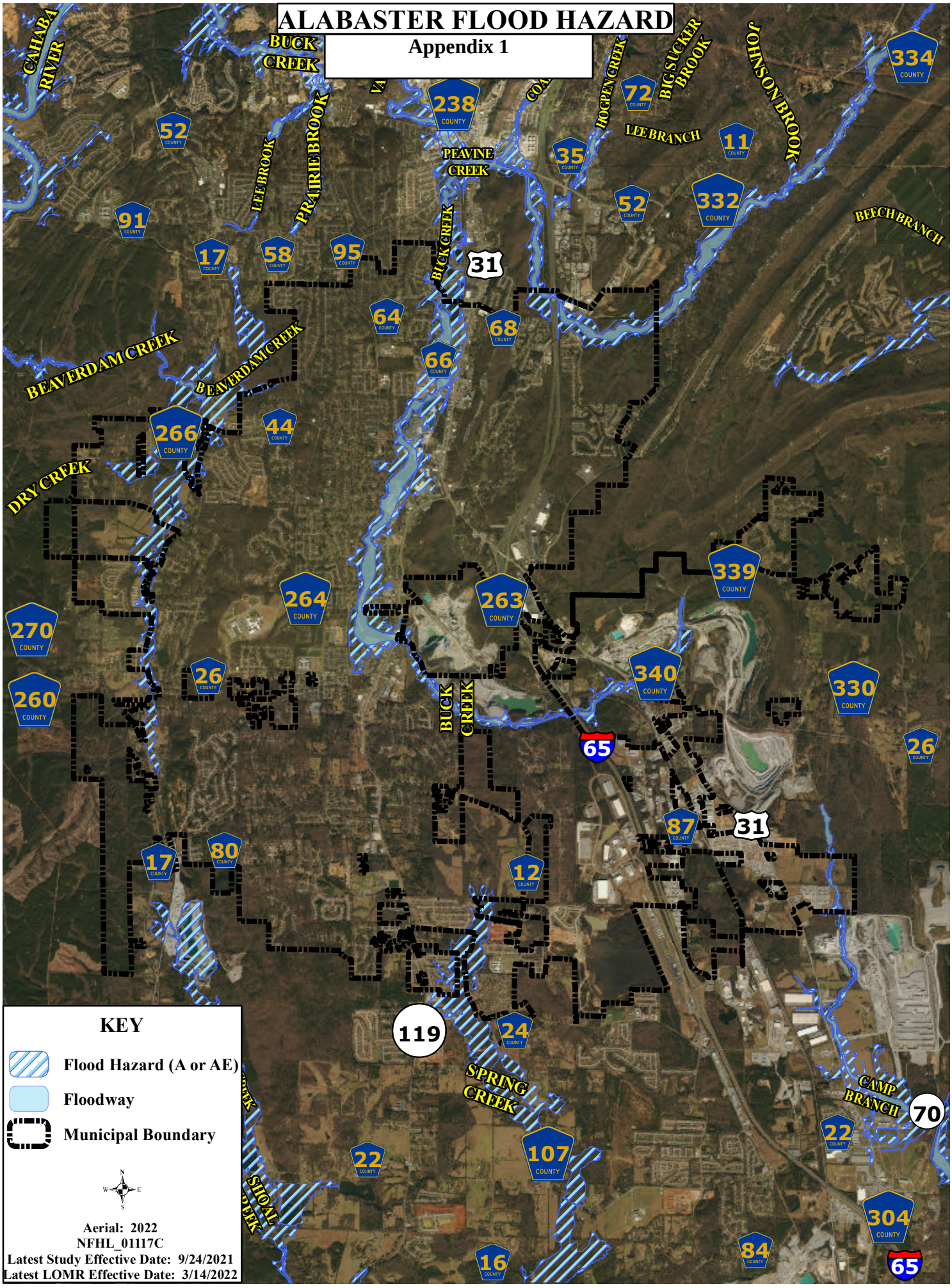
November 19, 2008, a controlled burn of 100 or more acres will take place Thursday in Oak Mountain State Park. From time to time, undergrowth in state parks is burned to help prevent forest fires, said Forrest Bailey, chief of the Natural Resources Section for the State Parks Division of the Department of Conservation and Natural Resources.

July 15-19, 2000, Firefighters in Shelby County continued to fight blazes that have burned 1,200 acres of forests and started to threaten some homes. The fires stretched from Oak Mountain to Harpersville, including blazes in the Chelsea Game Preserve. The Shelby County fires finally contained Forest fires in Shelby County were contained after1, 800 acres had been burned in Chelsea near U.S. 280.

April 3, 2007, Arson appears to be the cause of 10 brush fires near the Chelsea Park subdivision in the past six months, according to the Alabama Forestry Commission. Chelsea has become "one of our biggest problem areas" for forest fires, said Brad Lang, the Shelby County manager for the commission. There have been 12 forest fires there in the past six months, and 10 appear to have been intentionally set, Lang said. Nearly 100 acres have been burned.

ALABASTER FLOOD HAZARD

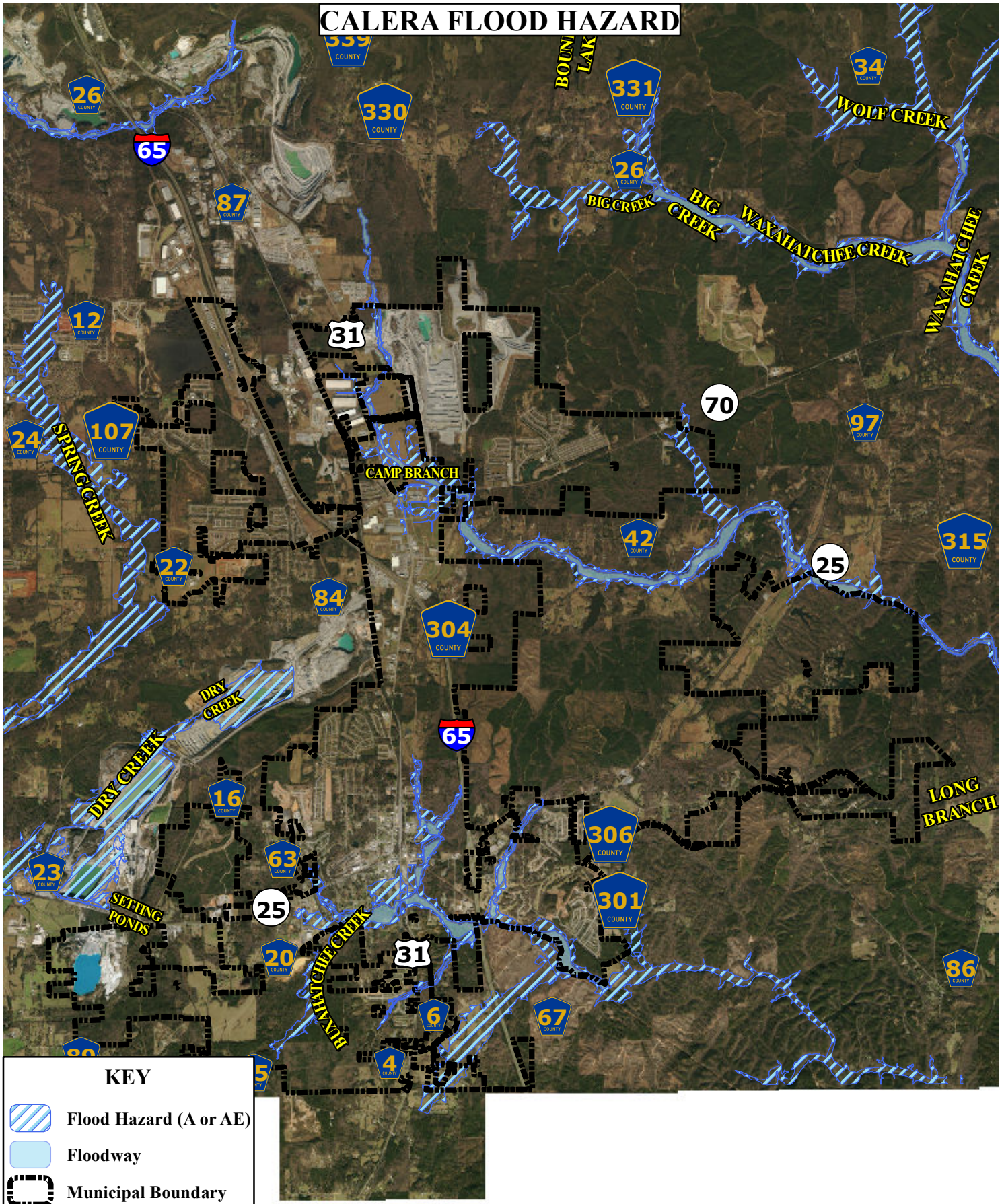
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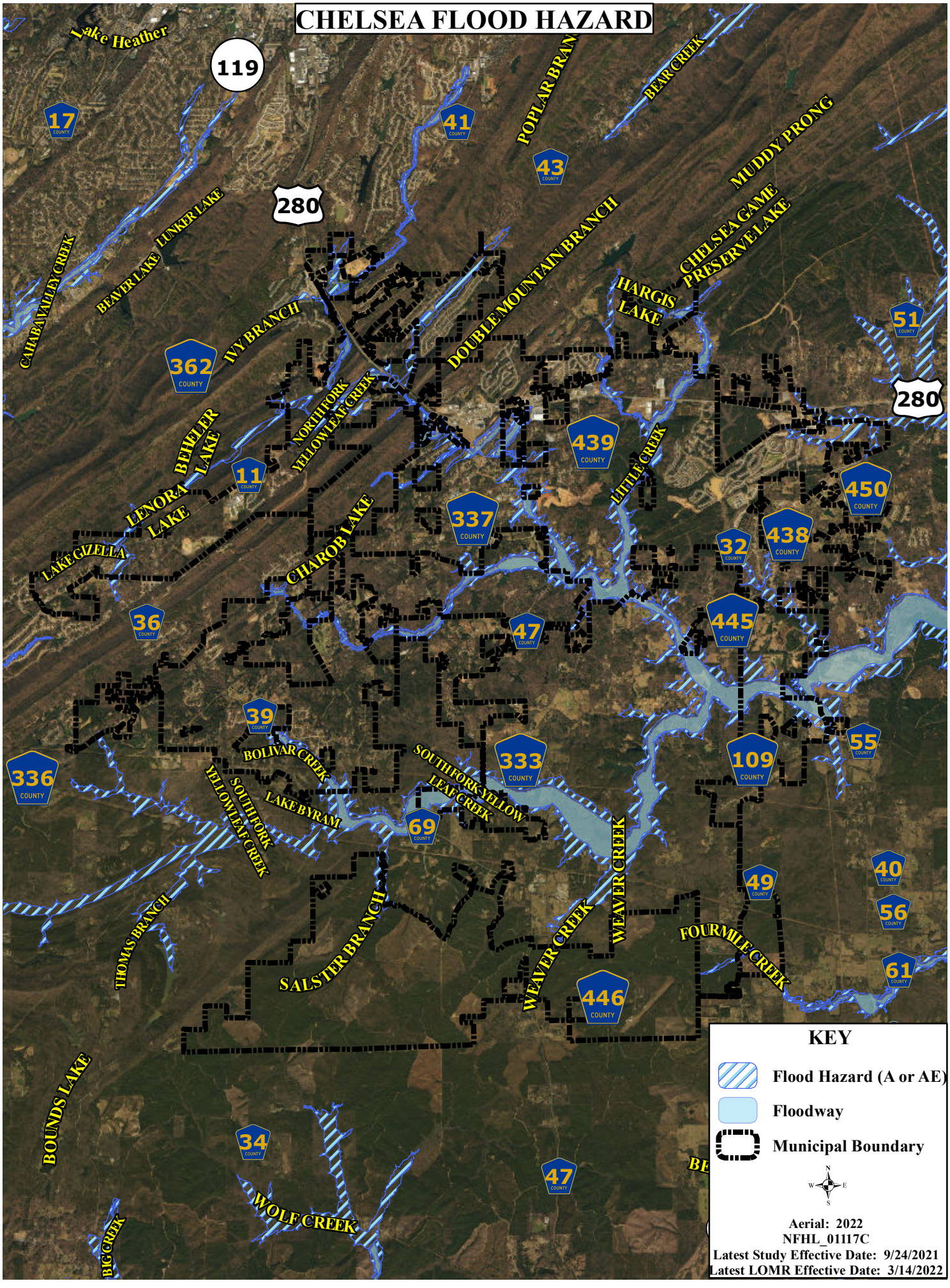


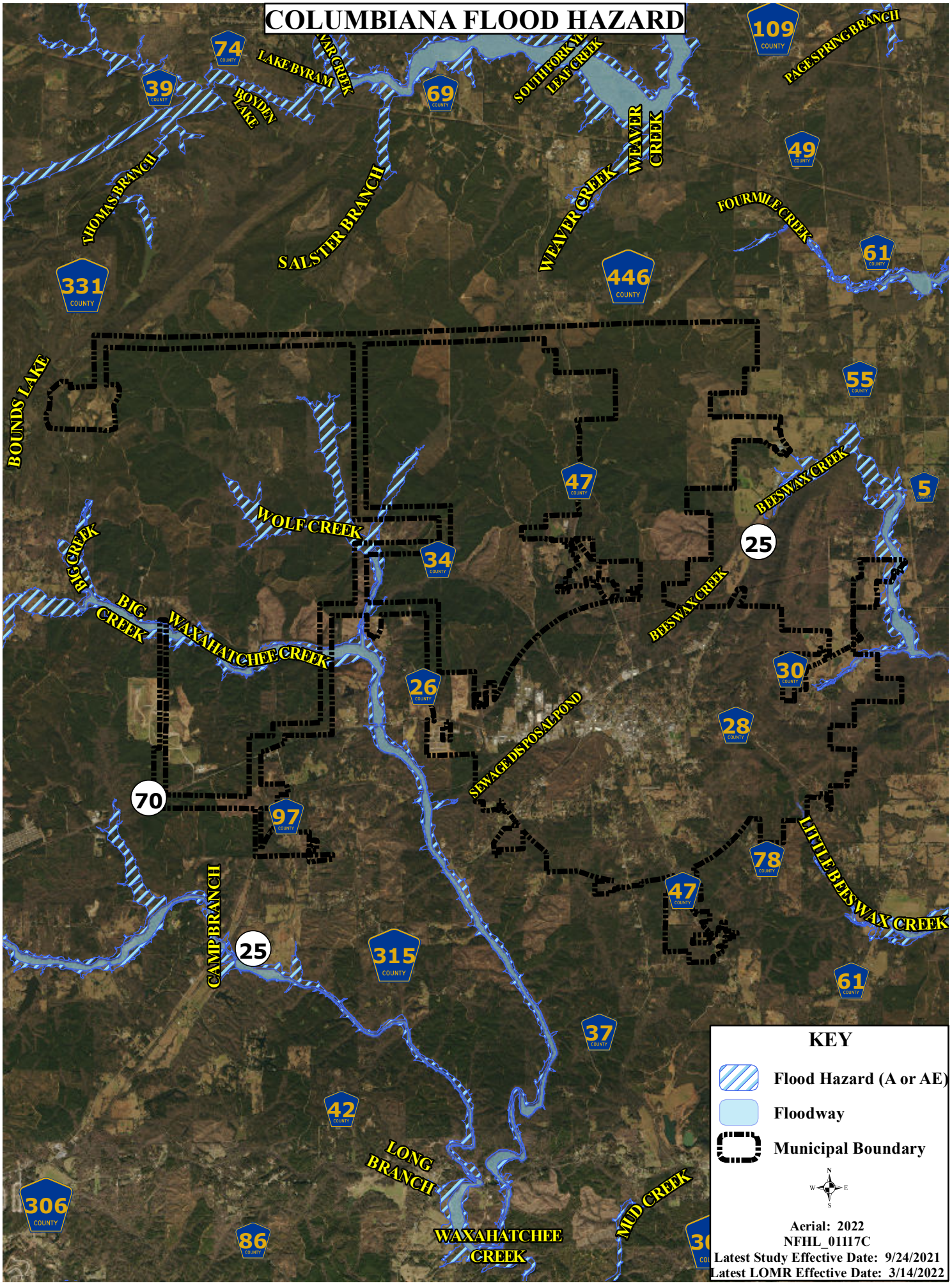
KEY

- Flood Hazard (A or AE)
- Floodway
- Municipal Boundary

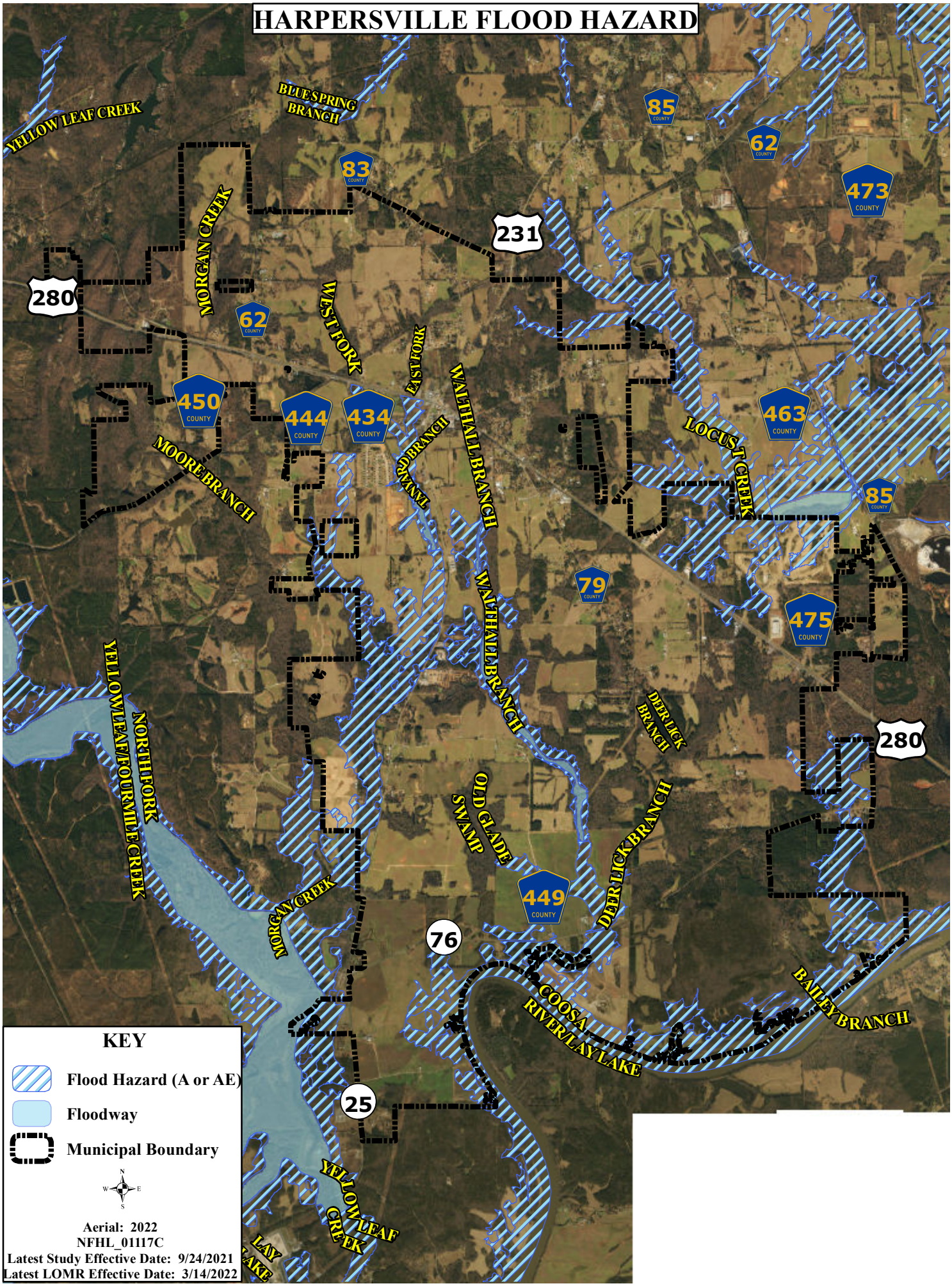
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Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022


CALERA FLOOD HAZARD
339 COUNTY
BOUN LAK
331 COUNTY
34 COUNTY
WOLF CREEK
26 COUNTY
330 COUNTY
65
87 COUNTY
26 COUNTY
BIG CREEK
BIG CREEK
WAXAHATCHEE CREEK
WAXAHATCHEE CREEK
12 COUNTY
31
70
97 COUNTY
24 COUNTY
107 COUNTY
SPRING CREEK
CAMP BRANCH
42 COUNTY
315 COUNTY
25
22 COUNTY
84 COUNTY
304 COUNTY
DRY CREEK
DRY CREEK
65
16 COUNTY
LONG BRANCH
306 COUNTY
63 COUNTY
23 COUNTY
SETTING PONDS
25
301 COUNTY
20 COUNTY
BUXAHATCHEE CREEK
31
86 COUNTY
6 COUNTY
67 COUNTY
4 COUNTY
KEY
Flood Hazard (A or AE)
Floodway
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Aerial: 2022
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Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022


CHELSEA FLOOD HAZARD
Lake Heather
119
17
41
43
280
POPLAR BRANCH
BEAR CREEK
MUDDY PRONG
CHELSEA GAME PRESERVE LAKE
HARGIS LAKE
DOUBLE MOUNTAIN BRANCH
LUNKER LAKE
BEAVER LAKE
CAHABA VALLEY CREEK
IVY BRANCH
362
51
280
NORTH FORK YELLOWLEAF CREEK
BEHELER LAKE
LENORA LAKE
11
439
LITTLE CREEK
450
337
438
32
CHAROB LAKE
LAKE GIZELLA
36
47
445
39
55
BOLIVAR CREEK
333
109
336
SOUTH FORK YELLOWLEAF CREEK
SOUTH FORK YELLOW LEAF CREEK
LAKE BYRAM
69
40
49
56
THOMAS BRANCH
SALSTER BRANCH
WEAVER CREEK
WEAVER CREEK
FOUR MILE CREEK
61
446
BOUNDS LAKE
34
47
WOLF CREEK
BIG CREEK
KEY
Flood Hazard (A or AE)
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COLUMBIANA FLOOD HAZARD
74
LAKE BYRAM
BOYDEN LAKE
39
69
SOUTH FORK WEAVER CREEK
109
PAGE SPRING BRANCH
49
WEAVER CREEK
THOMAS BRANCH
SALSTER BRANCH
FOURMILE CREEK
61
331
446
BOUNDS LAKE
55
47
BEESWAX CREEK
5
WOLF CREEK
34
25
BIG CREEK
BIG CREEK
WAXAHATCHEE CREEK
BEESWAX CREEK
30
26
28
SEWAGE DISPOSAL POND
70
97
78
LITTLE BEESWAX CREEK
47
CAMP BRANCH
25
315
61
37
42
LONG BRANCH
306
86
WAXAHATCHEE CREEK
MUD CREEK
KEY
Flood Hazard (A or AE)
Floodway
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HARPERSVILLE FLOOD HAZARD

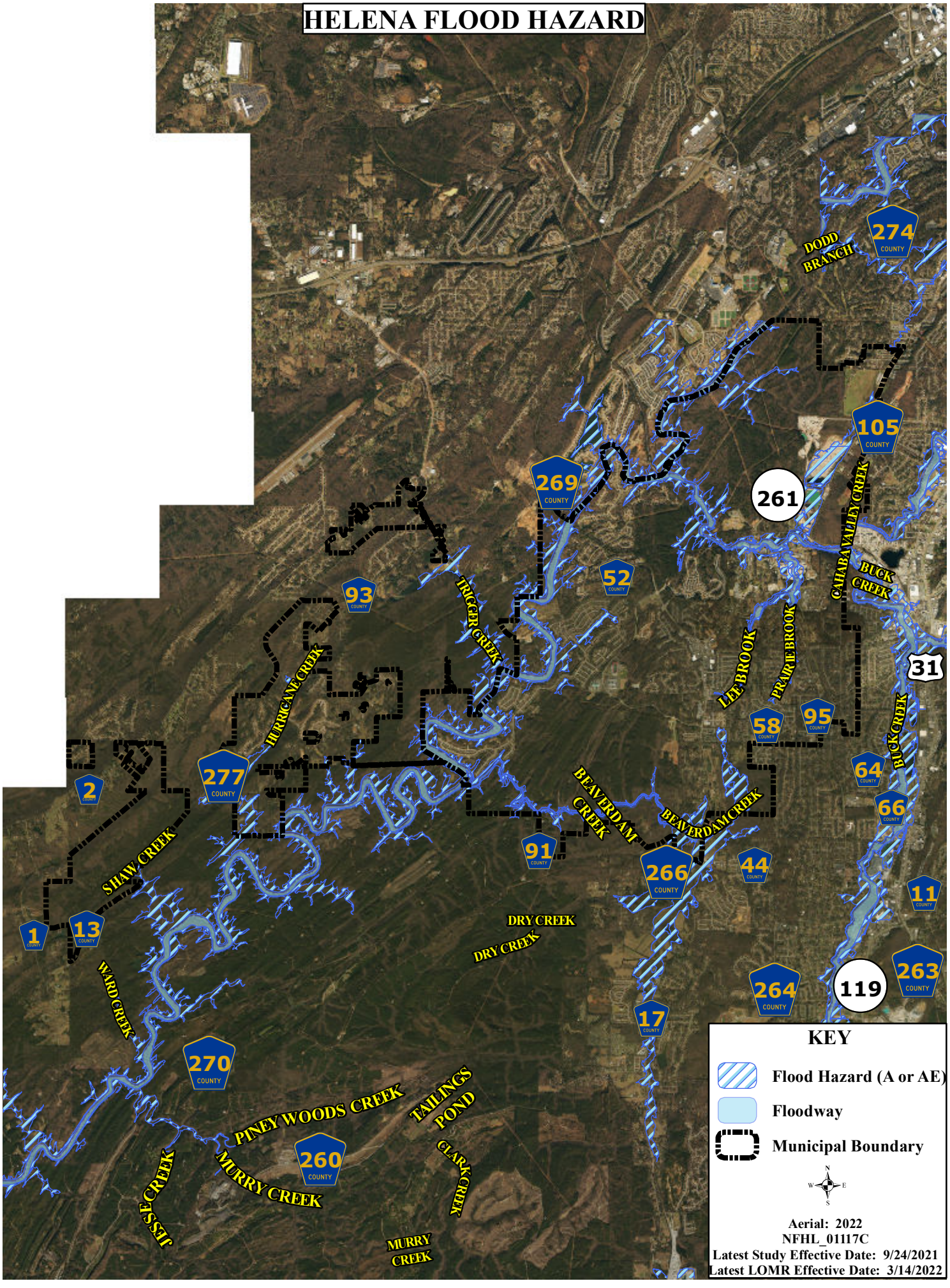


KEY

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- Floodway
- Municipal Boundary

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Latest LOMR Effective Date: 3/14/2022

HELENA FLOOD HAZARD

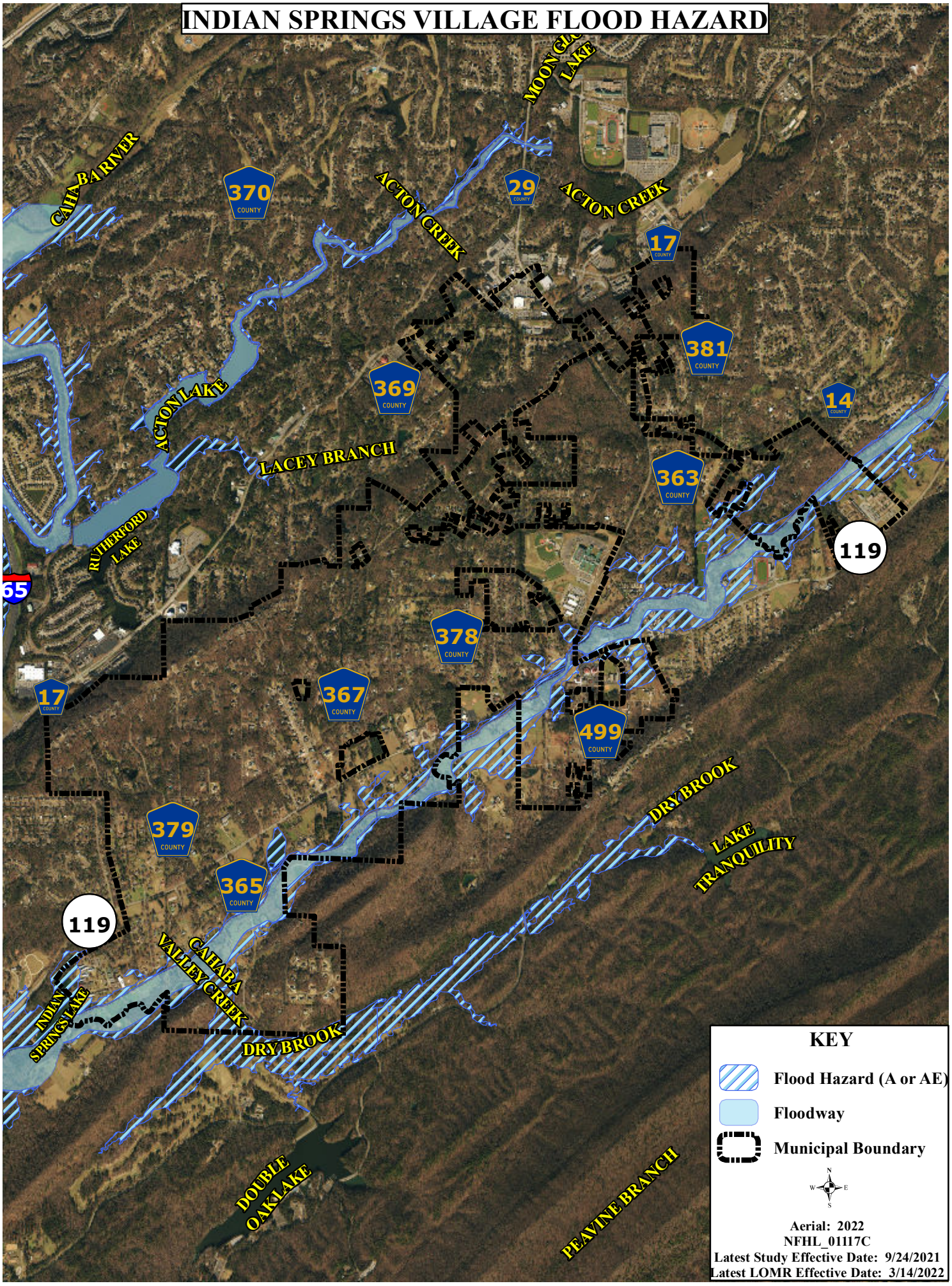


KEY

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- Floodway
- Municipal Boundary

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Latest LOMR Effective Date: 3/14/2022

INDIAN SPRINGS VILLAGE FLOOD HAZARD

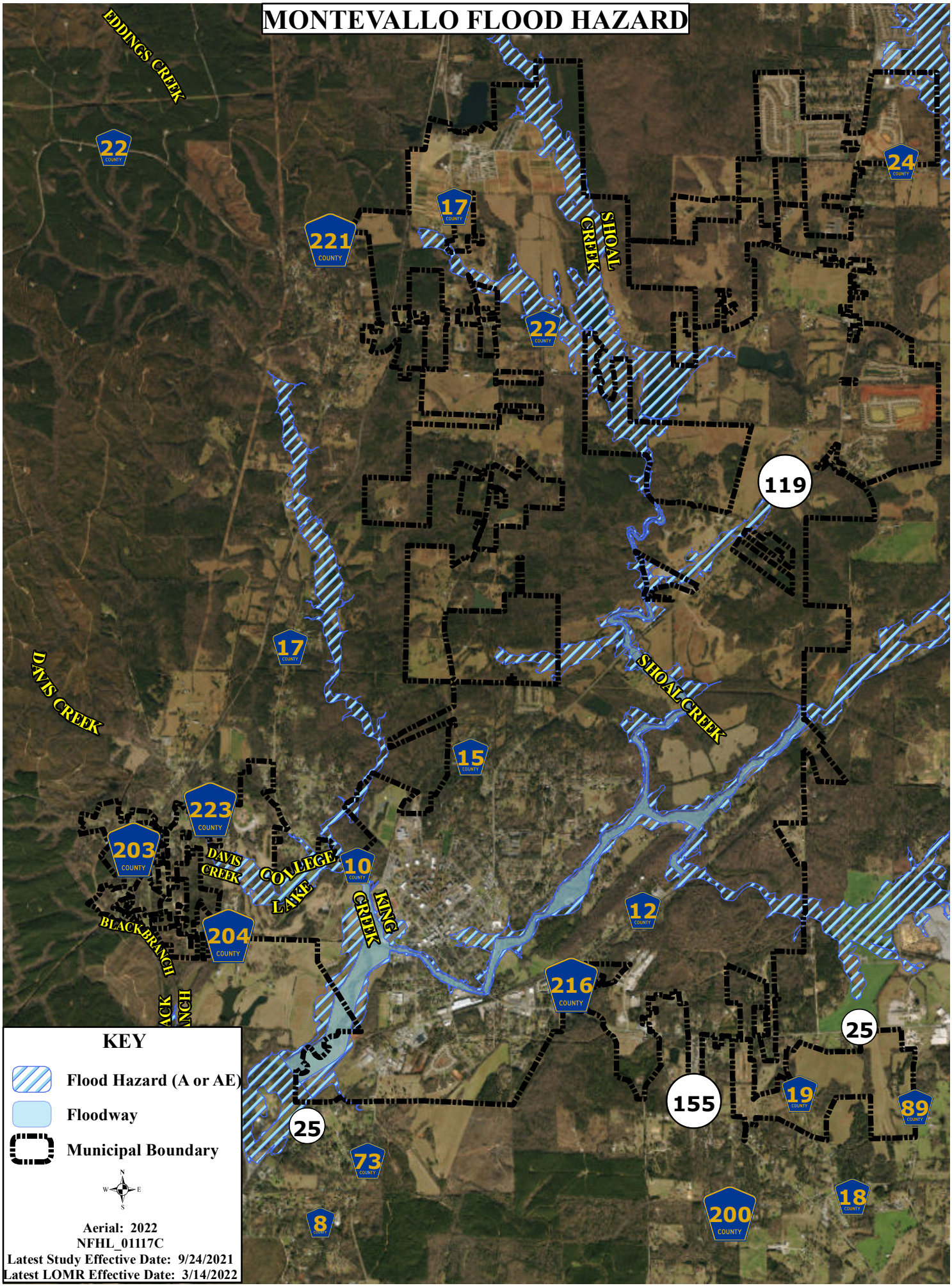


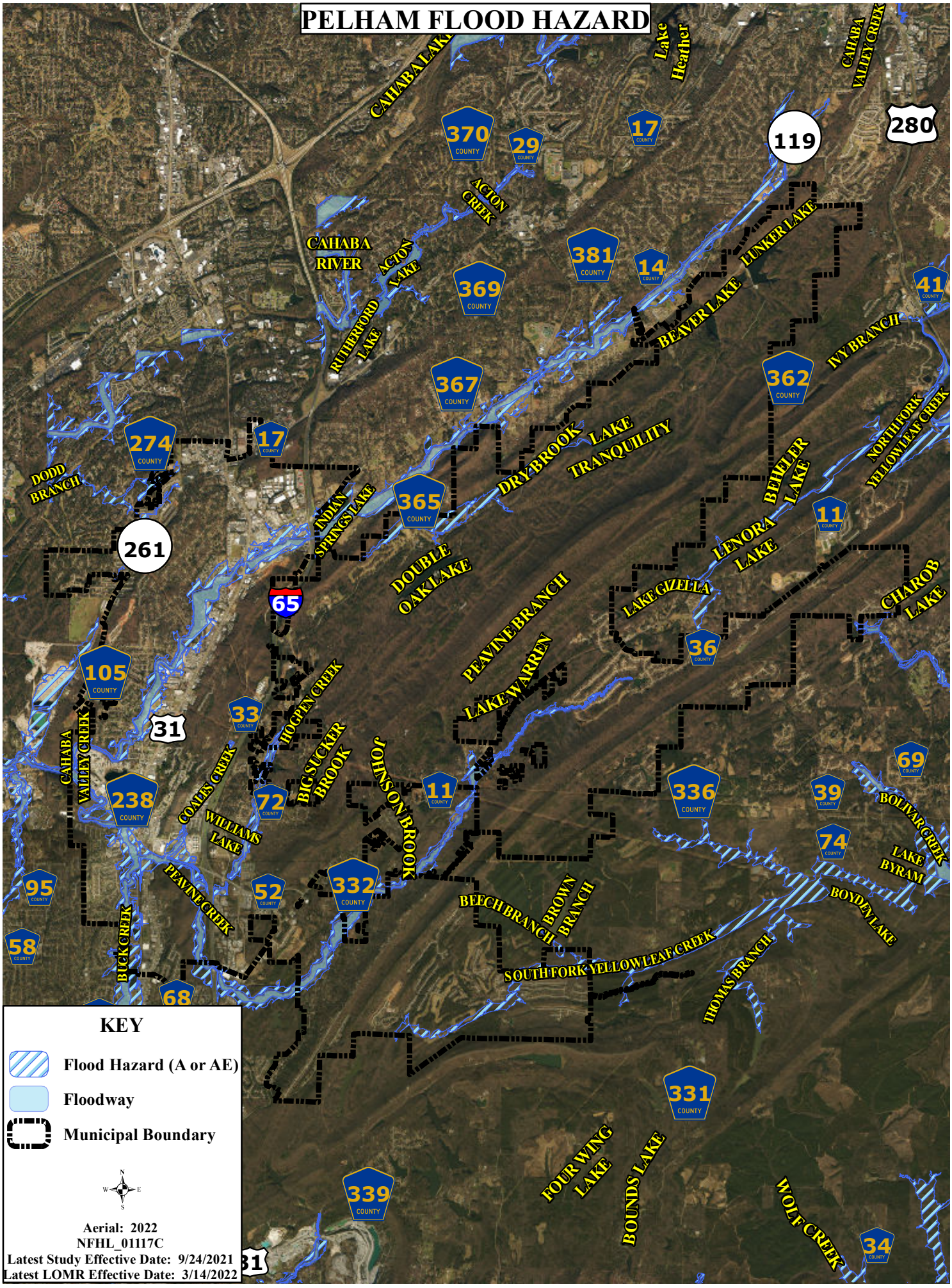
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- Floodway
- Municipal Boundary

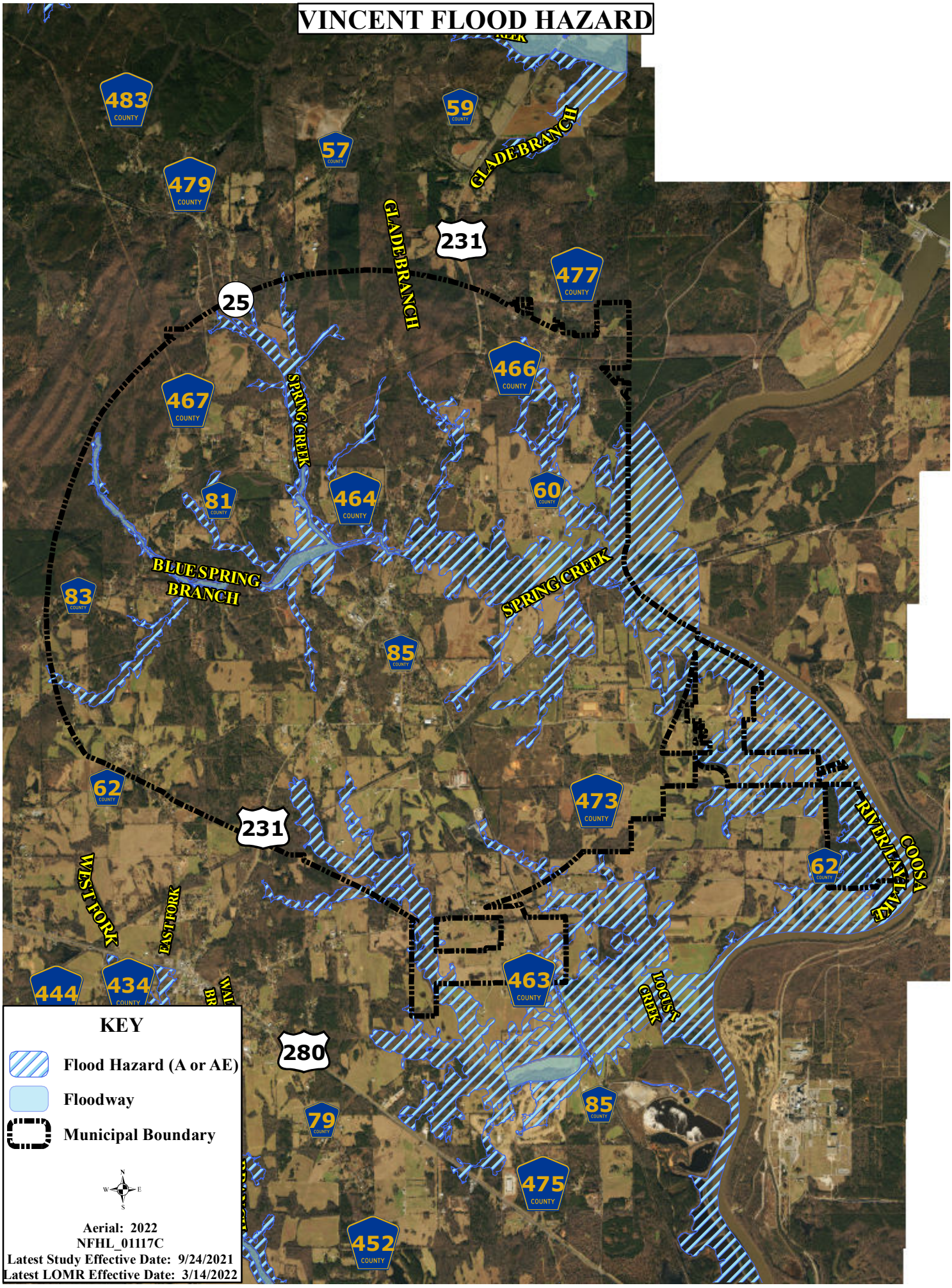
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MONTEVALLO FLOOD HAZARD
EDDINGS CREEK
DAVIS CREEK
SHOAL CREEK
SHOAL CREEK
DAVIS CREEK
COLLEGE LAKE
KING CREEK
BLACK BRANCH
22
221
17
22
24
119
17
15
223
203
10
204
12
216
25
155
19
89
25
73
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200
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KEY
Flood Hazard (A or AE)
Floodway
Municipal Boundary
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Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
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PELHAM FLOOD HAZARD
CAHABA LAKE
Lake Heather
CAHABA VALLEY CREEK
370 COUNTY
29 COUNTY
17 COUNTY
119
280
ACTON CREEK
CAHABA RIVER
ACTON LAKE
381 COUNTY
14 COUNTY
LUNKER LAKE
369 COUNTY
RUTHERFORD LAKE
BEAVER LAKE
41 COUNTY
IVY BRANCH
367 COUNTY
362 COUNTY
274 COUNTY
17 COUNTY
DODD BRANCH
DRY BROOK
LAKE TRANQUILITY
NORTH FORK YELLOW LEAF CREEK
BEHELER LAKE
INDIAN SPRINGS LAKE
365 COUNTY
11 COUNTY
261
LENORA LAKE
DOUBLE OAK LAKE
65
LAKE GIZELLA
CHAROB LAKE
PEAVINE BRANCH
36 COUNTY
105 COUNTY
LAKE WARREN
HOGPEN CREEK
33 COUNTY
31
CAHABA VALLEY CREEK
BIG SUCKER BROOK
JOHNSON BROOK
11 COUNTY
336 COUNTY
69 COUNTY
39 COUNTY
238 COUNTY
COALES CREEK
72 COUNTY
WILLIAMS LAKE
BOLIVAR CREEK
74 COUNTY
LAKE BYRAM
95 COUNTY
PEAVINE CREEK
52 COUNTY
332 COUNTY
BEECH BRANCH
BROWN BRANCH
BOYDEN LAKE
58 COUNTY
BUCK CREEK
SOUTH FORK YELLOW LEAF CREEK
THOMAS BRANCH
68
331 COUNTY
FOUR WING LAKE
BOUNDS LAKE
339 COUNTY
WOLF CREEK
34 COUNTY
31
KEY
Flood Hazard (A or AE)
Floodway
Municipal Boundary
N
W
E
S
Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022

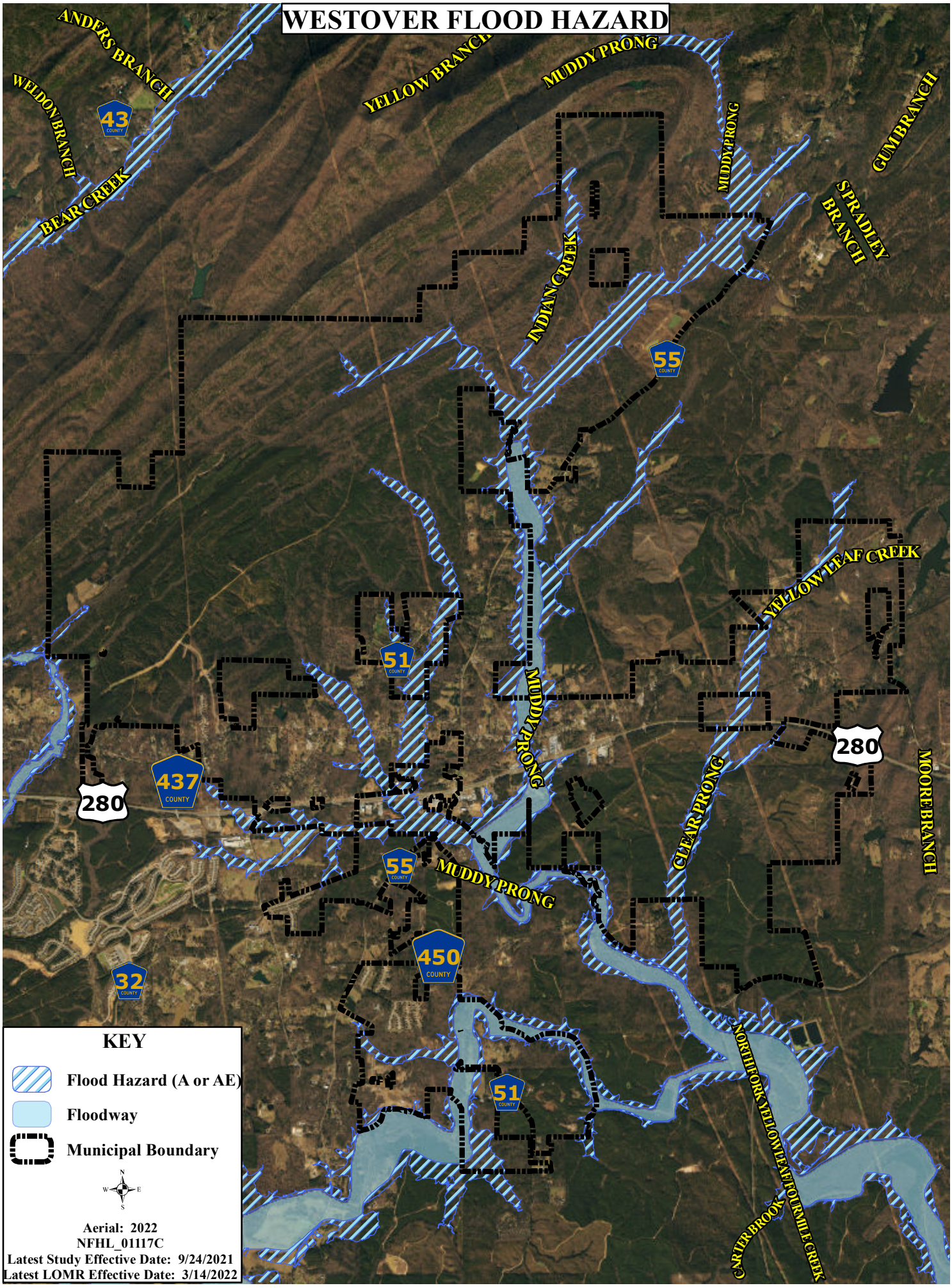
VINCENT FLOOD HAZARD



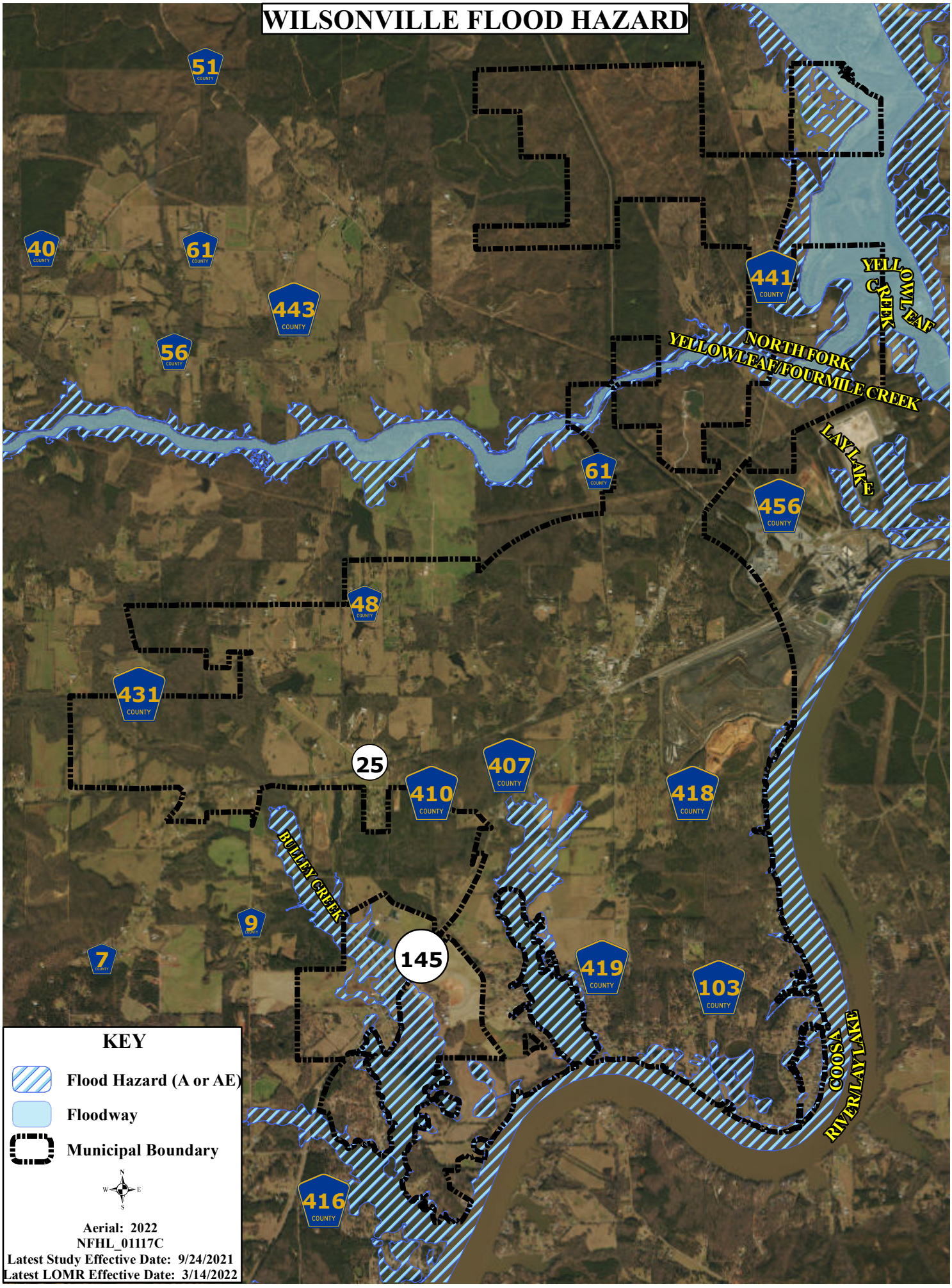
KEY

- Flood Hazard (A or AE)
- Floodway
- Municipal Boundary

Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022


WESTOVER FLOOD HAZARD
ANDERS BRANCH
WELDON BRANCH
BEAR CREEK
YELLOW BRANCH
MUDDY PRONG
MUDDY PRONG
GUM BRANCH
SPRADLEY BRANCH
INDIAN CREEK
YELLOW LEAF CREEK
MUDDY PRONG
CLEAR PRONG
MOORE BRANCH
MUDDY PRONG
NORTH FORK YELLOW LEAF
FOUR MILE CREEK
CARTER BROOK
43
55
51
437
280
55
450
32
51
280
KEY
Flood Hazard (A or AE)
Floodway
Municipal Boundary
N
W
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Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022

WILSONVILLE FLOOD HAZARD

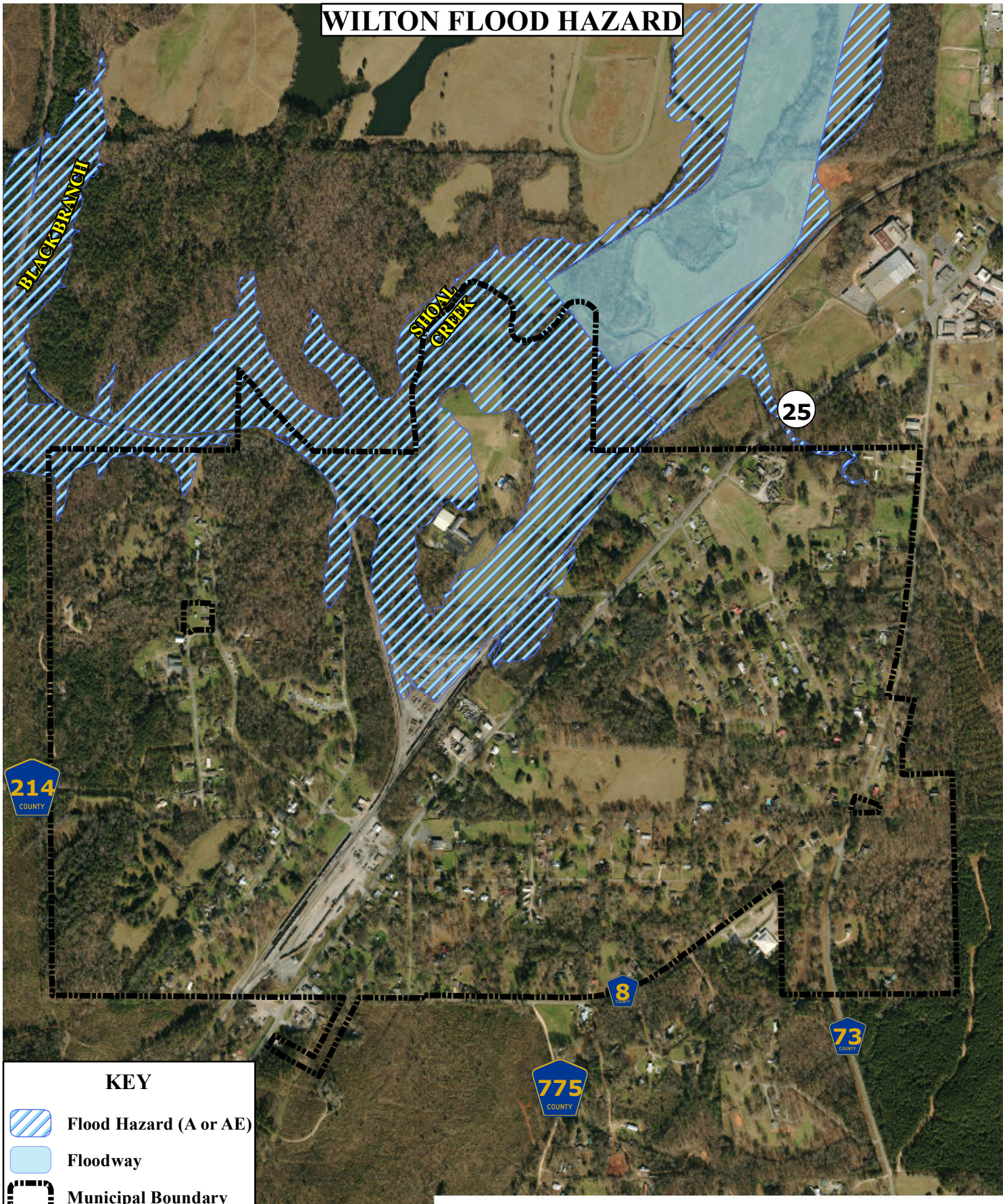


KEY

- Flood Hazard (A or AE)
- Floodway
- Municipal Boundary

Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022

WILTON FLOOD HAZARD



KEY

- Flood Hazard (A or AE)
- Floodway
- Municipal Boundary

N
W E
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Aerial: 2022
NFHL_01117C
Latest Study Effective Date: 9/24/2021
Latest LOMR Effective Date: 3/14/2022

SECTION 6
RISK ASSESSMENT – ASSESSING VULNERABILITY

6.1 INTRODUCTION

This Vulnerability Assessment Section provides a vulnerability summary and builds upon the information provided in the hazard profile section. This section summarizes the historic hazards and identifies community assets and development trends in Shelby County, then assesses the potential impact and amount of damage that could be caused by each hazard event.

6.1.1 2022 Plan Update

The below table documents the hazards included in the 2016 plan and their disposition in Section 6 of the 2022 mitigation plan update.

Table 6.1 2016 Mitigation Plan Hazards/2022 Updated Plan Hazard Status

2022 Hazard	Exp	Risk/Threat	2016 Plan Status	2022 Updated Plan Status
Drought	Yes	Moderate Slight	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Earthquake	Yes	Low Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Extreme Temperature	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Flooding	Yes	Moderate High	Identified as tropical Storms/Hurricanes, Thunderstorms, Dam/Levee Failure, profiled and detailed vulnerability assessment	Identified/profiled some vulnerability assessment
Hail	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
High Winds	Yes	High High	Identified as tropical Storms/Hurricanes, Thunderstorms, Tornadoes, profiled and detailed vulnerability assessment	Identified/profiled some vulnerability assessment
Ice/Snow Storms	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Land Subsidence	Yes	Moderate Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Landslides Mudslides	Yes	Low Minimal	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Lightning	Yes	Moderate Low	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Wildfires	Yes	Moderate Moderate	Identified/profiled some vulnerability assessment	Identified/profiled some vulnerability assessment
Urban Fires	Yes	Moderate Moderate	Not Included	Identified/profiled some vulnerability assessment

Exp = Exposure, Risk = Probability of Occurrence, Threat = Impact on loss of life and property damage

6.2 ASSESSING VULNERABILITY METHODOLOGY

The vulnerability findings in this section result in an approximation of vulnerability. These estimates should be used to understand relative vulnerability from hazards and the potential losses that may be incurred, however, uncertainties are inherent in loss estimation methodology, arising from incomplete scientific knowledge concerning specific hazards and their effects on the environment, incomplete data, and from approximations and simplifications that are necessary to provide a meaningful analysis. Further, most data used in this assessment covers relatively short periods of records which increases the uncertainty of any statistically based analysis.

To complete the assessment, each participating entity provided the best available local data. Shelby County Emergency Management then collected data from a variety of sources, including state and federal agencies. Additional work will be done on an ongoing basis to enhance, and further improve the accuracy of the baseline established here. It is expected that this vulnerability assessment will continue to be refined through future plan updates as new data and loss estimation methods or tools become available.

Two distinct methodologies were applied to assess the risk for Shelby County. The first includes qualitative analysis that relies more on local knowledge and rational decision-making. This qualitative methodology was described in the hazards profile section. The second methodology, a quantitative analysis utilizes data from a detailed GIS-based approach using best available local data from Shelby County. When combined with qualitative methodology the results are an assessment of potential hazard losses (in dollars). Future updates to the plan will fully utilize HAZUS-MH. Both methodologies rely upon best available data and technology. The methodologies are combined to create a “hybrid” approach for assessing hazard vulnerability for Shelby County that allows for some degree of quality control and assurance.

6.2.1 Hazard Event Disaster Declarations

When major damage from a natural disaster occurs, FEMA, as a matter of practice, includes a "buffer" area of adjoining counties in the event it later determines the damage was more widespread. Shelby County has been included in a total of 7 federal disaster declarations from 2016 through 2022. All of these events did not necessarily occur within the boundaries of Shelby County. The table below identifies those declarations and the economic relief provided.

Table 6.2 Shelby County Disaster Declaration Economic Relief

Date	Declaration Number	Hazard Incident	Economic Relief Amount	Economic Relief Source
09/18/17	3389	Hurricane Irma		FEMA
10/6/17	3394	Hurricane Nate		FEMA
01/20/20	3472	COVID-19		FEMA
09/14/20	3545	Hurricane Sally		FEMA
01/20/20	4503	COVID-19 Pandemic		FEMA
03/25/21	4596	Severe Storms		FEMA
10/6/21	4632	Severe Storms/Flooding		FEMA

In addition to the federally declared disasters for Shelby County, the HMPC also created a listing of disasters the county has experienced since 2009. These disasters are listed in the table below.

Table 6.3 Shelby County Disasters w/o A Declaration		
Disaster	**Date**	**Comments**
Winter Storm	1/28/14	Snow storm with 1-inch accumulation fell on already frozen ground causing icy roads and closed roads county & area wide. Thousands of motorists stranded and approximately 7,000 students spent overnight in schools.

6.2.2 Hazard Vulnerability Summary

The below table summarizes the historic hazards that have occurred in Shelby County. It should be noted that the data is not completely accurate in the area of assets damaged and the economic loss. The economic loss data was not accurately captured especially in the early years.

Table 6.4 Shelby County Hazard Profile Summary							
Hazard	**Incidents**	**Years**	**Avg./yr.**	**Fatalities**	**Injuries**	**Assets**	**Asset Loss**
Drought	32	63	.50	0	0	0	874,000
Earthquake	17	108	.16	0	0	0	0
Extreme Temperature	14	51	.27	2	2	0	12,267,164
Flooding-/Trop/Tstm	49	81	.60	5	1	0	19,813,501
Hail	133	43	3.09	0	4	0	814,133
High Wind-Trop/Tstm/Tor	189	136	1.38	116	1476	0	40,538,046
Ice/Snow Storm	16	51	.31	0	5	0	1,690,940
Landslides/Mudslides	6	35	.17	0	0	0	0
Land Subsidence	12	41	.29	0	0	0	182,000
Lightning	12	52	.23	0	5	0	528,312
Tsunami	0	0	0	0	0	0	0
Wildfires	1071	18	59.5	0	0	0	14,318,000
Urban Fires	35	15	2.33	18	31	50	22,126,000
Totals	1,586	694	2.28	141	1,517	50	$113,152,096

The Shelby County Hazard Mitigation Committee designed a Qualitative Methodology hazard rating that relies on historical and anecdotal data, community input, and professional judgment regarding historic and projected future hazard event. The qualitative assessment is built around varying degrees and weights of risk values as assigned by the consensus of Shelby County's Hazard Mitigation Steering Committee. The hazard assessment for Shelby County uses a scoring system based on the below table.

Table 6.5 Hazard Qualitative Rating Table						
Category	**0**	**1**	**2**	**3**	**4**	**5**
Fatalities and Injuries	0 fatalities or Injuries	<3 fatalities or injuries	4 to 14 fatalities and injuries	15 to 49 fatalities or Injuries	50 to 99 fatalities or Injuries	>100 fatalities or Injuries
Economic Loss	No Loss	Less than 500K cost	From 500K to 2.9Mil cost	From 3 Mil to 7.9 Mil cost	From 8Mil to 19.9Mil cost	More than $20Mil cost
Area Impacted	Local no evacuation	Local minimal evacuation	Local some evacuation	1 mile some evacuation	1-mile high evacuation	>3 mile and evacuation
Probability of Occurrence	Once every 100+ years	Once every 36 to 99 years	Once every 10 to 35 years	Once every 4 to 9 years	Once every 1 to 3 years	More than once a year
Repetitive Loss	<3	3 to 10	11 to 24	25 to 49	50 to 99	>100

The Hazard Mitigation Committee developed the historic and future hazard profile vulnerability assessment tables using the risk table above by assigning a value (1 through 5). In addition, fatalities and injuries were assigned a weighting factor of 3 and economic loss was assigned a weighting factor of 2.

Table 6.6 Shelby County Historic Hazard Profile Vulnerability Assessment

Hazard Event	Fatality and Injury	Economic Loss	Extent or Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
High Wind	15	10	2	5	5	37	**1**
Urban Fires	12	10	1	5	3	31	**2**
Flooding	6	8	2	4	3	23	**3**
Wildfires	0	8	2	5	5	20	**4**
Extreme Temperature	6	8	0	3	2	19	**5**
Hail	6	4	0	5	1	16	**6**
Ice/Snow Storm	6	4	1	4	1	16	**6**
Lightning	6	2	0	3	2	13	**8**
Drought	0	4	0	3	2	9	**9**
Land Subsidence	0	2	0	4	1	5	**10**
Landslides/Mudslides	0	0	0	3	0	3	**11**
Earthquake	0	0	0	1	0	1	**12**
Tsunami	0	0	0	0	0	0	**13**

The future vulnerability table assumes a single worst-case event and future increases in population and structures

Table 6.7 Shelby County Future Hazard Profile Vulnerability Assessment

Hazard Event	Fatality and Injury	Economic Loss	Extent or Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
High Wind	15	10	2	5	5	37	**1**
Flooding	9	8	3	4	5	29	**2**
Urban Fires	9	8	2	5	4	28	**3**
Earthquake	9	10	5	1	0	25	**4**
Wildfires	6	6	3	5	4	24	**5**
Ice/Snow Storm	6	4	1	4	2	17	**6**
Lightning	6	4	0	3	2	15	**7**
Extreme Temperature	6	2	1	3	2	14	**8**
Hail	3	4	0	5	1	13	**9**
Drought	0	4	0	3	3	10	**10**
Land Subsidence	0	2	1	4	1	8	**11**
Landslides/Mudslides	0	2	1	3	1	7	**12**
Tsunami	0	0	0	0	0	0	**13**

6.3 VULNERABILITY: REPETITIVE LOSS PROPERTIES

The NFIP program tracks properties that file several claims of a certain value over a specific period of time, termed Repetitive Loss Properties (RLP) and Severe Repetitive Loss Properties (SRL).

A RLP as defined by FEMA is an NFIP-insured property that, since 1978 and regardless of any changes in ownership during that period, has experienced any of the following:

- Four or more paid losses in excess of $1,000
- Two paid losses in excess of $1,000 within any rolling 10-year period
- Three or more paid losses that equal or exceed the current value of the insured property (FEMA, 2006).

Repetitive loss properties make up only about 2% of the flood insurance policies currently in force nationally, yet they account for 40 percent of the country's flood insurance claim payments.

The NFIP is concerned with RLPs because structures that flood frequently strain the National Flood Insurance Fund. In fact, the RLPs are the biggest draw on the Fund by not only increasing the NFIP's annual losses and the need for borrowing; but they drain funds needed to prepare for catastrophic flood events. Community leaders and residents are also concerned with the RLP problem because residents' lives are disrupted and may be threatened by the continual flooding.

Insurance market analysts insist that by reducing the number of RLPs, actual flood insurance claims will be reduced, and this will both diminish the upward pressure to raise flood insurance rates and stabilize, in the long run, the financial condition of the NFIP. Since 1978, RLPs across the U.S. have cost the NFIP about $2.7 billion. Although RLPs exist in all 50 states, five states (Louisiana, Texas, Florida, North Carolina, and New Jersey) accounted for 63% of all repetitive loss payments from 1978 through 2004. The majority of existing flood-prone structures are residences (not vacation or income-producing homes) "grand fathered" into the NFIP when the program was created. These properties have been repaired multiple times with subsidized flood insurance claim dollars. FEMA estimates that 90% of RLPs were built prior to December 31, 1974, before the preparation of flood insurance rate maps (FIRM) and building codes that adequately reflected the probability of flooding in special flood hazard areas (SFHA). These older, generally less-safe pre-FIRM buildings were built before flood hazard risks were fully known and not constructed to resist flood waters. Moreover, most of the owners of RLPs pay subsidized rates for flood insurance. FEMA has sought over the years to prioritize RLPs and pursue a variety of insurance and mitigation strategies to stem the disproportionate costs to the NFIP associated with these properties.

The SRL program was created pursuant to Section 1361A of the National Flood Insurance Act of 1968 (or" the Act"), 42 U.S.C. 4102A, as amended by the Bunning-Bereuter-Blumenauer Flood Insurance Reform Act of 2004, Public Law 108-264, with the goal of reducing flood damages to SRL properties. The SRL program provides funding to reduce or eliminate the long-term risk of flood damage to severe repetitive loss residential structures insured under the NFIP. The definition of severe repetitive loss as applied to this program was established in section 1361A of the National Flood Insurance Act, as amended (NFIA), 42 U.S.C. 4102a. An SRL property is defined as a residential property that is covered under an NFIP flood insurance policy and:

a. That has at least four NFIP claim payments (including building and contents) over $5,000 each, and the cumulative amount of such claims payments exceeds $20,000; or
b. For which at least two separate claims payments (building payments only) have been made with the cumulative amount of the building portion of such claims exceeding the market value of the building.

For both (a) and (b) above, at least two of the referenced claims must have occurred within any ten-year period, and must be greater than 10 days apart.

The long-term goal of the SRL program is to reduce or eliminate NFIP claims. The SRL program will fund mitigation projects, which will result in the greatest savings to the National Flood Insurance Fund (NFIF) in the shortest period of time, based on a Benefit-Cost Ratio (BCR) using Federal Emergency Management Agency (FEMA)-approved methodology to conduct the Benefit-Cost Analysis (BCA).

Participation in this program is voluntary. The SRL program differs from other FEMA mitigation grant programs in that those property owners who decline offers of mitigation assistance will be subject to increases in their insurance premium rates.

In order for local jurisdictions to qualify for hazard mitigation assistance through the Flood Mitigation Assistance Program (FMA), local hazard mitigation plans must include documentation in its mitigation strategy that continued enforcement of applicable flood plain management standards is parts of its strategy to reduce flood losses. In addition, a local mitigation plan must include a section in its risk assessment that describes the source of repetitive flooding problems and identifies the number and type (residential, commercial or governmental) of repetitive loss properties in the jurisdiction. This should include the extent of flood depth and damage potential. The tables below identify Repetitive Loss and Severe Repetitive Loss Properties in Shelby County.

Figure 6.1 Repetitive Loss Properties

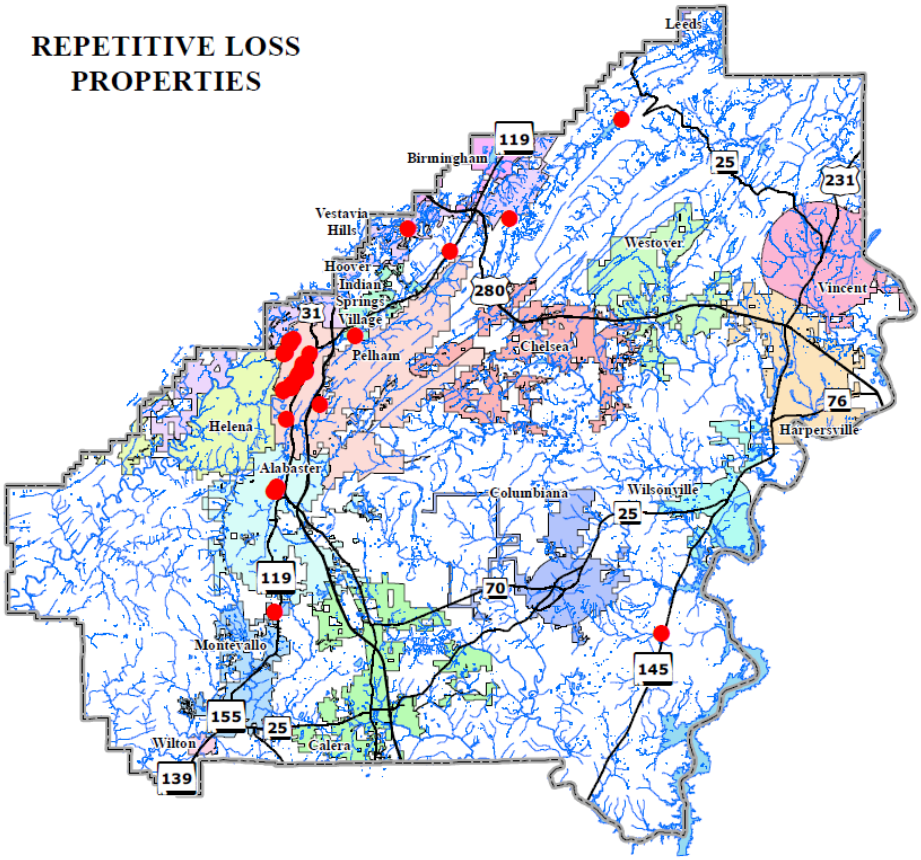


Table 6.8 Total Flood Mitigation Assistance & NFIP Losses by Jurisdiction							
County Name	Occupancy	FMA Repetitive Loss Properties	Insured NFIP Repetitive Loss Properties	Total Paid in Claims on FMA RLP	NFIP Repetitive Loss Properties	Insured NFIP RLP	Total Paid in Claims on NFIP RL Properties
Shelby County	2-4 Family	1	0	$57,558	8	2	$512,783
Shelby County	Busi- Non-residence	0	0	0	7	2	$882,807
Shelby County	Other Residence	0	0	0	2	1	$77,875
Shelby County	Other Non-residence	1	0	$30,186	1	0	$162,416
Shelby County	Single Family	16	4	$1,479,449	82	19	$5,539,013
Total		18	4	$1,567,193	100	24	$7,174,894

Source: Alabama Emergency Management Agency

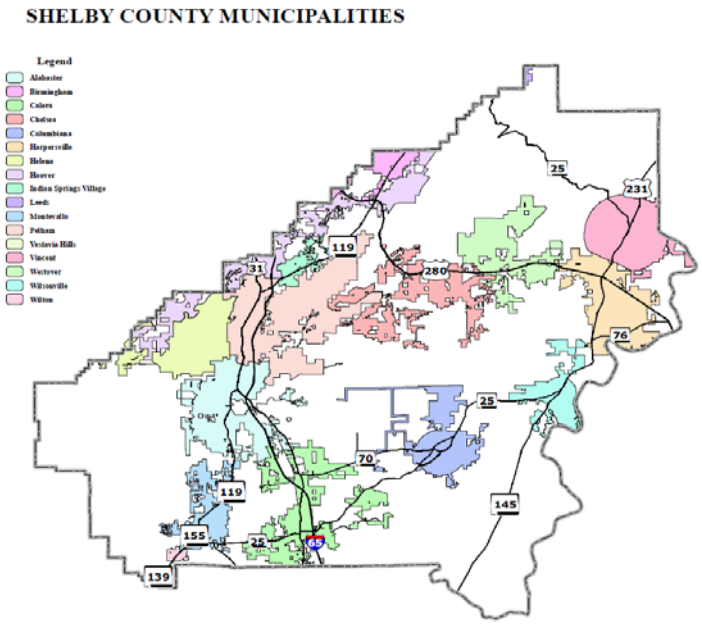
6.4 VULNERABILITY: IDENTIFYING STRUCTURES

According to FEMA, critical facilities and infrastructure are those systems "whose incapacity or destruction would have a debilitating impact on the defense or economic security of that community." These systems include the following eight general categories: telecommunications infrastructure; electrical power systems; gas and oil facilities; banking and finance institutions; transportation networks; water supply systems; government services; and emergency services.

Shelby County does not maintain an active database for critical facilities and infrastructure, although it has begun to build one through its development of GIS capabilities.

All participating municipalities provided the critical facilities and or assets within their communities. Shelby County Emergency management then combined the local jurisdiction information with the county information to identify all critical assets and structures.

Figure 6.2:



The table below is a summary table that is extracted from the detailed tables in the supporting Annex and specifically lists the potentially at-risk buildings or facilities based on the GIS analysis of Shelby County's critical facilities database in combination with the databases Federal and State-owned facilities.

Table 6.9 Participating Jurisdictions Critical Facility Summary

Jurisdiction	Total Facilities	Total Sq. Footage	Total Structure Value
Shelby County	91	4,116,474	$627,836,250
City of Alabaster	56	1,693,670	$246,131,490
City of Calera	34	2,203,164	$50,263,534
City of Chelsea	34	159,200	$21,882,319.82
City of Columbiana	19		$18,488,019
Town of Harpersville	13	1,168,299	$8,915,472
City of Helena	24	118,678	$54,419,688
Town of Indian Springs	7	49,150	$14,465,420
City of Montevallo	24	1,360,699	$338,714,670.24
City of Pelham	30	17,288,818	$54,692,039.28
Town of Vincent	22	1,142,335	$10,750,002
Town of Westover	7	1,018,099	$3,817,764
Town of Wilsonville	9	27,600	$11,293,961
Town of Wilton	6	23,000	$3,662,184.60
Totals	376	30,346,186	$1,465,332,814

6.5 ASSESSING VULNERABILITY: ANALYZING DEVELOPMENT TRENDS

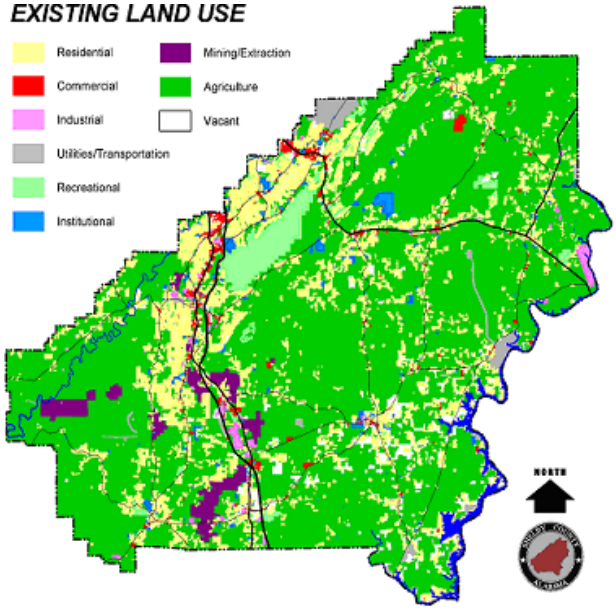
Residential, commercial, and industrial uses are predominant along the I-65 / US Highway 31 and the US Highway 280 corridors from one county line to the other with a heavy residential existing between the two corridors north of Oak Mountain State Park. Intense commercial concentrations occur within these corridors along their northern segments. Although rural in nature, residential uses exist along the State Highway 25 corridor that stretches from Wilton to Leeds with commercial uses centered in the downtowns.

Institutional uses include government properties, religious facilities, and schools. Utilities uses comprise private and public facilities involved with electric, water, and sewer networks as well as transportation facilities such as airports.

Timberlands, a component of Agricultural uses, exist in the western, central, and northeastern areas, and mining of limestone and coal occurs in the southwestern area.

A variety of parks, open space, and recreational opportunities are offered through county, municipal and state facilities including Alabama's largest State park, Oak Mountain State Park.

Figure 6.3 Shelby County Existing Land Use



Beginning with the1996 General Development Plan, Shelby County has committed to approximately $12 million for capital recreation projects at 18 county facilities. For some of these projects, the County has partnered with local municipalities to provide more opportunities for local residents. These parks range in size from large parks as Veterans Park, Heard Mont Park, and Beeswax Park to smaller venues such as Almont Park. Additionally, by partnering with local area organizations through Shelby County's Park & Recreation Grant Program, the county has used its $1.6 million investment to leverage more than $8 Million dollars in 89 park and recreational projects throughout the county. *Source: Shelby County 2004 Comprehensive Plan*

Zoning

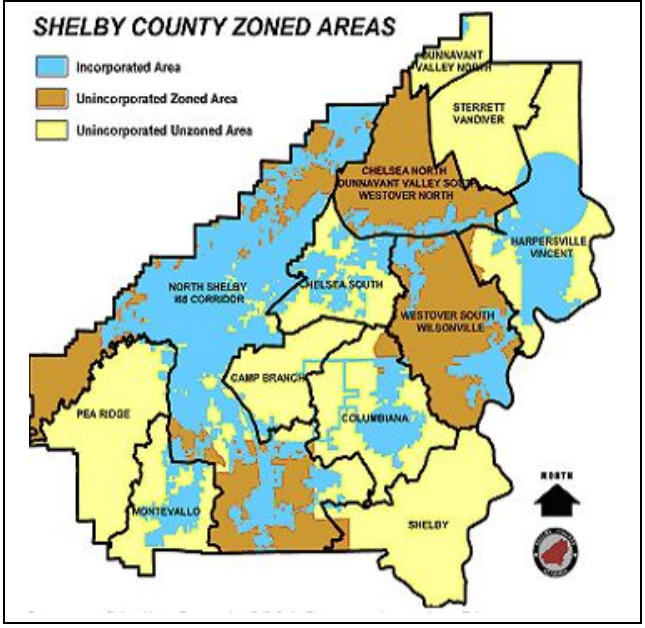
Twelve zoning beats exist within Shelby County. There are approximately 800 square miles in Shelby County, more than 47% of this area is un-zoned, unincorporated as compared to 24% zoned unincorporated. Shelby County's Enabling Legislation and its subsequent amendments authorize the Planning Commission to develop a comprehensive plan and regulations for guiding and accomplishing coordinated, adjusted, and harmonious land development.

In those areas where land use and zoning are available as a tool for growth management, the County lacks the authority to impose fines or penalties of a magnitude sufficient to prevent or reduce violations of development regulations.

A general lack of coordination among the County's 17 municipalities is exacerbated by a tax system that forces municipalities to rely on sales taxes for the bulk of their revenues, resulting in municipalities competing with each other for commercial development.

Municipalities covet commercial development and have liberally interpreted bad annexation statutes in order to "cherry pick" commercial uses while bypassing logically connected low-density residential development. Low-density residential development demands services in excess of the revenues generated, while adding additional voters into the community. The "spider like" pattern of municipal boundaries resulting from such annexation can result in service provision problems, particularly in the area of public safety, and hinders the community's ability to develop a sense of place.

Figure 6.4 Shelby County Zoned Areas



Additionally, growth and development patterns frequently result in the loss of natural landscapes, impose undue burdens upon natural systems & resources beyond sustainable levels, and directly degrade and destroys natural habitat. Such changes also are often accompanied by the creation of previously non-existent problems (e.g., increased flooding, landslides, subsidence, natural wildfires in residential areas).

The incorporated communities not only contain the majority of the county's population but also significant natural resources. Direct involvement in resource management processes by each municipality is strongly encouraged. Resource management is best approached from a countywide or regional perspective. While much of the focus of the ecosystem analysis is related to land and water resources, the area's air quality and inclusion in the Birmingham ozone non-attainment region merit attention. It is a much more difficult task to influence this ecosystem competent factors such as weather and temperature that are not controllable. However, by creating traditional, compact, sustain- able communities through intergovernmental cooperation Shelby County will remain competitive in the global marketplace.

Municipalities and private corporations can provide key infrastructure such as water and sewer, with little or no input from the County and cannot be coordinated and managed under an area wide plan, any efforts to control and redirect the County's development pattern is difficult.

Source: Shelby County 2004 Comprehensive Plan

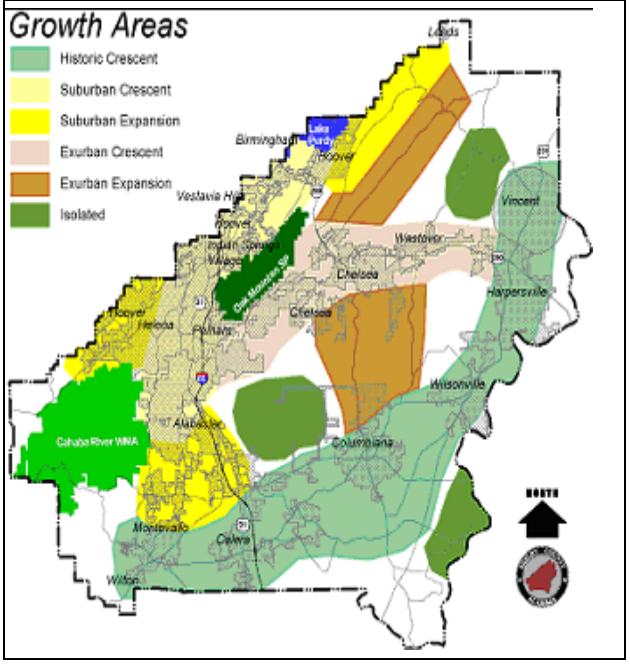
Strategic Land Development

The fundamental idea that underpins the Strategic Development Concept is that the continued development and redevelopment of Shelby County should be organized around a strong, clearly defined framework of identifiable places. This means Shelby County intends to build upon the strength and interrelationship between critical environmental resources and the presence and vitality of the communities within the County.

The Strategic Development Concept of this Comprehensive Plan is based on two fundamental principles: 1. New growth should be targeted to designated development areas following the Community Elements Design Principles so that growth takes place in a controlled manner without spreading into a dispersed, sprawling pattern. 2. Maintaining the Rural Landscape and ensuring the protection of current and future agricultural and forestall land are essential to preserving the heritage and unique character of Shelby County. These principles are achieved through identifying designated development areas and by describing the development appropriate for these areas.

Source: Shelby County 2004 Comprehensive Plan

Figure 6.5 Shelby County Growth Areas



Development Patterns

Development in Shelby County has generally followed major highway corridors. Historical growth followed the State Highway 25 corridor, which forms a southern growth crescent. A northern growth crescent containing the newer suburban development follows the Cahaba Valley southwest and down the U.S. Highway 31/Interstate 65 corridors to the Maylene area. The Town of Chelsea and the City of Columbiana occupy the center of two crosses of emerging development. The fingers of each cross extend outward from the center down the major transportation corridors of County Road 47, County Road 43, U.S. Highway 280, State Highway 70 and shares part of the State Highway 25 corridor.

Development in the Historical Crescent extending from the Town of Vincent southwest to the City of Montevallo contains some of the oldest development in the county. Development in these areas is mostly on acreage in conjunction with agricultural uses. Support services are located in town centers located along State Highway 25. Development in these areas doesn't appear to have a unifying character other than being located off state or county roads.

The Suburban Crescent contains a mix of older, well-established neighborhoods and development commonly associated with the explosive growth in unincorporated north Shelby County, southern part of the City of Alabaster, western part of the Town of Helena and parts of the City of Pelham. The range of age of these developments is almost 30 years with some embedded pockets of older dwellings. They are characterized by mostly ranch type or split level houses with low to moderately steep roof pitches on narrower, non-curbed streets to developments characterized by homes which are larger, and are more vertical with steeper roof pitches with more attention to architectural style. The newer developments (post-1980) are constructed following more rigorous standards for streets and access as required by newly adopted subdivision regulations.

An Exurban Crescent is beginning to emerge along the County Road 11/U.S. Highway 280 corridor with expansion areas north and south along County Roads 43 and 47. These areas contain some of the newest developments (within the last five years) in the county and are often designed to maximize the use of land rather than architectural style. These developments typically follow market trends of smaller more affordable houses on smaller lots although larger, more vertical houses are still common. An unfortunate side effect of this trend toward smaller houses on small lots is the tendency to mass grade large areas.

Several areas of Isolated Development are located near the river or along other secondary County Roads. These areas are still largely undeveloped. *Source: Shelby County 2004 Comprehensive Plan*

6.6 Multi-Jurisdictional Risk Assessment

This multi-jurisdictional plan presents information for the general planning area as a whole. However, some hazards and associated losses occur in only part of the planning area, this information is attributed to the particular jurisdiction in which they occur.

In some instances, individual municipalities in Shelby County have specific vulnerabilities to hazards that differ from the countywide vulnerabilities. This differentiation exists due to factors such as geographic location, topography, geologic differences, and proximity to hazards.

In addition to this summary section, within the discussion of each hazard in the profiles section, there is narrative identifying the specific municipalities or areas of the county that have been affected by hazards, the extent of impact and the probability of future occurrence in Shelby County. The table below summarizes each jurisdiction's specific vulnerability to each identified hazard.

In addition to differing levels of vulnerability to identified hazards; individual municipalities can also suffer significant differences in losses resulting from the impact and extent of a disaster. Generally, these losses are a direct result of population density, commercial development, or housing density and/or value.

Table 6.10 Likelihood Of Potential Hazard Incident Occurring

	Drought	Earthquake	Extreme Temps	Flooding	Hail	High Wind	Ice/Snow	Land subsidence	Landslide	Total	Likelihood
Shelby County	2	3	3	3	2	3	1	1	1	19	**M**
City of Alabaster	1	3	3	3	2	3	1	1	1	8	**M**
City of Calera	1	3	3	2	2	3	1	1	1	17	**M**
City of Chelsea	2	2	2	2	2	3	1	1	1	16	**M**
City of Columbiana	1	2	2	2	2	3	1	1	1	15	**M**
Town of Harpersville	2	2	3	2	2	3	1	1	1	17	**M**
City of Helena	1	2	3	2	2	3	1	1	1	16	**M**
Town of Indian Springs	1	2	2	3	2	3	1	1	1	16	**M**
City of Montevallo	1	2	3	2	2	3	1	1	1	16	**M**
City of Pelham	1	3	3	3	2	3	1	1	1	18	**M**
Town of Vincent	2	2	2	2	2	3	1	1	1	16	**M**
Town of Westover	2	2	2	2	2	3	1	1	1	16	**M**
Town of Wilsonville	2	2	3	2	2	3	1	1	1	17	**M**
Town of Wilton	1	2	3	2	2	3	1	1	1	16	**M**
Total	20	32	37	32	28	42	14	14	14		

Likelihood of occurrence in any single year. Very Likely=3, Likely=2, Possible=1
20-27 total likelihood of hazard occurrence is high, 11-20 total likelihood of hazard occurrence is medium, 0-10 total likelihood of hazard occurrence is low.

Within the discussion of each hazard profile, the narrative identifies those municipalities and specific areas of the county that have increased vulnerability and impact to that hazard and notes the factors contributing to an increased impact or vulnerability. The table below depicts the differing aspects of estimated losses by jurisdiction.

Table 6.11 Impact Of Potential Hazard Incident											
Jurisdiction	Drought	Earthquake	Extreme Temps	Flooding	Hail	High Wind	Ice/Snow	Land subsidence	Landslide	Total	Impact
Shelby County	2	2	2	2	2	3	2	2	2	19	**M**
City of Alabaster	1	2	2	3	2	3	2	2	2	19	**M**
City of Calera	1	2	2	2	2	3	2	2	2	18	**M**
City of Chelsea	2	2	2	2	2	3	2	2	2	19	**M**
City of Columbiana	2	2	2	2	2	3	2	2	2	19	**M**
Town of Harpersville	2	2	2	2	2	3	2	2	2	19	**M**
City of Helena	1	2	2	3	2	3	2	2	2	19	**M**
Town of Indian Springs	1	2	2	2	2	3	2	2	2	18	**M**
City of Montevallo	2	2	2	2	2	3	2	2	2	19	**M**
City of Pelham	1	2	2	3	2	3	2	2	2	19	**M**
Town of Vincent	2	2	2	2	2	3	2	2	2	19	**M**
Town of Westover	2	2	2	2	2	3	2	1	2	18	**M**
Town of Wilsonville	2	2	2	2	2	3	2	2	2	19	**M**
Town of Wilton	2	2	2	2	2	3	2	1	2	18	**M**
Totals	23	28	28	31	28	42	28	26	28		

3 = High – Significant and lasting destructive effect on lives or property
2 = Medium – Moderate destructive effect on lives or property; recovery is takes time and is moderately expensive
1 = Low -Lower magnitude of destructive effect on lives or property; recovery is accomplished in a reasonable period of time and is low cost
20-27-Impact of all hazards is high, 11-19-impact of all hazards is medium, 0-10-Impact of all hazards is low

6.7 Total Population and Property Valuation Summary by Jurisdiction

The data in Table 6.71 is from county and local municipal government and tax valuation from local revenue offices as well as the 2020 Census. This data provides an estimate of total exposure in the planning area.

Table 6.12 Total Population and Property Valuation Summary by Jurisdiction				
Jurisdiction	2020 Total Population	Parcels	Number of Buildings	Total Market Value of Improvements (2021)
Shelby County (Unincorporated)	64,944	32,165	59,335	$9,241,325,020
Alabaster, City of	33,284	12,821	18,960	$3,291,667,980
Calera, City of	16,408	8,180	9,664	$1,714,630,210
Chelsea, City of	14,982	6,866	8,922	$1,832,629,890
Columbiana, City of	4,4462	1,856	3,248	$405,935,860
Harpersville, Town of	1,614	1,242	2,707	$187,104,890
Helena, City of	18,421	7,812	9,295	$1,842,043,940

Indian Springs Village, Town of	2,481	1,034	1,844	$552,550,010
Montevallo, City of	7,229	2,903	4,472	$621,344,660
Pelham, City of	24,318	10,989	13,156	$3,565,868,790
Vincent, Town of	1,982	1,472	2,974	$183,375,860
Westover, Town of	1,766	1,088	1,821	$224,194,690
Wilsonville, Town of	1,857	1,362	2,567	$220,403,200
Wilton, Town of	587	356	721	$29,349,800
Total	**194,335**	**90,144**	**139,686**	**$23,892,424,800**

6.8 Vulnerable Populations

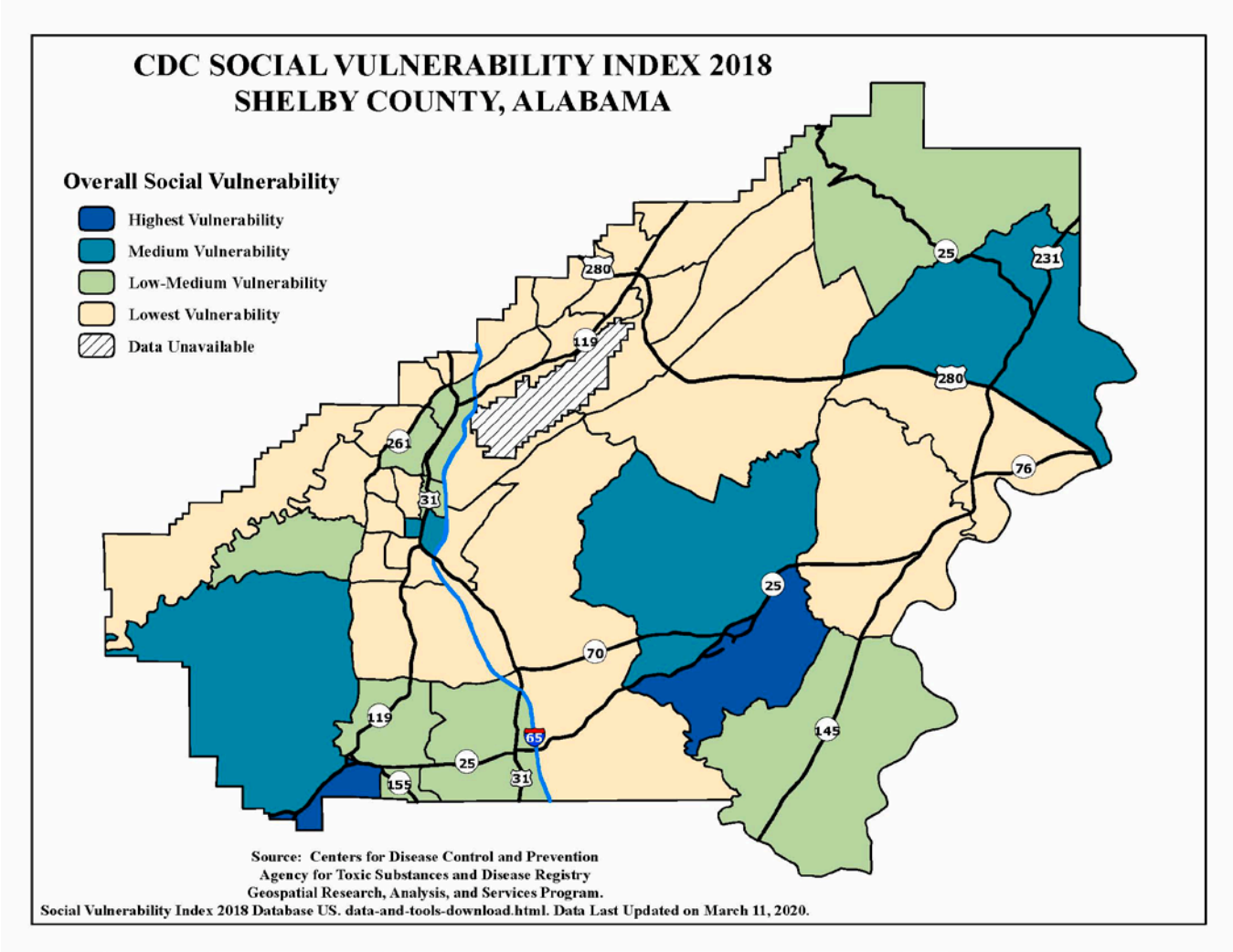
The Centers for Disease Control and Prevention (CDC) and the Agency for Toxic Substances and Disease Registry's (ATSDR) Social Vulnerability Index (CDC/ATSDR SVI) is a database for emergency response planners and public health officials to identify, map and plan support for communities most likely to need support before, during and after a public health emergency. The ATSDR defines Social Vulnerability as, "the resilience of communities (the ability to survive and thrive) when confronted by external stresses on human health, stresses such as natural or human-caused disasters, or disease outbreaks. Reducing social vulnerability can decrease both human suffering and economic loss." Socially vulnerable populations, "include those who have special needs, such as, but not limited to, people without vehicles, people with disabilities, older adults, and people with limited English proficiency."

The CDC/ATSDR SVI ranks census tracts on 15 social factors and groups them into overall vulnerability and four related themes.

OVERALL VULNERABILITY

Shelby County's Overall Social Vulnerability Index ranges from lowest to highest. The highest vulnerability runs along the I-65/US-31 corridor, South Central and Southwest areas of the county. Much of the rest of the county is lowest to medium vulnerability.

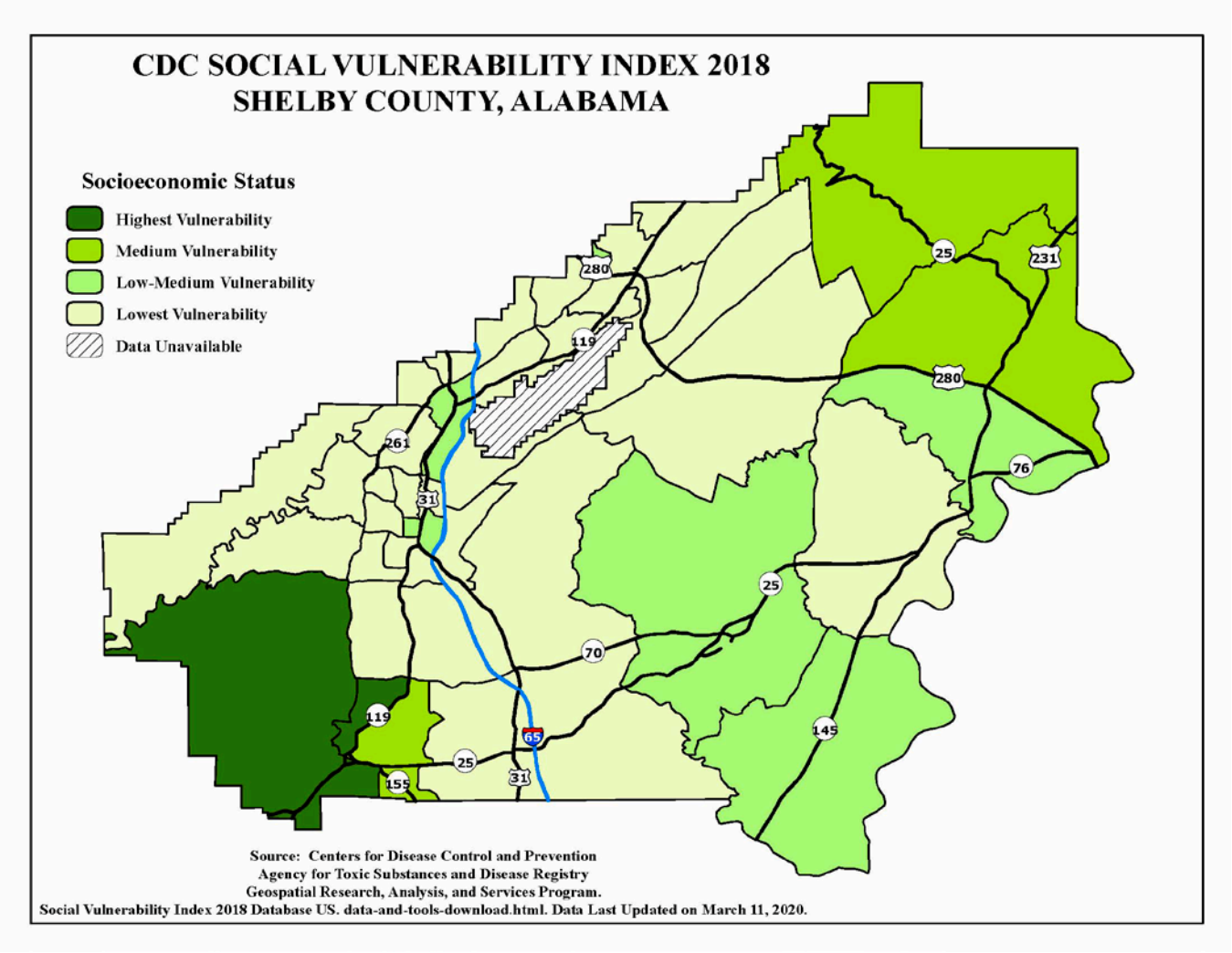
Figure 6.6:



SOCIOECONOMIC STATUS

This theme considers where people live in Shelby County based upon poverty, unemployment, per capita income and lack of a high school diploma. Shelby County ranges from areas with lowest vulnerability to highest, as seen in the map below.

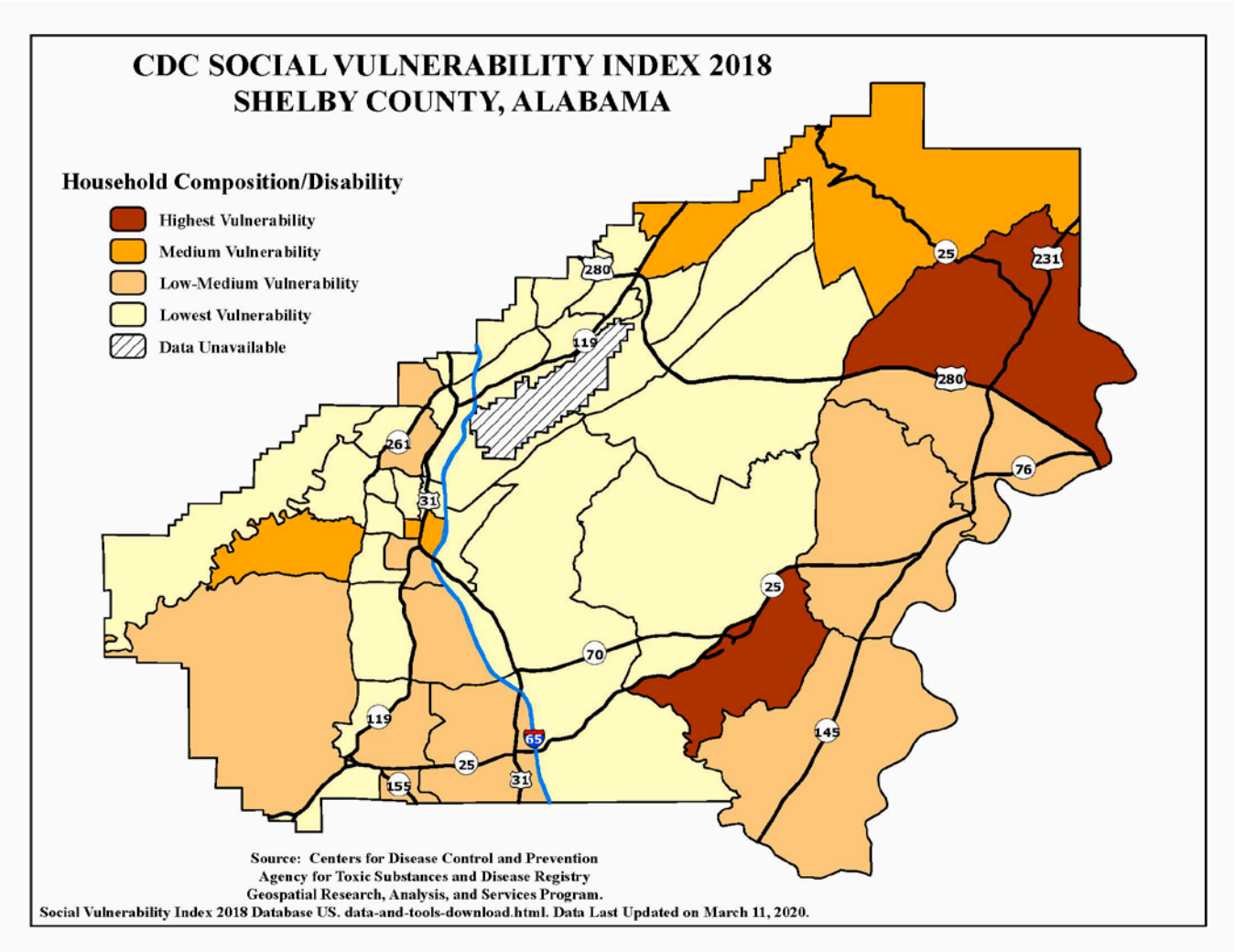
Figure 6.7:



HOUSEHOLD COMPOSITION & DISABILITY

This theme considers where people live the Shelby County based upon persons aged 65 and older, aged 17 or younger, older that 5 with a disability and single parent households. Shelby County ranges from areas with lowest vulnerability to highest. As of the 2019 American Community Survey, 11.3% of our population reported some type of disability with 3.6% reporting hearing difficulty, 1.8% vision difficulty, 4.7% cognitive difficulty, 5.3% ambulatory difficulty, 1.9% self-care difficulty and 4.9% an independent living difficulty.

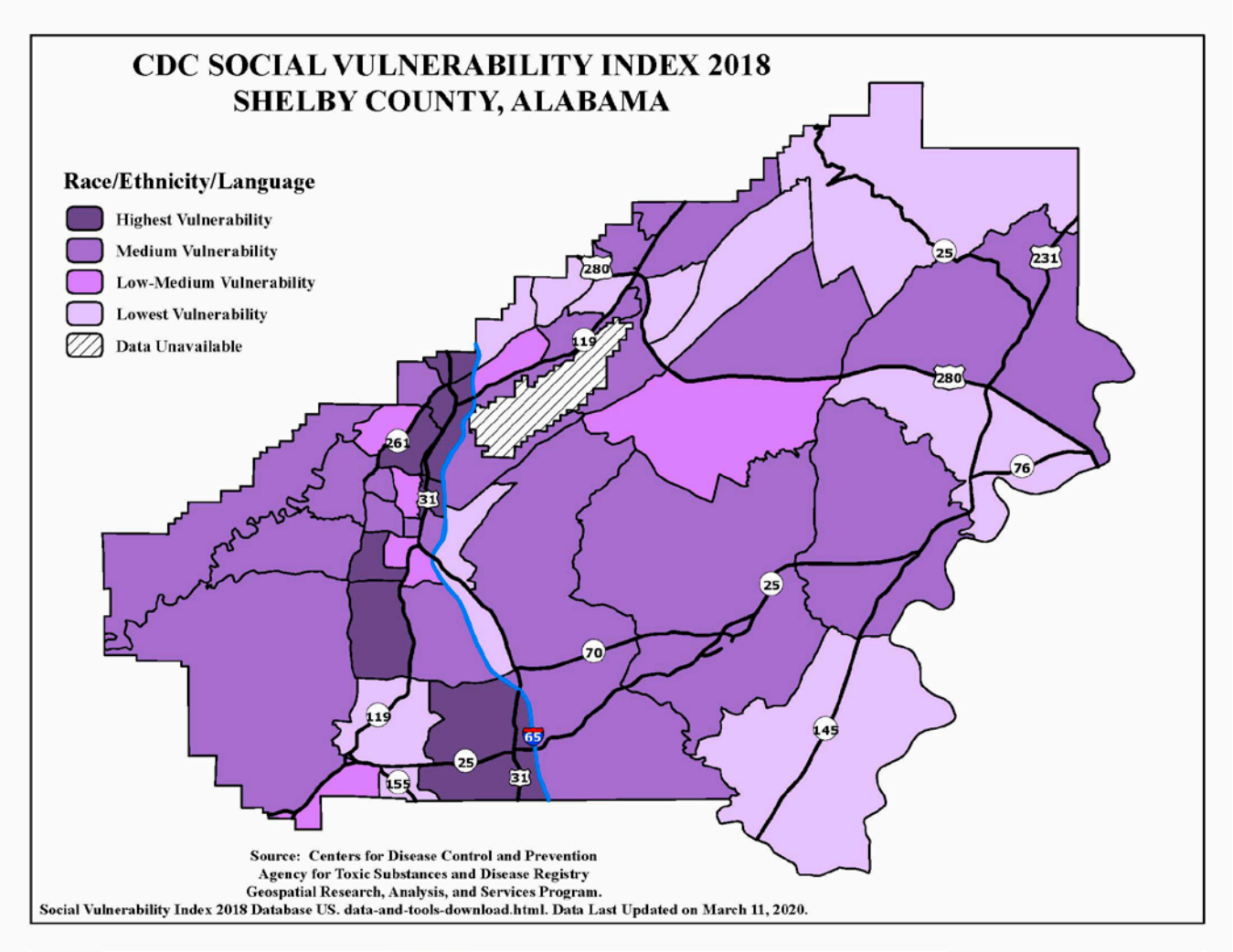
Figure 6.8:



RACE/ETHNICITY/LANGUAGE

This theme considers where people live in Shelby County based upon minority status and English language proficiency. Shelby County ranges from areas with lowest vulnerability to highest.

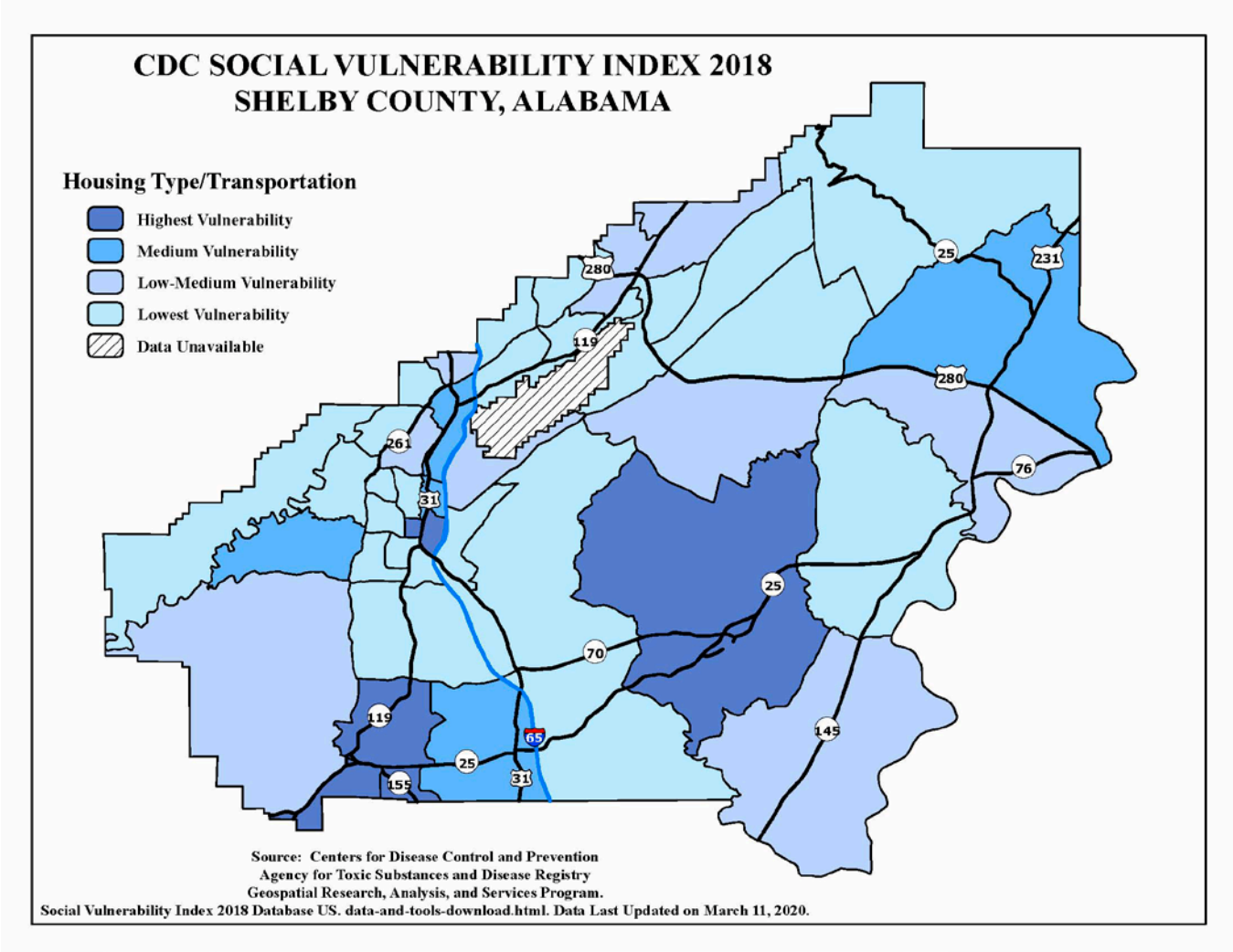
Figure 6.9:



HOUSING TYPE & TRANSPORTATION

The theme considers where people live in Shelby County based upon multi-unit structures, mobile homes, crowding, lack of access to a vehicle and group quarters. Shelby County ranges from areas with lowest vulnerability to highest.

Figure 6.10:



SECTION 7
CAPABILITIES AND HAZARD MITIGATION STRATEGY

7.1 INTRODUCTION

This section of the Plan discusses the capability of Shelby County and the participating local jurisdictions to implement hazard mitigation actions.

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy, and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs, or projects. It is important to establish goals, objectives and actions that are feasible, based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps determine which mitigation actions are practical and likely to be implemented given a local government's regulatory framework, level of administrative and technical support, and fiscal resources

The intent of the Mitigation Strategy is to provide Shelby County and its municipal jurisdictions with goals that will guide future mitigation policy and project administration, along with a list of proposed actions deemed necessary to meet those goals and reduce the impact of natural and manmade hazards. It is designed to be comprehensive and strategic in nature.

7.2 JURISDICTION CAPABILITIES

7.2.1 Capability Assessment Overview

A capability assessment has two primary components: an inventory of a local jurisdiction's relevant plans, ordinances, or programs already in place, and an analysis of its capacity to carry them out. A capability assessment also highlights the positive mitigation measures already in place or being implemented at the local level, which should continue to be supported and enhanced through future mitigation efforts. The capability assessment completed for Shelby County and its jurisdictions serves as a critical planning step and is an integral part of the foundation for designing an effective multi-jurisdictional hazard mitigation strategy. Coupled with the Risk Assessment, the Capability Assessment helps identify and target meaningful mitigation actions for incorporation in the Mitigation Strategy section of the Hazard Mitigation Plan. It not only helps establish the goals and objectives for Shelby County, but also ensures that those goals and objectives are realistically achievable under given local conditions.

7.2.2 Conducting the Capability Assessment

In order to facilitate the inventory and analysis of local government capabilities throughout Shelby County, a Capability Assessment Survey was distributed to Shelby County and its municipalities. The survey was completed by appropriate local government officials and requested information on a variety of "capability indicators" such as existing local plans, policies, programs, or ordinances that contribute to the community's ability to implement hazard mitigation actions. Other indicators requested included information related to each jurisdiction's fiscal, administrative, and technical capabilities, such as access to local budgetary and personnel resources for mitigation purposes. At a

minimum, survey results provide an extensive inventory of existing local plans, ordinances, programs, and resources in place or under development. The survey instrument not only helps to accurately assess each jurisdiction's degree of local capability, but also serves as a good source of introspection for those jurisdictions wishing to improve their capability as identified gaps, weaknesses, or conflicts can be viewed as opportunities for specific actions to be proposed as part of the community's mitigation strategy.

On the following pages are three worksheets that each participating jurisdiction hazard mitigation-planning representative completed. This information is necessary in order to evaluate proposed mitigation actions versus what is feasible in terms of jurisdictional legal, administrative, fiscal, and technical capabilities. The worksheet for Shelby County is included in this section. The worksheets for each municipality are included in the individual Mitigation Action Plans for each municipality.

Worksheet 1: Legal and Regulatory Capability

This worksheet documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The following planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Building codes regulate construction standards. In many communities, permits and inspections are required for new construction. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspections all affect the level of hazard risk faced by a community.

Capital Improvements Plans (CIP) guides the scheduling of spending on public improvements. A CIP can serve as an important mechanism to guide future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments.

Comprehensive Plans incorporates all aspects of the various tactical plans and programs into a strategic county plan that guides the county and its jurisdictions to successfully improve and enhance the quality of life for all citizens.

COOP/COG Plans Are Continuity of Operations Plans/ Continuity of Government Plans that define jurisdiction succession and recovery from disasters. The plan identifies alternate sites, critical processes, records, personnel, tools etc. that are required to re-establish critical services to the community within 12 hours and be sustained for a minimum of 30 days

Economic Development Plans provides for development of existing business in the county and a strategy to attract new business to locate in the county. A successful Economic Development Plan provides long-term, attractive employment opportunity to communities and increases the tax base.

EMAP Certification is certification by the Emergency Management Accreditation Program that certifies that the jurisdiction meets all the NIMS and NFPA-1600 requirements.

Emergency Response Plans are part of an Emergency Operations Plan (EOP) that outlines responsibilities and the means by which resources are deployed following an emergency incident or disaster.

Flood Management Plans (or a flood mitigation plan) provides a framework for action regarding the corrective and preventative measures in place to reduce flood-related impacts. Typical flood control activities include: structural flood control works (such as bank stabilization, levees, and drainage channels), acquisition of flood-prone land, flood insurance programs and studies, river and basin management plans, public education programs, and flood warning and emergency preparedness activities.

National Flood Insurance Program (NFIP) contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments. The program is promoted by FEMA as a basic first step for implementing and sustaining an effective hazard mitigation program. It is used as a key indicator for measuring local capability as part of this assessment. In order for a county or municipality to join the NFIP, it must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain.

Community Rating System (CRS) is an incentive-based program that encourages counties and municipalities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP, by adding extra measures to provide protection from flooding. All of the 18 creditable CRS mitigation activities are assigned a range of point values. This rating can reduce the cost of flood insurance for the community.

Growth Control Ordinances are primarily used by local governments to encourage growth in an orderly manner in the areas covered by the ordinance. The purpose of most growth control ordinances is to preserve residential housing values, protect historic areas, and insure that local governments can provide appropriate services to citizens.

Hazard Setback and Hillside Ordinances or Regulations are usually part of a comprehensive land use plan. Typically, a comprehensive plan is comprised of demographics, land use, transportation elements, and community facilities. Given the nature of the plan and its regulatory standing, the integration of hazard mitigation measures into the comprehensive plan enhances the likelihood of achieving risk reduction goals, objectives, and actions.

Historic Ordinances Identify and protect historic assets, structures or areas through the use of zoning and building regulations.

Post Disaster Ordinances provides for the protection of lives and property and enhances the recovery from disasters. The ordinance is used to control price gouging, and allows local governments to facilitate the purchase and deployment of equipment and resources to speed disaster recovery.

A Post Disaster Recovery Plan provides the framework to establish assistance to victims of disaster, assess the long-term economic effects of disaster on the community, facilitate post-disaster recovery, and assist the community with redevelopment plans.

Real Estate Disclosure facilitates real estate transactions and ensures that both buyers and sellers fully understand any mitigating circumstances associated with properties.

Site Plans/Subdivision Ordinance is intended to regulate the development of residential, commercial, industrial, or other uses, including public infrastructure, as land is subdivided into lots for future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.

Wildfire Ordinances are a means to control the potential of wildfire occurrence by requiring burn permits and the reduction of fuel for wildfires in both urban interfaces and forests in general.

Zoning Ordinances are the means to control land use by local governments. As part of a community's police power, zoning ordinances are used to protect the public health, safety and welfare of its citizens. Since zoning regulations enable local jurisdictions to limit the type and density of development, it can serve as a powerful tool when applied in identified hazard areas.

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, another entity/jurisdiction may have this authority at a higher level of government (county, parish, or regional political entity), or the state may prohibit the local jurisdictions from having this authority.

Table 7.1 Shelby County Legal And Regulatory Capability

Regulatory Tools/Plans	Regulatory Type: Ordinance Resolution Codes Plans Etc.	Year Adopted or Updated	Local Authority	State Prohibited	Higher Authority	Electronic copy Available
Building, Plumbing, Gas and Mechanical Codes	International Building Codes	2018	Y	N	Y	Y
Electrical Code	International Building Codes	2020	Y	N	Y	Y
Residential Energy Codes	International Building Codes	2015	Y	N	Y	Y
Capital Improvements Plan	Annual Budget	2022	Y	N	N	N
Comprehensive Plan	Resolution	2004	Y	N	N	Y
Continuity of Operations Plan	Pandemic Only	2008	Y	N	N	N
Community Rating System				N	Y	N
Economic Development Plan	Comprehensive Plan Resolution	2004	Y	N	N	Y
EMAP Certified				N	Y	N
Emergency Response Plan	County Emergency Operations Plan	2019	Y	N	Y	Y
Flood Damage Prevention Ordinance	Resolution	2022	Y	N	Y	Y
Growth Control Ordinance				N	N	N
Hazard Setback Regulations				N	N	N
Hillside Ordinance				N	N	N
Historic Ordinance				N	N	N
NFIP Participant	Resolution	2004	Y	N	Y	Y
Post-disaster Ordinance				N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	Y	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission	1960	Y	N	Y	N
Site Plan Requirements	Zoning Ordinance	2019	Y	N	N	Y
Subdivision Regulations	Zoning Ordinance	2022	Y	N	N	Y
Wildfire Ordinance				N	N	N
Zoning Ordinances	Ordinance	2019	Y	N	N	N

The Administrative and Technical Capacity survey documents personnel employed the jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Table 7.2 Shelby County Administrative And Technical Capabilities

Position	Staff/Personnel Resources	C=County Provides, S=State Provides, F=Federal Provides Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	12	12	12
Emergency Manager	Certified Professional	Emergency Management	1	1	1
Emergency Staff	Professional(s)	Emergency Management	5	5	5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	112	112	112
Fire Personnel	Professional(s)	Fire Dept.	323	323	323
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	30	30	30
Government Elected	Elected Officials	Mayor/Commission	12	12	12
Government Administration	Employees	Jurisdiction	602	602	602
Grant writer	Professional(s)	Emergency Management	1	1	1
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	6	6	6
Information Systems	Certified Professional	IT department	20	20	20
Land Use/Management	Engineer(s)/Planners	State/Local Planning	8	8	8
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	119	119	119
Medical Practitioners	Professional(s)	Medical Facilities	140	140	140
Public Works	Directors/Engineers	Public Works	90	90	90
Public Communication	911 specialists	E-911	15	15	15
Public Utilities	Professionals	Public Utilities	50	50	50
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

Table 7.3 Shelby County Fiscal Capabilities						
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			X
	Hazard Mitigation Planning Grants (HMPG)	X			X
	BRIC for disaster resistant universities		X		
	BRIC Grants for communities	X			X
	Department of Health Grants	X			X
	Department of Justice Grants	X			X
	Department of Agriculture Grants	X			X
	Department of Energy Grants	X			X
	Department of Education Grants	X			X
	Fire department grants	X			X
	Flood Management Grants (FMA)	X			X
	Homeland Security Grant Program (HSGP)	X			X
	Repetitive Flood Claims Grants (RFC)	X			
	Severe Repetitive Loss Grants (SRL)	X			
	Private foundation grants	X			X
	Private business/industry grants	X			X
Debt Procurement	Incur debt through special tax/revenue bonds	X			X
Dept Procurement	Incur debt through private activity bonds		X		
Impact Fees	Developer fees for new developments	X			X
Jurisdiction Bonds	Incur debt through general obligation bonds	X			X
Project Funding	Capital improvement	X			X
Spending Restrictions	Withhold spending in hazard-prone areas	X	X		
Special Taxes	Authority to levy taxes for specific purposes	X			X
Utility Fees	Fees for water, sewer, gas, or electric service	X			X

7.2.3 Participating Jurisdictions Capability Assessment Findings

The findings of the capability assessment are summarized in this Plan to provide insight into relevant capacity of Shelby County's jurisdictions to implement hazard mitigation activities. All information is based upon the responses provided by local government officials to the Capability Assessment Survey and during meetings throughout the planning process.

The information provided by participating jurisdictions was scored using a simple scoring methodology to rank each jurisdiction's overall capability. A total score and general capability rating of "High," "Medium" or "Low" was then determined for each jurisdiction according to the total number of points. The classifications are designed to provide an assessment of each jurisdiction's local

capability. The result of this multi-jurisdictional capability assessment provides critical information for developing an effective and meaningful mitigation strategy.

7.2.3.1 Planning and Regulatory Capability

Planning and regulatory capability is based on the implementation of existing plans, ordinances, and programs by a local government. These measures can help demonstrate a local jurisdiction's commitment to guiding and managing growth, development, and redevelopment in a responsible manner while maintaining the general welfare of the community. Such measures include emergency response and mitigation planning, comprehensive land use planning, and transportation planning, in addition to the enforcement of zoning or subdivision ordinances and building codes that regulate how land is developed and structures are built. Although some conflicts can arise, these planning initiatives present significant opportunities to integrate hazard mitigation principles and practices into the local decision-making process.

This information will help identify opportunities to address existing gaps, weaknesses, or conflicts with other initiatives, in addition to integrating this Plan with existing planning mechanisms, where appropriate.

Table 7.4 Planning and Regulatory Capability Summary

Regulatory Control in place Yes=1 No=0 0-7=Low 8-14=Medium 15-21=High Jurisdiction	Building Codes	Capital Improvement Plan	Comprehensive Plan	COOP/COG Plan	Community Rating System	Economic Development	EMAP Certified	Emergency Response Plan	Flood Management Plan	Growth Control Ordinance	Hazard Setback Ordinance	Hillside Ordinance	Historic Ordinance	Post Disaster Ordinance	Post Disaster Recovery Plan	Real Estate Disclosure	Shoreline Ordinance	Site Plan Requirements	Subdivision Regulations	Wildfire Ordinance	Zoning Regulations	Score	CAPABILITY
Shelby County	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	0	0	1	10	**M**
City of Alabaster	1	1	1	0	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	13	**M**
City of Calera	1	1	1	0	1	1	0	1	1	0	0	0	1	0	1	1	0	1	1	1	1	14	**M**
City of Chelsea	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	12	**M**
City of Columbiana	1	1	1	0	1	1	0	1	1	0	0	0	1	0	1	1	0	1	1	1	1	14	**M**
Town of Harpersville	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	0	0	1	10	**M**
City of Helena	1	1	1	0	1	1	0	1	1	0	0	0	1	0	1	1	0	1	1	1	1	14	**M**
Indian Springs Village	1	1	1	0	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	13	**M**
City of Montevallo	1	1	1	0	1	1	0	1	1	0	0	0	1	0	1	1	0	1	1	1	1	14	**M**
City of Pelham	1	1	1	0	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	1	1	13	**M**
Town of Vincent	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	1	0	1	11	**M**
City of Westover	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	0	0	1	10	**M**
Town of Wilsonville	1	1	1	0	0	1	0	1	1	0	0	0	0	0	1	1	0	1	1	0	1	11	**M**
Town of Wilton	1	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	0	0	0	1	7	**L**

7.2.3.2 Administrative and Technical Capability

The ability of a local government to develop and implement mitigation projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capability is evaluated by determining how mitigation activities are assigned to local departments and the personnel resources available to implement the activities. Key Resources to respond to and mitigate disaster include the following:

Table 7.5 Administrative and Technical Capability Summary

Resources in place Yes=2 Other Authority=1 No=0 30-42=High 17-29=Medium 0-17=Low Jurisdiction	**Agriculture Risk Assessor**	**Building Inspector**	**Emergency Manager**	**Emergency Staff**	**Emt's Certified**	**Fire Service**	**Flood Plain Manager**	**GIS**	**Government**	**Government Elected**	**Grant Writer**	**Hazard Risk Assessor**	**HAZMAT Team**	**Information Systems**	**Land Use Management**	**Law Enforcement**	**Medical Personnel**	**Public Works**	**Public Communications**	**Public Utilities**	**Surveyor**	**Score**	**CAPABILITY**
Shelby County	1	2	2	2	2	2	2	2	2	2	0	2	2	2	2	2	2	2	2	2	1	38	**H**
City of Alabaster	1	2	1	1	2	2	2	2	2	2	0	2	1	2	2	2	2	2	1	2	1	34	**H**
City of Calera	1	1	1	1	2	2	1	2	2	2	0	2	1	2	2	2	2	2	2	2	1	33	**H**
City of Chelsea	1	1	1	1	2	1	1	1	2	2	0	1	1	2	1	1	2	2	1	1	1	26	**M**
City of Columbiana	1	1	1	1	2	2	1	1	2	2	0	1	1	2	1	2	2	2	2	2	1	30	**H**
Town of Harpersville	1	1	1	1	2	1	1	1	2	2	0	1	1	2	1	2	1	2	1	2	1	27	**M**
City of Helena	1	2	1	1	2	2	1	1	2	2	0	1	1	2	2	2	2	2	1	2	1	31	**H**
Indian Springs Village	1	1	1	1	2	1	1	1	2	2	0	1	1	2	2	1	2	1	1	1	1	26	**M**
City of Montevallo	1	2	1	1	2	2	1	1	2	2	0	1	1	2	2	2	2	2	1	2	1	31	**H**
City of Pelham	1	2	1	1	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	38	**H**
Town of Vincent	1	1	1	1	2	2	1	1	2	2	0	1	1	2	1	2	1	2	1	2	1	28	**M**
City of Westover	1	1	1	1	2	2	1	1	2	2	0	1	1	2	1	1	0	1	1	1	1	24	**M**
Town of Wilsonville	1	1	1	1	2	2	1	1	2	2	0	1	1	2	1	1	0	2	1	2	1	26	**M**
Town of Wilton	1	1	1	1	1	1	1	1	2	2	0	1	1	2	1	1	0	2	1	1	1	23	**M**

7.2.3.3 Fiscal Capability

The ability of a local government to take action is closely associated with the amount of money available to implement policies and projects. This may take the form of outside grants or local-based revenue and financing. The costs associated with mitigation policy and project implementation vary widely. In some cases, policies are tied primarily to staff or administrative costs. In other cases, direct expenses are linked to an actual project such as the acquisition of flood prone homes, which can require a substantial commitment from local, state, and federal funding sources. The Capability Assessment Survey was used to capture information on each jurisdiction's fiscal capability through the identification of locally available financial resources.

The survey identifies whether the jurisdiction does or does not have the capability and scores overall fiscal capability.

Table 7.6 Fiscal Capability Summary

Fiscal Capability in Place Yes=1 No=0 7-9=High 5-7=Medium 0-4=Low Jurisdiction	**Community Grants**	**Public Debt Procurement**	**Private Debt Procurement**	**Impact Fees**	**Jurisdiction Bonds**	**Project Funding**	**Special Taxes**	**Hazard Spending Restrictions**	**Utility Fees**	**Score**	**CAPABILITY**
Shelby County	1	1	0	0	1	1	1	0	1	6	**M**
City of Alabaster	1	1	0	1	1	1	1	0	1	7	**H**
City of Calera	1	1	0	1	1	1	1	0	1	7	**H**
City of Chelsea	1	1	0	0	1	1	1	0	1	6	**M**
City of Columbiana	1	1	0	1	1	1	1	0	1	7	**H**
Town of Harpersville	1	1	0	0	1	1	1	0	1	6	**M**
City of Helena	1	1	0	1	1	1	1	0	1	7	**H**
Indian Springs Village	1	1	0	1	1	1	1	0	1	7	**H**
City of Montevallo	1	1	0	1	1	1	1	0	1	7	**H**
City of Pelham	1	1	0	1	1	1	1	0	1	7	**H**
Town of Vincent	1	1	0	0	1	1	1	0	1	6	**M**
City of Westover	1	0	0	0	0	0	1	0	1	3	**L**
Town of Wilsonville	1	1	0	0	0	1	1	0	1	5	**L**
Town of Wilton	1	0	0	0	0	0	1	0	1	3	**L**

7.2.3.4 Shelter Capability

Shelby County and its participating jurisdictions have several shelters. There are designated Red Cross shelters and other facilities that are designated as shelters by municipalities and Shelby County. Below

is a table that identifies the shelters and their characteristics. An up to date list of Community Safe Rooms and their current status can be found at shelters.shelbyal.com.

Table 7.7 Shelby County Shelters

Location	Capacity	Sleeping Capacity	Kitchen Facilities	Commodities On site	Emergency Generator	Heat/AC	Communications	Safety Rating	Comments
790 8th Avenue, Calera, AL	150	NA	No	No	No	No	No	250 MPH	Located beside Calera Elementary School.
107 Mildred Street, Columbiana, AL	150	NA	No	No	No	No	No	250 MPH	Located Behind City Hall
7305 Highway 51, Chelsea, AL	150	NA	No	No	No	No	No	250 MPH	Located beside the Fire Department
11101 Highway 47, Chelsea, AL.	150	NA	No	No	No	No	No	250 MPH	Located behind the Chelsea Community Center.
39321 Highway 25, Harpersville, AL	150	NA	No	No	No	No	No	250 MPH	Located inside the Senior Center Building
4175 Highway 22, Montevallo, AL	150	NA	No	No	No	No	No	250 MPH	Located Behind West Shelby VFD
500 County Road 10, Montevallo, AL	150	NA	No	No	No	No	No	250 MPH	Located at Stevens Park,
12205 Highway 43, Vandiver, AL	150	NA	No	No	No	No	No	250 MPH	Located at Senior Building
5384 Highway 62, Vincent, AL	150	NA	No	No	No	No	No	250 MPH	Intersection of Hwy 62 & Gorman Park Rd
3312 Westover Rd, Westover, AL	150	NA	No	No	No	No	No	250 MPH	Located by Westover Town Hall
4175 Highway 22, Montevallo, AL	150	NA	No	No	No	No	No	250 MPH	Located by Senior Building

7.3 REPETITIVE FLOODING MITIGATION

This section describes the source of repetitive flooding problems and identifies the number and type (residential, commercial or governmental) of repetitive loss properties in the jurisdiction.

A repetitive loss structure, as defined by the National Flood Insurance Program (NFIP), is a structure that is covered by flood insurance by NFIP that has suffered flood damage twice over a 10-year period in which the average cost of repair is over 25% of the market value of the structure at the time of the event.

The table below identifies the repetitive flooding sources structures and mitigation measures taken to reduce future incidents.

Table 7.8 Repetitive Flooding Mitigation					
Number of Structures	Structure Type Residential Commercial Government Critical Facility Etc.	Flood Type Storm Water Out Of Banks Low Lying Maintenance	Location	Number of events	Mitigation Action Structure Buy Out Levee Built Drainage Improvement Etc.
5	Residential	Out of banks	Alabaster	13	Drainage Improvement
3	Residential	Out of banks	Birmingham	7	Drainage Improvement
1	Residential	Out of banks	Helena	2	Drainage Improvement
1	Residential	Out of banks	Leeds	2	Drainage Improvement
76	Residential	Out of banks	Pelham	266	Apply for grants to assist in drainage and additional culverts
2	Residential	Low lying	Vincent	3	Drainage Improvement

7.4 MITIGATION STRATEGY

Development of the comprehensive strategy included a thorough review of all natural and selected manmade hazards, and identification of policies and projects to reduce the future impacts of hazards and assist the county and municipalities to achieve compatible economic, environmental, and social goals. The strategy ensures that all policies and projects are linked to established priorities and assigned to specific departments or individuals responsible for their implementation with target implementation deadlines. When applicable, funding sources are identified that can be used to assist in project implementation.

The first step in designing the Mitigation Strategy includes a review of existing mitigation measures and the identification of countywide Mitigation Goals. Mitigation Goals represent broad statements that are achieved through the implementation of more specific, action-oriented objectives listed in the county's Mitigation Action Plan. These actions include both hazard mitigation policies (such as the regulation of land in known hazard areas through a local ordinance), and hazard mitigation projects that seek to address specifically targeted hazard risks (such as the mitigation of an area prone to repetitive flooding).

The second step involves the identification and analysis of available mitigation measures to help achieve the identified mitigation goals. This is a long-term, continuous process sustained through the development and maintenance of this Plan. Alternative mitigation measures will continue to be considered as future mitigation opportunities become identified, as data and technology improve, as mitigation funding becomes available, and as this Plan is maintained.

The third and last step in designing the Mitigation Strategy is the creation of the local Mitigation Action Plans (MAPs); The MAPs represent unambiguous plans for action, and are considered to be the most essential outcome of the mitigation planning process. They include a prioritized listing of proposed hazard mitigation actions (policies and projects) for each of Shelby County's jurisdictions, along with accompanying information regarding those agencies or individuals assigned responsibility for their implementation, potential funding sources and an estimated target date for implementation. The MAPs provide those individuals or agencies responsible for implementing mitigation actions with a clear roadmap that also serves as an important tool for monitoring progress over time.

7.4.1 Mitigation Goals and Objectives

The hazard mitigation planning process has brought together a group of dedicated representatives from the jurisdictions comprising Shelby County. An early suggestion from several members of the planning committee that the group continue to meet on a regular schedule after Plan approval speaks for the cooperation and sense of community each jurisdiction brings to the planning effort, and instills confidence that the jurisdictions will unite in mitigation and other efforts.

It is the vision of Shelby County and its municipalities to promote citizen and governmental responsibility for hazard awareness and preparedness, and to foster cooperative planning among the jurisdictions to reduce the impact of natural and manmade hazards on public and private assets, and on the safety and welfare of all citizens.

The goals and objectives of the Shelby County Multi-Jurisdictional Hazard Mitigation Plan were crafted early in the planning process through a facilitated discussion and brainstorming session with the Mitigation Steering Committee. Both State and local risk assessment findings were used as the bases of goal and objective setting. At each step of the planning process the goals and objectives were reviewed and modified, if necessary, based on any new information that was gathered and assimilated into the Plan. Many of the profiled hazards are addressed by specific goals and objectives while the "All Hazard" goal and objectives address all hazards. The Mitigation Committee believes that all of the following goals and objectives are necessary to begin to address hazard issues in Shelby County. The following goal and objective statements represent a broad target for Shelby County and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

Table 7.9 Mitigation Goals and Objectives

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the city of Shelby County	Objective AH.1: Improve Shelby County's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve Shelby County's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the city of Shelby County	Objective FL.1: Improve Shelby County's flood warning and information distribution to citizens Objective FL.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve Shelby County's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the city of Shelby County	Objective HW.1: Improve Shelby County's High Winds warning and information distribution to citizens Objective HW.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve Shelby County's capability to prepare for, respond to and recover from High Winds events

Table 7.9 Mitigation Goals and Objectives	
GOALS	**OBJECTIVES**
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the city of Shelby County	Objective IS.1: Improve Shelby County's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve Shelby County's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the city of Shelby County	Objective WF7.1: Improve Shelby County's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve Shelby County's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the city of Shelby County	Objective UF.1: Improve Shelby County's Urban Fire warning and information distribution to citizens Objective UF.2: Improve Shelby County's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve Shelby County's capability to prepare for, respond to and recover from Urban Fire events

7.4.2 Local County Goals

The Shelby County Hazard Mitigation Plan establishes four goals:

- GOAL 1. Maintain and enhance the Shelby County's capacity to continuously make Shelby County less vulnerable to all hazards.
- GOAL 2. Build and support local capacity and commitment to continuously become less vulnerable to natural hazards.
- GOAL 3. Improve coordination and communication with other relevant entities.
- GOAL 4. Increase public understanding, support, and demand for hazard mitigation.

7.4.3 Identification of Mitigation Actions

In formulating Shelby County's Mitigation Strategy, a wide range of actions were considered in order to help achieve countywide and jurisdiction goals and objectives. All actions considered by the Mitigation Steering Committee can be classified under one of the following six broad categories of mitigation techniques:

Prevention activities are intended to keep hazard problems from getting worse, and are typically administered through government programs or regulatory actions that influence the way land is developed and buildings are constructed. They are particularly effective in reducing a community's vulnerability, in areas where development is limited or capital improvements have not been substantial. Examples of preventative activities include:

- Planning and zoning
- Building codes

- Hazard mapping
- Open space preservation
- Floodplain regulations
- Storm water management regulations
- Drainage system maintenance
- Capital improvements programming
- Shoreline/riverine/fault zone setbacks
- Site planning and landscape design

Property Protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard, or removal of the structures from hazardous locations. Examples include:

- Acquisition
- Relocation
- Building elevation
- Critical facilities protection
- Retrofitting (e.g., wind proofing, flood proofing, seismic design techniques, etc.)
- Safe rooms, shutters, shatter-resistant glass
- Insurance

Natural Resource Protection reduces the impact of natural hazards by preserving or restoring natural areas and their protective functions. Such areas include floodplains, wetlands, steep slopes, and sand dunes. Parks, recreation, or conservation organizations often implement these protective measures. Examples include:

- Floodplain protection
- Watershed management
- Riparian buffers
- Forest and vegetation management (e.g., fire resistant landscaping, fuel breaks, etc.)
- Erosion and sediment control
- Wetland preservation and restoration
- Habitat preservation
- Slope stabilization

Structural Mitigation Projects are intended to lessen the impact of a hazard by modifying the environmental natural progression of the hazard event through construction. They are usually designed by engineers and managed or maintained by public works staff. Examples include:

- Reservoirs
- Dams/levees/dikes/floodwalls
- Diversions/detention/retention
- Channel modification

- Storm sewers

Emergency Services emergency service measures minimize the impact of a hazard event on people and property. These commonly are actions taken immediately prior to, during, or in response to a hazard event. Examples include:

- Warning systems
- Evacuation planning and management
- Emergency response training and exercises
- Sandbagging for flood protection

Public Education and Awareness are used to alert residents, elected officials, business owners, property buyers, and visitors about hazards, hazardous areas, and mitigation techniques they can use to protect themselves and their property. Examples of measures to educate and inform the public include:

- Outreach projects
- Speaker series/demonstration events
- Hazard map information
- Real estate disclosure
- Library materials
- Education programs for school children

7.4.4 Selection of Mitigation Actions

In order to determine the most appropriate mitigation techniques for Shelby County and its municipal jurisdictions, local government officials reviewed and considered the findings of the Capability Assessment and Risk Assessment. Other considerations included each mitigation action's effect on overall risk to life and property, its ease of implementation, its degree of political and community support, its general cost-effectiveness, and funding availability (if necessary). The following table of alternative mitigation actions was the basis for developing the mitigation actions to ensure that all profiled hazards have mitigation actions.

Table 7.15 Alternative Mitigation Actions

HAZARDS> Alternative Mitigation Actions that can affect the adjacent hazards	Drought	Earthquake	Extreme Temp	Flooding	Hail	High Winds	Ice/Snow	Landslides etc	Land Subsidence	Lightning	Wildfire	Urban Fire
Building codes		X		X	X	X	X	X	X	X	X	X
Density regulations			X	X		X			X	X	X	X
Hazard Setback regulations				X				X	X		X	X
Development regulations	X	X		X		X	X	X	X	X	X	X
Wildfire fuel reduction	X										X	X
Hillside regulations		X					X	X				
Post Disaster ordinance	X	X	X	X	X	X	X	X	X	X	X	X

Setback regulations		X		X				X	X		X	
Special use permits	X	X	X	X			X	X	X		X	X
Storm water controls	X			X								
Comprehensive Plan	X	X		X		X	X	X	X	X	X	X
Zoning		X		X				X			X	X
Acquire in-hazard assets				X								
Facility hazard barriers				X								
Structure elevation				X								
Relocation of structures				X				X	X			
Structure acquisitions		X		X		X	X	X	X	X	X	X
Dams monitoring		X		X			X	X	X			
Levee/seawall mgt		X		X		X	X	X	X			
Real estate disclosure				X		X		X	X		X	
Forest management	X			X		X				X	X	
Erosion controls				X								
Waterway management	X			X			X	X				
Landscape management	X		X	X	X	X	X	X	X		X	X
Wetlands regulations				X			X					
Vital facilities protection		X		X	X	X	X	X	X	X	X	X
COOP/COG Plan		X		X		X	X				X	X
National Incident Management Trng		X		X		X	X				X	X
Emergency Ops. Plan	X	X	X	X	X	X	X	X	X	X	X	X
Hazard/threat recognition	X	X	X	X	X	X	X	X	X	X	X	X
Hazard warning systems	X	X	X	X	X	X	X		X	X	X	X
Health/safety information		X	X	X	X	X	X	X	X	X	X	X
Pre-disaster mitigation	X	X	X	X	X	X	X	X	X	X	X	X
Post disaster mitigation	X	X	X	X		X	X	X	X	X	X	X
Safe rooms and shelters				X	X	X	X			X	X	X
Public education and Preparedness	X	X	X	X	X	X	X	X	X	X	X	X

7.4.5 Reducing Hazard Impact on New Buildings and Infrastructure

Some of the mitigation actions and projects included in this plan include:

- Adopting and/or enforcing comprehensive building codes
- Requiring emergency generator pigtails on new government and special needs structures
- Providing builders information on hazard areas and associated restrictions
- Restrictions on building structures in hazard areas
- Developing and or enforcing a comprehensive land use plan.
- Encouraging new power lines to be buried to reduce power outages.
- Encouraging “right of way” maintenance programs for power lines and pipelines to remove burnable debris and trees that could create natural gas, oils and gas or power outages.
- Extend water lines and hydrants to combat fires.

7.4.6 Reducing Hazards Impact on Existing Buildings and Infrastructure

Some of the mitigation actions in this plan that reduce impact on existing buildings and infrastructure include:

- Potential buyout of structures in hazard areas.
- Elevating structures to reduce flood loss
- Retrofitting structures to reduce high wind loss
- Burying existing power lines to reduce outages
- Improving drainage capacity of canals and ditches
- Installing emergency generators on critical government and special needs structures
- Clearing “right of ways” of public utility power lines

7.4.7 National Flood Insurance Program (NFIP) Compliance

Participation in the NFIP is based on an agreement between communities and FEMA. The NFIP has three basic aspects:

- Floodplain identification and mapping
- Floodplain management
- Flood insurance

First, NFIP participation requires community adoption of flood maps. Mapping flood hazards creates broad-based awareness of the flood hazards and provides the data needed to administer floodplain management programs and to actuarially rate new construction for flood insurance. Second, to be a participant, the NFIP requires communities to adopt and enforce minimum floodplain management regulations that help mitigate the effects of flooding on new and improved structures. Third, community participation in the NFIP enables property owners to purchase insurance as a protection against flood losses in exchange for State and community floodplain management regulations that reduce future flood damages.

Shelby County and its municipal jurisdictions have been mapped and the floodplains identified. Since the 2016 plan, all jurisdictions have had their flood maps digitized and updated through the FEMA Map Modernization program. Nearly all NFIP communities in Shelby County have continued to effectively enforce and keep their floodplain ordinance current since their original entry into the program. Local flood plain ordinance administrators provide technical assistance to applicant and keep abreast of changes in flood plain management requirements through the State NFIP Coordinator.

The following table provides information on the NFIP participation status of Shelby County jurisdictions:

Community ID	Community Name	Initial FHBM Identified	Initial FIRM Identified	Current Effective Map Date	Status
010259	Alabaster	05/24/74	06/15/81	02/20/13	Participating
010373	Calera	11/02/79	05/01/95	02/20/16	Participating
010432	Chelsea		09/29/06	02/20/13	Participating
010449	Columbiana		09/29/06	02/20/13	Participating
010293	Harpersville	04/11/75	09/29/06	02/20/13	Participating
010294	Helena	01/10/75	01/06/82	09/24/21	Participating
010430	Indian Springs Village	11/29/74	09/16/82	09/24/21	Participating
010349	Montevallo	01/28/77	03/16/81	02/20/13	Participating
010193	Pelham	06/21/74	06/15/81	09/24/21	Participating
010191	Shelby County	11/29/74	09/16/82	09/24/21	Participating
010292	Vincent	04/11/75	06/15/81	02/20/13	Participating
010451	Westover		09/29/06	02/20/13	Participating
010404	Wilsonville	09/07/79	03/01/95	02/20/13	Participating
010405	*Wilton	11/02/79	09/29/06	02/20/13	Not participating

- The Town of Wilton's leadership has chosen not to participate in the NFIP since no structures lie within the Special Flood Hazard Area (SFHA) and there are no paid employees besides water service.

2022 NFIP Community Status, Shelby County Jurisdictions

7.4.8 Analyzing and Prioritizing NFIP Compliance Actions

All Local Mitigation Plans approved by FEMA after October 1, 2008 must describe each jurisdiction's participation in the NFIP. All participating jurisdictions participate in the NFIP, have adopted a flood management plan and completed mapping of Flood Plaines

Basic compliance NFIP actions could include, but are not limited to:

1 - Adoption and enforcement of floodplain management requirements, including regulating all and substantially improved construction in Special Flood Hazard Areas (SFHAs)

2 - Floodplain identification and mapping, including any local requests for map updates, if needed

3 - Description of community assistance and monitoring activities.

The following prioritized actions are included in the jurisdictions Mitigation Action Plans

- Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas.
- Use HAZUS-MH to develop a database of NFIP and other structures in 100/500-year flood plains.
- Adopt/enforce an NFIP flood plain management plan.
- Join/continue to participate in the National Flood Insurance Program (NFIP).

- Achieve/maintain participation in the NFIP Community Rating System.
- Educate builders, developers and the public on the National Flood Insurance Program (NFIP).
- Educate developers, builders and the public on the location of NFIP designated flood prone areas.
- Adopt/enforce floodplain legislation to require structures built to be elevated above the NFIP BSE.
- Obtain funding to relocate NFIP repetitive flooding structures in flood prone areas.
- Obtain funding to retrofit NFIP repetitive flooding structures in flood prone areas.
- Participate in FEMA's Cooperating Technical Partners Program (CTP) that supports NFIP.

7.4.9 Analyzing and Prioritizing Mitigation Actions

FEMA guidance for meeting planning requirements of the DMAK2 specifies that governments prioritize their mitigation actions based on the level of risk a hazard poses to the lives and property of a given jurisdiction. In response to this requirement, the Shelby County Mitigation Steering Committee completed a Mitigation Technique Matrix to make certain they addressed, at a minimum, those hazards posing the greatest threat. The matrix provides the committee with the opportunity to cross-reference each of the priority hazards with the comprehensive range of available mitigation techniques, including prevention; property protection; natural resource protection; structural projects; emergency services; and public education and awareness.

Despite the diligence of the Mitigation Committee in completing the STAPLEE Criteria form, scores for many goal actions were identical, and provided little help in assigning priority. This process did allow the committee a thorough dissection of each action.

Regardless of numerical priority ranking, early implementation dates are assigned to those actions needed to serve as a foundation upon which to build other actions. Also assigned early implementation dates are those actions leading to maintaining eligibility for current grant funding, as well as those which will promote acquisition of new funding sources.

Table 7.11 Shelby County Mitigation Technique Matrix

	Mitigation Technique	Flooding	High Winds	Extreme Temps	Ice/Snow
1	Prevention	Y	Y	Y	Y
2	Property Protection	Y	Y	Y	Y
3	Natural Resource Protection	Y	Y	Y	Y
4	Structural Mitigation Projects	Y	Y	Y	Y
5	Emergency Services	Y	Y	Y	Y
6	Public Education/Awareness	Y	Y	Y	Y

Each participating jurisdiction prioritized its selected mitigation items individually. The "STAPLEE" evaluation and prioritization is included in each individual MAP in the appendices. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard event. A weighting factor of 2 is used for cost/benefit items.

Table 7.12 STAPLEE Mitigation Action Priority Process			
Issue	**1**	**2**	**3**
Social Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
Effect on saving lives	Lifesaving impact is negligible	Lifesaving impact is moderate	Lifesaving impact is significant
Effect on reducing property loss	Effect on reducing property loss is negligible	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is negligible	Effect on reducing economic loss is moderate	Effect on reducing economic loss is significant
Technical Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Staffing	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Maintenance/Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders

Table 7.12 STAPLEE Mitigation Action Priority Process			
Issue	**1**	**2**	**3**
Economic Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Hazmat Waste Site affect	High likelihood of potential affect on hazardous materials and waste sites	Moderate likelihood of affect on hazardous materials and waste sites	Low likelihood of affect on hazardous materials and waste sites
Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes
Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Political, Legal, Economic and Environment			

The Table prioritizing Shelby County mitigation actions is at the end of this section and the prioritization of Individual jurisdictions mitigation actions is included in the Individual Mitigation Action Plans in the IMAP Annexes for each individual jurisdiction.

The migitation priorities identified in the previous plan have been extensively reviewed. After careful consideration and discussion, no changes were necessary and this updated plan validates the priorities and information in the previously appoved plan.

7.4.10 Mitigation Actions Implementation

The success of this Plan hinges on two major action items;

1. Emergency Management staff must pursue all grant opportunities to assist with funding of mitigation actions. Staff must receive necessary grant writing training and evaluation of grant criteria. Without grant funding, Shelby County cannot afford to begin many of the more expensive mitigation actions described in this plan.

2. Shelby County Emergency Management is tasked with Plan oversight, to include project tracking, progress reports, and reconvening the Steering Committee as needed for Plan review and revision

It was the intent of the committee to establish realistic, attainable actions that can be implemented within the present fiscal capabilities of the participating jurisdictions and accepted by the citizens of the county. All members of the Planning Committee agreed that starting with small steps, accomplishing the stated goals, and publicizing the success of the county's mitigation efforts will open the community to accept larger, costlier, projects in the future. Specific mitigation actions were identified to prevent future losses; however, current funding is not identified for all of these actions at present. The County has limited resources to take on new responsibilities or projects. The implementation of these mitigation actions is dependent on the approval of the local elected governing body and the ability of the community to obtain funding from local or outside sources. Where such actions are high priorities, the community will work with AEMA, FEMA and other Federal, State and County agencies to secure funds.

In addition to the assignment of a local lead department or agency, an implementation time period or a specific implementation date has been assigned in order to assess whether actions are being implemented in a timely fashion.

Many of the actions are interrelated (e.g. providing various categories of preparedness and awareness information to citizens at community events); these will be accomplished under a single, ongoing project. Many of the actions can be accomplished within existing department budgets, costing only the time of employees already on staff. While "time is money" and hours have been estimated in dollars for each action item, there will be no requirement for additional funds to be budgeted to accomplish many of the action items. In general, mitigation actions ranked as high priorities will be addressed first. However, medium or even low priority mitigation actions will be considered for concurrent implementation. Therefore, the ranking levels should be considered as a first-cut, preliminary ranking and will evolve based on input from the County departments and representatives, the public, AEMA, and FEMA as the Plan is implemented.

7.4.11 Mitigation Action Benefit/Cost Review

Section 201.6.c.3iii of 44CFR requires the prioritization of the action plan to emphasize the extent to which benefits are maximized according to a cost/benefit review of the proposed projects and their associated costs. The County utilized the economic criteria in the following "STAPLEE" evaluation. This benefit/cost review is qualitative; that is, it does not include the level of detail required by FEMA for project grant eligibility under the Hazard Mitigation Grant Program (HMGP) and Building Resilient Infrastructure and Communities (BRIC) grant program. This qualitative approach was used because projects may not be implemented for up to 10 years, and the associated costs and benefits could change dramatically in that time. Each project was assessed by assigning the subjective ratings (high, medium, and low) to its costs as described in the Economic "STAPLEE" section.

7.4.12 Previously Implemented Mitigation Measures

The success of future mitigation efforts in a community can be gauged to some extent by its ongoing or past efforts. Previously implemented mitigation measures indicate that there is, or has been, a desire to reduce the effects of natural hazards, and the success of these projects can be influential in building

local government support for new mitigation efforts. Shelby County's previous mitigation efforts and programs include the following:

- Each jurisdiction in Shelby County supports a public works department and many provide water and wastewater treatment facilities.
- All Fire Departments provide EMT's emergency medical service throughout the county.
- Law enforcement is provided for each municipality, either by the municipal law enforcement agencies, or by the Shelby County Sheriff's Office.
- Fire Protection and fire medical / rescue services are provided for each municipality by fire departments, with either all paid, a combination of paid and volunteer, or all volunteer firefighters.
- Shelby County and the municipalities within, participate in the National Flood Insurance Program.
- Alabama health officials helped to develop a mass clinic plan. Shelby County Health Department's plan was tested during an August 2004 Strategic National Stockpile drill and subsequently was revised to address problems found during that exercise.
- Shelby County is responsible for planning a mass vaccination process should this be necessary due to contagious disease outbreak. Locations for mass dispensing sites have been identified, and a process for administering medicines is being refined and tested.
- Practice exercises are conducted between AEMA, NWS, FBI, Shelby County Emergency Medical Services, city first responders and Shelby County Emergency Management to assure preparedness.
- Cities throughout Shelby County continue to add outdoor warning sirens to improve warning effectiveness, and to maintain existing sirens to insure proper operation.
- The American Red Cross has multiple designated emergency shelters.
- Multiple Shelby County communities have been active in the Firewise program, which works with the state Department of Natural Resources to remove potential fuel sources that may be involved in wild land fires. This mitigation effort limits the spread of wild land fires, and helps to protect homes.

The mitigation actions identified in the previous plan have been extensively reviewed. The effectiveness of the actions implemented is documented in this section. The actions not implemented are either carried forward to the updated plan or have been eliminated as not feasible or no longer an effective action.

All municipal actions are continued as of the 2022 update to this plan. The following table will be updated as municipal or county Mitigation Actions are completed or deleted.

Table 7.13 Previous Mitigation Action Review		
Action and Description	**Status**	**Mitigation Effectiveness**
1.1.1 Maintain up-to-date comprehensive plans for all municipalities.	In Progress	Medium
1.1.2 Integrate the findings and recommendations of this plan into the comprehensive plan updates for Shelby County, Alabaster, Calera, Chelsea, Columbiana, Harpersville, Helena, Indian Springs, Montevallo, Pelham, Vincent, Westover, Wilsonville and Wilton.	In Progress, as plans are updated	Medium
1.1.3 Review and amend existing planning documents to be certain the vulnerability and environmental suitability of lands for future development are clearly addressed; local plans should address the vulnerability of designated hazard areas and encourage open space planning to create amenities for recreation and conservation of fragile resources.	In Progress	Medium
1.2.1 Maintain risk assessment data in GIS, including flood zones, tornado tracks, sinkhole threat areas, disaster events, and a comprehensive inventory of critical facilities within all jurisdictions.	In Progress	High
1.2.2 Integrate FEMA HAZUS-MH applications for hazard loss estimations within local GIS programs. Maintain up-to-date data within GIS to apply the full loss estimation capabilities of HAZUS.	In Progress	Medium
1.3.1 Seek a countywide update of all FIRMs in digital format, with an emphasis on detailed studies of developed and developing areas with elevations provided and floodways delineated.	In Progress	High
1.3.2 Perform a detailed feasibility study of the Stratford Place and Saddle Run subdivisions in Pelham to determine flooding causes and feasible solutions and funding alternatives.	Completed	
1.4.1 Consider large lot size restrictions on flood-prone areas designated on Flood Insurance Rate Maps.	Completed	Medium
1.4.2 Evaluate additional land use restrictions within designated flood zones, such as prohibition of storage of buoyant materials, storage of hazardous materials, restrictive development of flood ways, among others.	Completed	Medium
1.5.1 Train local flood plain managers through programs offered through the State Flood Plain Manager and FEMA's training center in Emmitsburg, Maryland.	In Progress	Medium
1.5.2 Maintain a library of technical assistance and guidance materials to support the local flood plain manager.	Complete	Medium
1.5.3 Obtain membership for local flood plain managers in the Association of State Flood Plain Managers.	In Progress	Medium
1.5.4 Evaluate the effectiveness of higher regulatory standards, such as additional building elevation and limitation of fill within flood plains, to be included in local flood plain management regulations.	In Progress	Medium
1.5.5 Enact flood hazard prevention ordinances and establish Wilton as regular member of the NFIP.	In Progress	High
1.6.1 Evaluate building code standards for roof construction to assure protection against wind damage from hurricanes, tornadoes, and windstorms; require installation of hurricane clips.	In progress	High
1.6.2 Consider technical codes to require assessments in areas of quarries or where water systems have high-capacity wells.	In progress	Medium

Table 7.13 Previous Mitigation Action Review		
Action and Description	**Status**	**Mitigation Effectiveness**
1.7.1 Enact local ordinances to require community storm shelters within sizeable mobile home parks and subdivisions.	Delayed	
1.7.2 Require the construction of safe rooms within new public buildings, such as schools, libraries, community centers, and other public buildings where feasible.	In Progress, State Law Requires	High
1.7.3 Continue program to subsidize safe room construction in existing homes.	In Progress New State Law	High
1.7.4 Construct freestanding public safe rooms in vulnerable locations.	In Progress	
1.8.1 Apply for and maintain membership in the CRS Program.	In Progress	Medium
2.1.1 Provide technical assistance to owners of pre-FIRM buildings to advise on available retrofits to protect against flood damage.	In Progress	Medium
2.1.2 Seek funding sources, such as Community Development Block Grant funds, to assist low income home owners with building retrofits to protect against flooding	Delayed	Medium
2.2.1 Promote the purchase of insurance coverage for flooding and sinkhole damages in high-risk areas by property owners and renters.	In Progress	Low
3.1.1 Publicize the availability of FIRM information to real estate agents, builders, developers, and homeowners through trade publications and media announcements.	In Progress	Medium
3.2.1 Establish an annual Severe Weather Awareness Day	In Progress	High
3.4.1 Obtain free publications from FEMA, NWS, USGS, and other federal and state agencies and deposit these materials with local libraries.	In Progress	Medium
3.4.2 Maintain local library repositories with the latest available publications.	In Progress	Medium
3.5.1 Distribute hazard mitigation brochures to area schools for student distribution.	In Progress	Medium
4.1.1 Investigate the feasibility of a land trust to acquire open space, purchase easements, and accept donations of lands within environmentally significant and vulnerable locations.	Completed Alabama Forever Wild Land Trust	Medium
4.2.1 Enact and enforce dumping regulations.	In Progress	Low
4.2.2 Enact and enforce erosion and sedimentation control regulations.	In Progress	Low
4.3.1 Seek technical assistance through the Alabama Cooperative Extension System with Best Management Practices (BMP) for channel/drainage system maintenance.	In Progress	Medium
5.1.1 Install new outdoor warning systems.	In Progress	High
5.1.2 Install a rapid notification telephone system.	Complete County has Everbridge notification system county wide	High
5.2.1 Support the Alabama Skywarn Foundation efforts to distribute weather radios to low income households, especially in rural areas outside of siren coverage areas.	In Progress	High

Table 7.13 Previous Mitigation Action Review		
Action and Description	**Status**	**Mitigation Effectiveness**
5.2.2 Promote the use of weather radios in households and businesses.	In Progress	High
6.1.1 Prepare/implement operating procedures for drainage system maintenance.	In Progress	High

State mitigation efforts and programs that are significant to Shelby County include the following:

Alabama Emergency Operations Plan (EOP): The Alabama Emergency Operations Plan is the document that provides the foundation for all disaster and emergency response operations conducted within the state of Alabama. Alabama state law requires AEMA to develop this plan and update it on a periodic basis.

AEMA Division Offices: The regional office serves as the primary day-to-day point of contact with local governments and the citizens of the state. A Regional Program Coordinator heads each office. The Area Coordinators travel to local Emergency Management offices to help coordinate planning and preparedness activities, ensure that federally assisted counties are complying with grant requirements, and provide training to emergency responders. The RPC also serves as the agency's conduit to state assistance to major emergencies. An RPC responds to any major emergency, emergencies involving multiple state agencies, multiple fatalities, and other events upon the request of local officials.

Each county in Alabama has its own Local Emergency Management Director that serve at the direction of the respective County Boards. Because disasters occur at the local government level, the Local Director is the key to comprehensive community emergency management. Some local Emergency Management programs receive federal funding assistance through AEMA. Such programs must meet minimum mutually agreed upon criteria.

The Domestic Preparedness Program is a partnership of federal, state and local agencies with the goal of insuring that, as a nation, we are prepared to respond to a terrorist attack involving nuclear, biological or chemical weapons - weapons of mass destruction (WMD). Today, the term "Homeland Security" is used to denote the concept of preparing for these kinds of events.

7.4.13 Multi-Jurisdictional Mitigation Actions

The Mitigation Actions proposed by each of Shelby County's local governing bodies participating under this Plan are in the Individual Mitigation Action Plans (MAP's) Annex. Each MAP has been designed to address the jurisdiction description, capabilities and the multi-jurisdictional goals, objectives and actions of the overall Hazard Mitigation Plan. Some Action items in the below table and the Individual Mitigation Action Plans address specific hazards, others are general action items that address multiple hazards. In any event within the action items detailed in the mitigation actions tables are;

1. Actions that address both current and future buildings (i.e. building codes)
2. Action that address current and future infrastructure
3. Actions that address each profiled hazard (minimum of 2)
4. Actions for each participating jurisdiction (minimum of 2)

The cohesive collection of actions listed in each jurisdiction's Mitigation Action Plan also can serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW2a	Hurricane watch and warning procedures are in place to alert 1st responders and the public	NWS EMA	Existing	5,518 110,350	2022 2027	90
AH1f	Assist schools and special needs facilities to develop disaster preparedness/response plans.	EMA Local Govt	Existing	5,518 110,350	2022 2027	88
HW1b	Educate the public on High Wind weather preparedness, response and recovery	EMA	Existing	5,518 110,350	2022 2027	87
HW1c	Educate and distribute High Wind preparedness information	EMA	Grant Local Funds	1,104 55,175	2022 2027	87
HW1e	Insure NWS Hurricane watches and warnings are monitored by Emergency Management	EMA	Existing	5,518 110,350	2022 2027	87
HW1c	Educate the special needs and education populations on High Wind preparedness and response	EMA	Existing	5,518 110,350	2022 2027	86
HW3d	Insure county EMA participates in High Wind planning as a potential reception area for evacuees.	EMA ARC DHR	Existing	5,518 110,350	2022 2027	86
AH1e	Distribute safe room/shelter in place information to schools, special needs and the public. Annual Storm Spotter Classes and Training with safety team and students.	BOE EMA DHR ARC	Existing	5,518 110,350	2022 2027	84
AH1i	Develop/maintain a public information web site on hazard preparedness and response	IT Services EMA	Existing	5,518 110,350	2022 2027	83
AH3x	Develop a community shelter program for mobile home parks	Local Govt County Govt. EMA	Grant Local Funds	11,035 110,350	2022 2027	83
FL3e	Develop a program to inspect and maintain natural drainage channels to clear beaver dams and debris; Co Rd 26,81, 24, 86, 43 & 77, Dead Hollow Road South, Glaze Road; Continue to inspect on annual basis.	County Engineer, Dev Services	Grant Local Funds	75,518 331,050	2022 2027	83
UF1a	Educate school, special needs and the community populations on fire safety and response. Monthly drills.	BOE Fire Service EMA	Existing	5,518 110,350	2022 2027	83
UF1b	Educate school, special needs and the community population on fire extinguisher use	Fire Service	Existing	5,518 110,350	2022 2027	83
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA	Existing	5,518 110,350	2022 2027	83

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1h	Develop a media warning program to warn the public of hazard event	EMA	Existing	5,518 110,350	2022 2027	82
AH3v	Require critical sites to develop and provide to EMA an emergency plan	LEPC EMA	Existing	5,518 110,350	2022 2027	82
FL1a	Distribute flood awareness and preparedness literature at events	EMA ARC LEPC	Existing	5,518 110,350	2022 2027	82
FL2a	Obtain PPE for all personnel responding to flood events	EMA	Grant Local Funds	110,350 331,050	2022 2027	82
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	County Engineer USDA	Grant Local Funds	110,350 331,050	2022 2027	82
UF3d	Develop fire plans for all major businesses and critical facilities	Local Govt	Existing	5,518 110,350	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	County Govt Local Govt	Existing	5,518 110,350	2022 2027	81
AH3i2	Coordinate a shelter program for the Red Cross and volunteers	ARC, EMA, DHR	Existing	5,518 110,350	2022 2027	80
AH3l	Assist schools in implementing an emergency communications plan. Reviewed annually in the safety plan.	BOE, EMA	Grant Local Funds	110,350 331,050	2022 2027	80
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	County Govt Local Govt	Existing	5,517,500 9,931,500	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	County Govt Local Govt	Existing	5,518 110,350	2022 2027	79
AH3b	Obtain and continually update 911 technology and capabilities	911, EMA	Grant Local Funds	55,175 220,700	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	ARC EMA	Existing	5,518 110,350	2022 2027	79
AH3n	Ensure that utility restoration plans and mitigation efforts are in place with the various electric utilities.	EMA	Local funds	5,518 110,350	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	DHR, ARC, EMA, Coroner	Existing	5,518 110,350	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	Local Govt Co Govt. EMA	Existing	5,518 110,350	2022 2027	79
FL3a	Participate in the National Flood Insurance Program (NFIP)	County Govt Local Govt	Existing	5,518 110,350	2022 2027	79
FL3h	Request a study of the feasibility of flood control measures along the Cahaba and Coosa Rivers.	Corp of Engineer County Govt Develop Services	Grant Local Funds	5,518 110,350	2022 2027	79
UF2c	Obtain/maintain fire fighting supplies at all fire departments.	Local Govt EMA	Grant Local Funds	551,750 1,103,500	2022 2027	79

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing).	EMA 911	Existing	5,518 110,350	2022 2027	78
AH3w	Obtain/maintain a grant writing position for the county jurisdictions.	County Govt Local Govt. EMA	Grant Local Funds	55,175 165,525	2022 2027	78
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions.	County Govt, Local Govt	Existing	5,518 110,350	2022 2027	78
AH1g	Obtain/install an automated wide area rapid notification system.	County Govt Local Govt	Grant Local Funds	220,700 551,750	2022 2027	77
HW3g	Adopt/enforce mobile home tie down and skirting legislation.	County Govt Local Govt	Existing	5,518 110,350	2022 2027	77
UF3c	Assist fire inspections to be regularly conducted at businesses and industry.	Local Govt	Existing	5,518 110,350	2022 2027	77
WF1b	Educate businesses and the public on the causes of wild land fires.	AFC EMA	Existing	5,518 110,350	2022 2027	77
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	AFC EMA	Existing	5,518 110,350	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques.	Local Entity SCSO EMA	Grant Local Funds	22,070 220,700	2022 2027	76
AH3o	Assist all businesses, schools, special needs and government facilities to post evacuation routes. Safety plans reviewed annually.	BOE EMA County Govt Local Govt	Existing	5,518 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	EMA Local Entities	Grant Local Funds	44,140 110,350	2022 2027	76
AH3s2	Assist jurisdictions to develop strategies to prevent loss of public records	County Govt Local Govt EMA	Existing	5,518 110,350	2022 2027	76
AH3t	Annually review and update hazard related legislation	LEPC EMA	Existing	5,518 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	EMA	Existing	16,533 110,350	2022 2027	76
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	Local Govt	Existing	5,518 110,350	2022 2027	76
FL3d	Participate in the NFIP Community Rating System. Some cities are implementing the CRS.	County Govt Local Govt Co Engineer	Existing	5,518 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually.	Local Entity, EMA	Local Funds	5,518 110,350	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS).	Local Entity, EMA	Grant Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP.	EMA	Grant Local Funds	11,035 110,350	2022 2027	74

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH2i	Train 1st responders/officials in performing damage assessments.	EMA	Existing	16,533 110,350	2022 2027	74
AH3h	Develop EOP ESF's/annexes for all hazards that may impact the jurisdiction.	EMA, LEPC	Grant Local Funds	27,588 110,350	2022 2027	74
AH3h1	Review/revise the county Emergency Operations Plan annually and after each disaster.	EMA, LEPC	Local Funds	5,518 55,175	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities. Kits include class roster and basic first aid supplies.	EMA, BOE	Grant Local Funds	55,175 220,700	2022 2027	74
FL3l	Identify alternative access points for single access neighborhoods.	County Engineer	Grant Local Funds	27,588 110,350	2022 2027	74
FL3m	Acquire signage to indicate water depth at flooding points.	County Engineer	Grant Local Funds	55,175 165,525	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities.	County Govt, Local Govt, EMA	Grant Local Funds	33,105 165,525	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response.	EMA	Grant Local Funds	55,175 220,700	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized countywide Update program annually.	County Govt, Local Govt, EMA	Grant Local Funds	22,070 110,350	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the county.	County Govt, Local Govt	Existing	5,518 110,350	2022 2027	74
HW3h	Adopt/enforce legislation for mobile home parks to install ground anchors.	County Govt, Local Govt	Existing	5,518 110,350	2022 2027	74
UF2a	Obtain fire PPE for all personnel responding to fire incidents.	EMA Local Govt	Grant Local Funds	551,750 1,103,500	2022 2027	74
UF2d	Train all fire responders in fire combat techniques annually.	Local Govt	Grant Local Funds	55,175 165,525	2022 2027	74
UF3a	Ensure that NFPA standards and codes are followed.	Local Govt	Existing	5,518 110,350	2022 2027	74
WF1c	Educate school populations on causes of, preparedness for and response to a wild-land fire	AFC EMA	Existing	5,518 110,350	2022 2027	74
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC EMA	Grant Local Funds	5,518 110,350	2022 2027	74
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	DNR, EMA, Fire Dept's	Local funds	5,518 110,350	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	EMA	Existing	5,518 110,350	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	EMA Local Govt VFD	Grant Local Funds	285,875 860,730	2022 2027	73

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH2a	Obtain/distribute interoperable radios for all 1st responders	EMA Fire Svc Law Enforcement	Grant Local Funds	110,350 331,050	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events. Train through State level ADPH.	EMA ADPH	Grant Local Funds	22,070 220,700	2022 2027	73
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas. Last updated by FEMA in 2013.	County Govt Local Govt Devel Svcs	Existing	5,518 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually (Tornado)	EMA	Grant Local Funds	11,035 110,350	2022 2027	73
IS3d	Assist jurisdictions as necessary to establish snow and ice removal methods. Currently sand bridges as needed.	County Govt Local Govt	Existing	5,518 110,350	2022 2027	73
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	AFC EMA	Existing	5,518 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to all uncovered areas (20 Systems)	EMA Local Govt VFD	Grant Local Funds	331,050 1,103,500	2022 2027	72
AH3c	Ensure the Emergency Action System (EAS) can be activated by officials at the local level	AEMA EMA	Existing	5,518 110,350	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	EMA	Local NGO Funds	165,525 331,050	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	EMA	Grant Local Funds	11,035 110,350	2022 2027	72
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	County Govt, Local Govt, Devel Svcs	Existing	5,518 110,350	2022 2027	72
FL3f	Identify roadways, culverts and bridges damaged by flooding (CR 55, CR 101)	County Engineer	Grants Local Funds	55,175 285,875	2022 2027	72
FL3g	Update County Land Use Plan to identify areas where development should be restrictive	County Govt Develop Services	Existing	5,518 110,350	2022 2027	72
FL3j	Use HAZUS-MH to develop a database of structures in 100/500-year flood plains	IT Services EMA Develop Services	Existing	11,035 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS) Conduct Storm Spotter's Courses	NWS EMA	Existing	5,518 110,350	2022 2027	72
UF2e	Obtain fire equipment to combat fires in high rise buildings	Local Govt	Grant Local Funds	1,103,500 5,517,500	2022 2027	72
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	Local Govt	Grant Local Funds	110,350 441,400	2022 2027	72

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC EMA	Existing	5,518 110,350	2022 2027	72
AH3a1	Develop/maintain a countywide NIMS resource inventory software	EMA Local Entity	Local	22,070 110,350	2022 2027	71
AH3b1	Develop redundancy capabilities for 911 services and equipment	911, EMA	Existing	55,175 110,350	2022 2027	71
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	EMA	Grant Local Funds	27,588 285,875	2022 2027	71
AH3d1	Obtain equipment and train staff to implement NOAA and Emergency Management Software	EMA	Grant Local Funds	27,588 110,350	2022 2027	71
FL2b	Train all 1st responders on repetitive flooding areas and structures	EMA	Grant Local Funds	55,175 220,700	2022 2027	71
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	County Govt Local Govt Devel Svcs, County Engineer	Existing	5,518 110,350	2022 2027	71
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	County Engineer	Grant Local Funds	33,105 220,700	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents Distribute radios	EMA	Grant Local Funds	55,175 165,525	2022 2027	71
HW3h	Assist the use of shatter-proof/tempered windows in schools	BOE EMA	Grant Local Funds	551,750 1,103,500	2022 2027	71
UF2b	Train firefighters to obtain for state and national certifications	Local Govt	Grant Local Funds	110,350 331,050	2022 2027	71
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	County Govt Local Govt	Existing	5,518 110,350	2022 2027	71
UF3f	Adopt/enforce commercial and special needs facilities sprinkler legislation	County Govt Local Govt	Existing	5,518 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	Local Entity EMA ADPH	Grant Local Funds	22,070 220,700	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	EMA ARC DHR	Local Funds	5,518 110,350	2022 2027	70
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing.	County Govt Local Govt	Existing	5,518 110,350	2022 2027	70
UF3k	Obtain smoke detectors and provide free to residents in need.	Local Govt EMA	Grant Local Funds	55,175 441,400	2022 2027	70
WF3i	Adopt/enforce wildfire legislation that includes burning bans.	Co Govt Local Govt	Existing	5,518 110,350	2022 2027	70
AH3m	Assist medical services to develop a Mass Casualty Plan. Annually through exercises.	Co Coroner EMA ADPH	Grant Local Funds	11,035 110,350	2022 2027	69

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a1	Adopt/enforce an NFIP flood plain management plan.	County Govt Local Govt	Existing	5,518 110,350	2022 2027	69
FL3a2	Adopt/enforce floodplain legislation to require structures built to be elevated above the NFIP BFE.	County Govt Local Govt Co Engineer	Existing	5,518 110,350	2022 2027	69
FL3c	Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood prone areas.	County Govt Local Govt	Grants Local Funds	2,207,000 5,517,500	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans.	County Govt Local Govt EMA	Grant Local Funds	33,105 220,700	2022 2027	68
HW3e	Obtain funding to build mobile home community storm shelters.	Local Govt County Govt EMA	Grant Local Funds	220,700 1,103,500	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques.	AFC	Grant Local Funds	55,175 165,525	2022 2027	67
AH3b2	Develop redundancy capabilities for emergency radio communications.	911 1st Responder Depts	Existing	5,518 110,350	2022 2027	66
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots.	Co Govt Local Govt, EMA	Grant Local Funds	220,700 441,400	2022 2027	66
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP).	County Govt Local Govt Dev Svcs	Existing	5,518 110,350	2022 2027	66
FL3f	Develop a storm water management plan for the jurisdiction. Shelby County has updated MS4 Stormwater Management Plan in place.	County Govt Environ Services	Existing	5,518 110,350	Complete	66
UF1d	Obtain a fire education-training trailer for the jurisdiction.	EMA	Grant Local Funds	110,350 331,050	2022 2027	66
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent.	County Govt Local Govt	Grant Local Funds	1,103,500 4,414,000	2022 2027	66
WF2e	Obtain DNR compatible radios for interoperable communications.	EMA	Grant Local Funds	110,350 331,050	2022 2027	66
AH3s1	Assist all businesses in developing Business Continuity Plans.	County Govt Local Govt EMA	Existing	5,518 110,350	2022 2027	65
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning.	County Govt Local Govt Devel Svcs	Existing	5,518 110,350	2022 2027	65
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	County Govt, Envir Svcs, Dev Svcs	Existing	5,518 110,350	2022 2027	65

Table 7.14 Shelby County Mitigation Actions

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3h	Acquire and install six inch water mains/hydrants county wide	County Govt Local Funds	Federal/ State Grant Local Funds	5,518 110,350	2022 2027	64
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	Co. Govt. Local Govt.	Grant Local funds	5,518 110,350	2022 2027	63
WF2f	Exercise fire response regularly for residences, businesses and industry.	AFC Local Fire Services	Existing	11,035 110,350	2022 2027	63
FL2f	Obtain equipment to develop a swift water rescue team.	EMA	Grant Local Funds	35,000 331,050	2022 2027	62
FL2f1	Train appropriate 1st responders for a swift water rescue team.	Fire College Local Entities EMA	Grant Local Funds	27,588 220,700	2022 2027	62
WF2b	Obtain specialized equipment to combat wild-land fires.	EMA	Grant Local Funds	110,350 441,400	2022 2027	62
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding (CR 55 and CR 101.).	County Engineer	Funds Local Funds	1,269,025 2,538,050	2022 2027	61
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding. County Engineer has cranes, backhoes, rollers and dozers.	County Engineer	Grant Local Funds	827,625 4,414,000	2022 2027	61
WF3j	Develop Procedures by the county Solid Waste Department to respond to landfill fires.	Co Govt Envir Svcs	Existing	5,518 110,350	2022 2027	56
WF3k	Inspect the county Solid Waste Facility for mitigation efforts to prevent methane gas buildup	Co Govt Envir Svcs	Existing	5,518 110,350	2022 2027	56

Table 7.15 "STAPLEE" Mitigation Actions Prioritization Table

	Social				Technical			Administrative			Political			Legal			Economic				Environmental					Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=1-9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	2	3	3	2	3	3	3	3	3	3	2	6	4	4	2	3	3	3	3	3	91
Hurricane watch and warning procedures are in place to alert 1st responders and the public	3	9	6	9	3	2	3	2	3	2	3	2	2	3	3	2	6	6	3	3	3	3	3	3	3	90
Assist schools and special needs facilities to develop disaster preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots.	3	9	6	9	3	3	3	3	2	3	2	2	3	3	3	2	6	4	2	2	3	3	3	3	3	88
Educate the public on High Wind weather preparedness, response and recovery	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Educate and distribute High Wind preparedness information	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Insure NWS Hurricane watches and warnings are monitored by Emergency Management	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	6	9	3	3	2	3	3	2	3	2	3	3	3	2	6	2	2	2	3	3	3	3	3	86
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	3	3	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	86
Educate the special needs and education populations on High Wind preparedness and response	3	6	4	9	3	2	3	3	3	3	3	3	3	3	3	3	4	4	3	3	3	3	3	3	3	86

Insure county EMA participates in High Wind planning as a potential reception area for evacuees.	3	9	0	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	86
Distribute safe room/shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop/maintain a public information web site on hazard preparedness and response	2	9	6	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	3	2	3	3	3	3	3	83
Develop a program to inspect and maintain natural drainage channels to clear beaver dams and debris; Co Rd 26,81, 61, 24, 86, 43 & 77)	2	6	6	7	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	83
Educate school, special needs and the community populations on fire safety and response	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Educate school, special needs and the community population on fire extinguisher use	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Assist fire departments in obtaining fire prevention program materials	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Develop a media warning program to warn the public of hazard event	2	9	6	9	3	3	3	2	2	2	2	1	3	3	3	3	3	3	3	2	3	3	3	3	3	82
Require critical sites to develop and provide to EMA an emergency plan	2	6	4	9	2	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Distribute flood awareness and preparedness literature at events	2	6	2	7	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Obtain PPE for all personnel responding to flood events	2	6	4	7	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	82
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	7	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	82
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Develop fire plans for all major businesses and critical facilities	2	6	6	5	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Coordinate a shelter program for the Red Cross and volunteers	2	6	0	9	2	3	2	2	3	2	2	3	3	3	3	3	6	6	2	3	3	3	3	3	3	80
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	5	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	80

Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Obtain and continually update 911 technology and capabilities	2	9	6	9	3	3	3	1	1	2	3	3	3	3	3	3	2	1	3	1	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that utility restoration plans and mitigation efforts are in place with the various electric utilities.	2	6	2	9	3	2	3	2	2	2	2	2	2	3	3	3	6	6	2	2	3	3	3	3	3	79
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Participate in the National Flood Insurance Program (NFIP)	3	0	4	7	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Request a study of the feasibility of flood control measures along the Cahaba and Coosa Rivers.	2	6	6	7	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	79
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	5	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Obtain/maintain a grant writing position for the county jurisdictions	2	6	6	9	3	2	3	2	1	2	2	1	2	3	3	3	4	4	2	3	3	3	3	3	3	78
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Assist special needs facilities to implement a security system	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Obtain/install an automated wide area rapid notification system.	2	9	6	9	3	3	3	1	3	1	2	1	3	3	3	3	2	1	3	1	3	3	3	3	3	77
Adopt/enforce mobile home tie down and skirting legislation	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Assist fire inspections to be regularly conducted at businesses and industry	2	6	6	5	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Educate businesses and the public on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist all businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76

Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Assist jurisdictions to develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	3	3	3	3	3	3	3	76
Annually review and update hazard related legislation	3	3	2	9	3	2	3	2	3	2	2	2	2	3	3	3	4	4	3	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Maintain contact with state and federal agencies regarding biological and disease threats.	3	9	0	4	3	3	3	3	3	3	2	2	3	3	3	3	3	3	2	3	3	3	3	3	3	76
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	5	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	76
Participate in the NFIP Community Rating System	3	0	0	7	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Develop EOP ESF's/annexes for all hazards that may impact the jurisdiction	3	3	2	9	2	3	2	2	2	1	3	3	3	3	3	2	4	4	3	2	3	3	3	3	3	74
Review/revise the county Emergency Operations Plan annually and after each disaster	3	3	2	9	2	3	2	2	2	1	3	3	3	3	3	2	4	4	3	2	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Identify alternative access points for single access neighborhoods	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Acquire signage to indicate water depth at flooding points	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized countywide Update plan annually	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the county.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74

Adopt/enforce legislation for mobile home parks to install ground anchors	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Train all fire responders in fire combat techniques annually	2	6	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Ensure that NFPA standards and codes are followed.	2	0	4	5	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Educate school populations on causes of, preparedness for and response to a wild-land fire	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually (Tornado)	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Assist jurisdictions to establish snow and ice removal methods	2	6	2	4	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to all uncovered areas (20 Systems)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Ensure the Emergency Action System (EAS) can be activated by officials at the local level	3	9	6	9	1	2	1	2	2	2	1	1	1	3	3	3	2	2	2	2	3	3	3	3	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	2	3	3	3	4	4	4	2	3	3	3	3	3	72
Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	2	6	4	7	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	72
Identify roadways, culverts and bridges damaged by flooding (Hiawatha Road, Crenshaw Road, Dead Hollow Road South)	3	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	72

Update County Land Use Plan to identify areas where development should be restrictive	2	3	6	7	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	72
Use HAZUS-MH to develop a database of structures in 100/500-year flood plains	2	6	6	9	3	2	2	2	2	2	1	1	1	3	3	2	2	2	3	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service (NWS) Conduct Storm Spotter's Courses	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Obtain fire equipment to combat fires in high rise buildings	2	6	6	5	3	3	3	2	2	2	2	2	2	3	3	3	2	2	3	1	3	3	3	3	3	72
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Develop/maintain a countywide NIMS resource inventory software	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Develop redundancy capabilities for 911 services and equipment	2	6	4	9	3	3	3	2	2	1	2	2	2	3	3	3	2	1	2	1	3	3	3	3	3	71
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	1	1	1	1	1	2	3	3	3	4	2	4	1	3	3	3	3	3	71
Obtain equipment and train staff to implement NOAA and Emergency Management Software	2	6	4	9	3	2	3	1	1	1	1	1	2	3	3	3	4	2	4	1	3	3	3	3	3	71
Train all 1st responders on repetitive flooding areas and structures	2	3	2	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	71
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents Distribute radios	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Assist the use of shatter-proof windows in schools	1	6	4	8	3	3	3	2	2	2	2	2	3	3	3	3	2	1	2	1	3	3	3	3	3	71
Train firefighters to obtain for state and national certifications	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	5	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	71
Adopt/enforce commercial and special needs facilities sprinkler legislation	2	6	4	5	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70

Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	5	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	70
Obtain smoke detectors and provide free to residents in need.	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	70
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Assist medical services to develop a Mass Casualty Plan	2	6	0	9	3	3	3	2	2	1	2	1	2	3	3	3	3	3	2	1	3	3	3	3	3	69
Adopt/enforce an NFIP flood plain management plan	2	0	4	7	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	69
Adopt/enforce floodplain legislation to require structures built to be elevated above the NFIP BSE	2	3	6	7	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	69
Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood prone areas	2	6	6	7	3	3	3	1	2	2	1	1	2	3	3	2	2	1	3	1	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Develop redundancy capabilities for emergency radio communications	2	3	2	9	3	3	3	2	2	1	1	2	2	3	3	3	2	2	2	1	3	3	3	3	3	66
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	66
Develop a storm water management plan for the jurisdiction	2	3	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	66
Acquire equipment to detect/monitor of agriculture vectors or diseases	1	6	6	4	3	3	3	2	1	2	2	2	2	3	3	3	2	1	3	1	2	3	3	2	3	66
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	5	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	66
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	5	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	66
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Assist all businesses in developing Business Continuity Plans	2	0	2	9	3	3	3	3	1	3	1	1	1	3	3	3	3	2	3	1	3	3	3	3	3	65
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	7	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	65
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	7	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	65

Acquire and install six inch water mains/hydrants county wide	2	9	6	5	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	64
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	63
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Obtain equipment to develop a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Train appropriate 1st responders for a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Train and fund a position for school or work place hostage negotiation	2	6	2	3	3	3	3	1	2	2	2	1	3	3	2	2	1	1	2	3	3	3	3	3	3	62
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding (Hiawatha Rd, Crenshaw Swamp Rd, Dead Hollow Rd)	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Develop Procedures by the county Solid Waste Department to respond to landfill fires.	2	3	2	1	3	2	2	2	3	2	2	2	2	3	3	2	2	4	2	3	2	2	1	2	2	56
Inspect the county Solid Waste Facility for mitigation efforts to prevent methane gas buildup	2	3	2	1	3	2	2	2	3	2	2	2	2	3	3	2	2	4	2	3	2	2	1	2	2	56

SECTION 8
MITIGATION PLAN MAINTENANCE

8.1 INTRODUCTION

Periodic revisions and updates of the Hazard Mitigation Plan are required to ensure that the goals of the Plan are kept current, taking into account potential changes in hazard vulnerability and mitigation priorities. In addition, revisions may be necessary to ensure that the Plan is in full compliance with applicable federal and state regulations. Periodic evaluation of the Plan will also ensure that specific mitigation actions are being reviewed and carried out according to each jurisdiction's individual Mitigation Action Plan

8.2 MONITORING, EVALUATION AND UPDATING METHODOLOGY

The Shelby County Hazard Mitigation Committee intends to remain intact as the organization responsible for monitoring, evaluating and updating this Plan. The Shelby County EMA Director shall continue to act as the coordinator for the Mitigation Committee. Each participating jurisdiction is expected to maintain representation on the committee which shall fulfill the monitoring, evaluation and updating responsibilities identified in this Section. The Shelby County Hazard Mitigation Plan will be monitored, evaluated and updated for the following purposes:

1. Maintain the currency of hazard and risk information.
2. Ensure that mitigation projects and actions reflect the priorities of the county and its constituents.
3. To comply with Federal Emergency Management Agency (FEMA) requirements, and maintain the county's eligibility for federal disaster assistance and mitigation grants.

It is recognized that individual commitments change over time, and it shall be the responsibility of each department to inform the mitigation committee coordinator of any changes in representation by formal letter. The Coordinator will keep the committee makeup as a uniform representation of planning partners and stakeholders within the planning area. The planning committee shall be informed at the time of each change in representation on the committee

8.3 SCHEDULE FOR MONITORING THE PLAN

The Mitigation Committee shall be responsible for monitoring progress on, and evaluating the effectiveness of, the Plan, and documenting this in an annual progress report. During each year, and prior to the annual meeting of the Mitigation Committee, representatives will collect and process the annual reports from the departments, agencies and organizations involved in implementing mitigation projects or activities, or conduct phone calls and meetings with persons responsible for initiating and/or overseeing the mitigation projects to obtain progress information. Further, they shall obtain from their municipal supervisor/mayor or clerk any public comments made on the plan. The Mitigation Committee representatives shall be expected to document, as needed and appropriate:

- Hazard events and losses occurring in their jurisdiction including their nature and extent and the effects that hazard mitigation actions have had on impacts and losses,
- Progress on the implementation of mitigation actions, including efforts to obtain outside funding for mitigation actions
- Any obstacles or impediments to the implementation of actions
- Additional mitigation actions believed to be appropriate and feasible
- Public and stakeholder input and comment on the Plan.

8.4 SCHEDULE AND METHODOLOGY FOR PLAN EVALUATION

The evaluation of the mitigation plan is an assessment of whether the planning process and actions have been effective, if the Plan goals are being reached, and whether changes are needed. The Plan will be evaluated on an annual basis to determine the effectiveness of the programs, and to reflect changes that may affect mitigation priorities or available funding.

The status of the Plan will be discussed and documented at an annual plan review meeting of the Shelby County Hazard Mitigation Committee (SCHMC) and the Shelby County Local Emergency Planning Committee (SCLEPC) to be held the 2nd Tuesday in February starting at 11:30 AM. In January or at least one month before the annual plan review meeting, the Shelby County Mitigation Plan Coordinator will advise Mitigation Committee members of the meeting date, agenda and expectations of the members.

The Mitigation Coordinator will be responsible for calling and coordinating the annual plan review meeting, and assessing progress toward meeting plan goals and objectives. These evaluations will assess whether:

- Goals and objectives address current and expected conditions.
- The nature or magnitude of the risks has changed.
- Current resources are appropriate for implementing the Mitigation Plan and if different or additional resources are now available.
- Actions were cost effective.
- Schedules and budgets are feasible.
- Implementation problems, such as technical, political, legal or coordination issues with other agencies exist.
- Outcomes have occurred as expected.
- Changes in county resources impacted plan implementation (e.g., funding, personnel, and equipment)
- New agencies/departments/staff should be included, including other local governments as defined by 44 CFR 201.6.
- Documentation for hazards that occurred within the jurisdiction during the last year

Specifically, the Mitigation Committee will review the mitigation goals, objectives, and activities/projects using performance based indicators, including:

- New agencies/departments created that have authority to implement mitigation actions or are required to meet goals, objectives, and actions
- Project evaluation based on current needs of the mitigation plan
- Project completion regarding progress of proposed or ongoing actions
- Under/over spending regarding proposed mitigation action budgets
- Achievement of the goals and objectives
- Resource allocation to note if resources are required to implement mitigation activities
- Timeframes-comment on whether proposed schedules are sufficient to address actions
- Budgets-note if budget basis should be changed or is sufficient
- Lead/support agency commitment-note if there is a lack of commitment on the part of lead or support agencies
- Resources regarding whether resources are available to implement actions
- Feasibility –comment regarding whether certain goals, objectives, or actions prove to be unfeasible

Finally, the Mitigation Committee will evaluate how other programs and policies have conflicted or augmented planned or implemented measures, and shall identify policies, programs, practices, and procedures that could be modified to accommodate hazard mitigation actions. Other programs and policies can include those that address:

- Economic Development
- Environmental Preservation & Permitting
- Historic Preservation
- Redevelopment
- Health and/or safety
- Recreation
- Land use/zoning
- Public Education and Outreach
- Transportation

The Mitigation Committee Coordinator shall be responsible for preparing an Annual Mitigation Plan Progress Report, based on the provided local annual progress reports from each department presented at the annual Mitigation Committee meeting, and other information as appropriate and relevant. These annual reports will provide data for the 5-year update of this Mitigation Plan and will assist in pinpointing implementation challenges. By monitoring the implementation of the Plan on an annual basis, the Mitigation Committee will be able to assess which projects are completed, which are no longer feasible, and what projects may require additional funding.

This annual progress report shall apply to all planning partners, and as such, shall be developed according to an agreed format and with adequate allowance for input and comment of each planning partner prior to completion and submission to the State Hazard Mitigation Officer. Each planning partner will be responsible for providing this report to its governing body for their review. During the annual Mitigation Committee meeting, the planning partners shall establish a schedule for the draft

development, review, comment, amendment and submission of the Annual Mitigation Plan Progress Report to the State.

The Annual Mitigation Plan Progress Report shall be posted on the County's Hazard Mitigation Plan website to keep the public apprised of the Plan's implementation.

The Plan will also be evaluated and revised following any major disasters, to determine if the recommended actions remain relevant and appropriate. The risk assessment will also be revisited to see if any changes are necessary based on the pattern of disaster damages or if data listed in the Hazard profile Section of this Plan has been collected to facilitate the risk assessment is still relevant. This is an opportunity to increase the community's disaster resistance and build a better and stronger community.

8.5 FIVE YEAR PLAN REVIEW SCHEDULE AND METHODOLOGY

44 CFR 201.6.d.3 requires that local hazard mitigation plans be reviewed, revised as appropriate, and resubmitted for approval in order to remain eligible for benefits awarded under DMA 2000. It is the intent of the Shelby County Mitigation Committee to update this Plan on a five-year cycle from the date of this 2022 plan adoption.

To facilitate the update process, the Mitigation Plan Coordinator, with support of the Mitigation Committee, shall use the third annual Mitigation Committee meeting (February of 2025 assuming this Plan is approved in 2022) to develop and commence the implementation of a detailed Plan update program. The Mitigation Plan Coordinator shall invite representatives from the State to this meeting to provide guidance on plan update procedures. This program shall, at a minimum, establish who shall be responsible for managing and completing the Plan update effort, what needs to be included in the updated plan, and a detailed timeline with milestones to assure that the update is completed according to regulatory requirements.

At this meeting, the Mitigation Committee shall determine what resources will be needed to complete the update. The Mitigation Committee Coordinator will prepare a report: 1) describing the update requirements; 2) summarizing the staff analysis of the Plan, highlighting areas that require modification and identifying why the modification is needed, and; 3) providing detailed recommendations about how the Plan should be updated, noting any technical work that may be required. The report will be provided to Mitigation Committee and County Commission for consideration. The County Commission and Mitigation Committee will review the report and make recommendations to the County Supervisor on how to proceed with the update process. The County Supervisor will designate an individual or county department to carry out the recommendations and any technical work, and will prepare draft updates to the Plan on a schedule determined by the Mitigation Committee, the County Commission and/or the County Supervisor.

During the five-year plan review process, the following questions will be considered as criteria for assessing the effectiveness and appropriateness of the Plan:

- Do the goals address current and expected conditions?
- Has the nature or magnitude of risks changed?
- Are the current resources appropriate for implementing the Plan?

- Are there implementation problems, such as technical, political, legal or coordination issues with other agencies?
- Have the outcomes occurred as expected?
- Did the jurisdictions, agencies, and other partners participate in the Plan implementation process as proposed?

Shelby County and its participating departments or agency's will forward information on any proposed change(s) to all interested parties including, but not limited to, all affected parish and municipal departments, residents and businesses. When a proposed amendment may directly affect particular private individuals or properties, Shelby County will follow existing local, state or federal notification requirements, which may include published public notices as well as direct mailings. Information on any proposed Plan amendments will also be forwarded to the State. This information will be disseminated in order to seek input on the proposed amendment(s) for not less than a 45-day review and comment period. At the end of the 45-day review and comment period, the proposed amendment(s) and all comments will be forwarded to the Mitigation Committee for final consideration. The committee will review the proposed amendment along with the comments received from other parties, and if acceptable, the committee will submit a recommendation for the approval and adoption of changes to the Plan to each appropriate governing body within 60 days. In determining whether to recommend approval or denial of a Plan amendment request, the following factors will be considered by the Mitigation Committee:

- There are errors, inaccuracies or omissions made in the identification of issues or needs in the Plan.
- New issues or needs have been identified which are not adequately addressed in the Plan.
- There has been a change in information, data, or assumptions from those on which the Plan is based.
- There has been a change in local capabilities to implement proposed hazard mitigation activities.

Upon receiving the recommendation from the Mitigation Committee and prior to adoption of the Plan, The local governing body will hold a public hearing. The governing body will review the recommendation from the Mitigation Committee (including the factors listed above) and any oral or written comments received at the public hearing. Following that review, the governing body will take one of the following actions:

- Adopt the proposed amendments as presented;
- Adopt the proposed amendments with modifications;
- Refer the amendments request back to the Mitigation Committee for further revision; or

Defer the amendment request back to the Mitigation Committee for further consideration and/or additional hearings. When the draft updates are completed, the Mitigation Committee will convene to conduct a comprehensive evaluation and revision. The Mitigation Committee (with input from the Stakeholders Group) will produce a final draft of the updated Plan for consideration by the Mayor and County Council. The Council and Mayor will review the updated Plan, initiate changes, approve and adopt the Plan in sufficient time to meet FEMA requirements.

8.6 INTEGRATE THE REQUIREMENTS OF THE MITIGATION PLAN INTO OTHER PLANNING MECHANISMS (COMPREHENSIVE, CAPITAL IMPROVEMENT & OTHER PLANS)

It is the intention of the Mitigation Committee and participating departments to incorporate mitigation planning as an integral component of daily government operations. Mitigation Committee members will work with local government officials to integrate the newly adopted hazard mitigation goals and actions into the general operations of government and partner organizations. By doing so, the Mitigation Committee anticipates that:

1) Hazard mitigation planning will be formally management efforts

2) The Hazard Mitigation Plan will become a mutually supportive document that works in concert to meet the goals and needs of County residents; and

3) Duplication of effort can be minimized.

It is recognized by all participating departments that this information can be invaluable in making decisions under other planning programs.

The primary process for integrating mitigation strategies into other local planning mechanisms will be through the revision, update and implementation of each of the individual plans that require specific planning and administrative tasks (e.g. plan amendments, ordinance revisions, capital improvement projects, etc.). The Mitigation Committee will identify which parts of this plan would be most appropriate to have incorporated into other county plans or mechanisms. The Mitigation Committee Coordinator is charged with identifying the schedule and contacts responsible for updating other county plans and mechanisms.

During the planning process for new and updated local planning documents, such as a comprehensive plan, capital improvements plan, or emergency management plan, Shelby County will provide a copy of the Hazard Mitigation Plan to the appropriate parties and recommend that all goals and strategies of new and updated local planning documents are consistent with and support the goals of the Hazard Mitigation Plan and will not contribute to increased hazards.

Although it is recognized that there are many possible benefits to integrating components of this Plan into other local planning mechanisms, the development and maintenance of this stand-alone Hazard Mitigation Plan is deemed by the Mitigation Committee to be the most effective and appropriate method to ensure implementation of local hazard mitigation actions at this time.

The members of the Mitigation Committee will remain charged with ensuring that the goals and strategies of new and updated local planning documents are consistent with the goals and actions of the Hazard Mitigation Plan, and will not contribute to increased hazard vulnerability in the Shelby County. The Table below includes existing processes and programs through which the mitigation plan should be implemented.

Table 8.1 Plan Integration		
Process	**Action**	**Implementation of Plan**
Administrative	Departmental or organizational work plans, policies, and procedural changes	▪ Public Works ▪ Building/Engineering ▪ Planning ▪ Emergency Services ▪ Health and Social Services ▪ Transportation ▪ Business and Economic Development
Administrative	Other organizations' plans	▪ Include reference to this plan in risk reduction section of the Municipal Emergency Operations Plans ▪ Include references in the creation of ordinances, public education, ▪ County Household Hazardous Waste information
Administrative	Jobs/Job Descriptions	Unpaid internships to assist in hazard mitigation plan maintenance
Budgetary	Capital and operational budgets	Review of county and local budgets to include line item mitigation actions
Regulatory	Executive Orders, ordinances and other directives	▪ Comprehensive Planning - Institutionalize hazard mitigation for new construction and land use. ▪ Zoning and Ordinances ▪ Building Codes-enforcement of codes or higher standard in hazard areas ▪ Capital Improvements Plan - Ensure that the person responsible for projects under this plan evaluate if the new construction is in a high hazard area, flood plain, etc. so the construction is designed to mitigate the risk. Revise requirements for this plan to include hazard mitigation in the design of new construction. ▪ National Flood Insurance Program – Continue participation in this program and increase participation in Community Rating System Program • Continue to implement storm water management plans. • Prior to formal changes (amendments) to comprehensive plans, zoning, ordinances, capital improvement plans, or other mechanisms that control development must be reviewed to ensure they are consistent with the hazard mitigation plan
Funding	Secure traditional sources of financing	▪ Apply for grants from federal or state government, nonprofit organizations, foundations, and private sources including Pre-Disaster Mitigation Program (PDM), Flood Mitigation Assistance Program (FMA), and the Hazard Mitigation Grant Program (HMGP-Stafford Act, Section 404). ▪ Research grant opportunities through U.S. Department of

Table 8.1 Plan Integration		
Process	**Action**	**Implementation of Plan**
		Housing and Urban Development's Community Development Block Grant (CDBG) ▪ Stafford Act, Section 406 – Public Assistance Program Mitigation Grants ▪ Federal Highway Administration ▪ Catalog of Federal Domestic Assistance ▪ United States Fire Administration – Assistance to Firefighter Grants ▪ United States Small Business Administration Pre and Post Disaster Mitigation Loans ▪ United States Department of Economic Development Administration Grants ▪ United States Army Corps of Engineers ▪ United States Department of Interior, Bureau of Land Management
Partnerships	Develop creative partnerships, funding and incentives	▪ Public-Private Partnerships ▪ State Cooperation ▪ In-kind resources
Partnership	Existing Committees and Councils	▪ Local Government Committees: ▪ Environmental Commissions ▪ Planning Boards ▪ Zoning Board of Appeals ▪ Media and Communications ▪ Merchants Association ▪ Property Owners Association
Partnership	Working with other federal, state, and local agencies	▪ Army Corps of Engineers (USACE) ▪ American Red Cross ▪ Department of Homeland Security (DHS) ▪ Federal Emergency Management Agency (FEMA) ▪ National Oceanic and Atmosphere Agency (NOAA) ▪ National Weather Service (NWS) ▪ Minnesota Department of Transportation ▪ Minnesota Department of Environmental Protection ▪ Minnesota State Police ▪ United States Department of Agriculture (USDA) ▪ United States Department of Transportation (USDOT) ▪ United States Geological Service (USGS) ▪ Watershed Associations

8.6.1 Previous Plan Maintenance and Incorporation of Mitigation Strategy

The current mitigation team extensively reviewed the previous plan maintenance and updating methodologies and processes. Documented in this section are the methodologies that were effective and those that need improvements.

Table 8.2 Plan Maintenance Effectiveness Review

Plan Maintenance Component	Status	Effectiveness
Annually Evaluate the effectiveness of previously-implemented mitigation actions;	Review annually	Medium
Annually Explain why any actions are not completed or behind schedule;	Annually	Medium
Annually Address changing land use patterns and new developments; and,	As required	
Annually Identify any changes in risk assessment and/or risk vulnerability.	Risk Assessment/vulnerability study made each year	Medium
For continued public involvement a hard copy of the plan will be available for viewing at all appropriate agencies throughout the county; including, at a minimum, the Shelby County EMA Office, the office of the Shelby County Commission, the offices of the mayors, and the main public library. After adoption, a notice in the newspaper will inform the public that the plan may be viewed at these locations.	Posted to County Web site; each municipality provide hard copy for files	Medium
Public meetings will be held when significant modifications to the plan are required or when otherwise deemed necessary by the HMPC.	Public meeting held as necessary	
If any of the jurisdictions develop future plans that pertain to items that may have an effect on natural hazard planning, the findings of this plan would likewise need to be incorporated into that community' s plan.	Updated with 5-year plan	Medium
At the end of the five-year cycle of the Action Program, the committee will oversee a major update to the plan that follows the Federal planning criteria in effect at the time of the update.	Plan updated every 5 years	High

Shelby County and many of the participating jurisdictions have reviewed and incorporated Hazard identification and risk assessment into other plans including Comprehensive Plans, Flood Management Plans and Emergency Operations Plans. Information from the previous plan was also used to develop SOG's and FOG's for hazard event response

8.7 CONTINUED PUBLIC INVOLVEMENT

Public participation is an integral component of the mitigation planning process and will continue to be essential as this Plan evolves over time. Significant changes or amendments to the Plan require a public hearing prior to any adoption procedures.

The public will have an opportunity to comment on the Plan at the annual review meeting for the Mitigation Plan and during the 5-year plan update. The annual progress reports will be posted on the

County mitigation website in addition to the Hazard Mitigation Plan. The County will maintain this website, posting the annual progress reports and maintaining an active link to collect public comments.

The Mitigation Committee Coordinator is responsible for coordinating the Plan evaluation portion of the meeting, soliciting feedback, collecting and reviewing the comments, and ensuring their incorporation in the 5-year plan update as appropriate. Additional meetings may also be held as deemed necessary by the mitigation committee. The purpose of these meetings would be to provide the public an opportunity to express concerns, opinions, and ideas about the mitigation plan. Annual progress reports will also be posted to the project web site.

Other efforts to involve the public in the maintenance, evaluation, and revision process will be made as necessary. These efforts may include:

- Advertising meetings of the Mitigation Committee in the local newspaper, public bulletin boards, and/or county and county office buildings;
- Designating willing and voluntary citizens and private sector representatives as official members of the Mitigation Committee;
- Utilizing local media to update the public of any maintenance and/or periodic review activities taking place;
- Utilizing county and county web sites to advertise any maintenance and/or periodic review activities taking place.

The Shelby County is committed to the continued involvement of the public in the hazard mitigation process. Therefore, copies of the Plan will be made available for review during normal business hours at the Shelby County Library, the County Planning Department, and on the county website.

SECTION 9
APPENDICES

9.1 REFERENCES AND ACKNOWLEDGEMENTS

The resources were accessed during plan development and in many cases provided specific content, maps and images.

Agency for Toxic Substances and Disease Registry (ATSDR)
Alabama Department of Agriculture
Alabama Department of Justice
Alabama Department of Transportation
Alabama Emergency Management Agency
Alabama Department of Public Health
Alabama Department of Human Resources

Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI)
Coast Guard, National Response Center
Colorado State University
City-Data.com
City of Alabaster
City of Calera
City of Chelsea
City of Columbiana
Town of Harpersville
City of Helena
Town of Indian Springs Village
City of Montevallo
City of Pelham
Town of Vincent
Town of Westover
Town of Wilsonville
Town of Wilton

Environmental Protection Agency

Federal Bureau of Investigation
Federal Computer Incident Response Center
Federal Emergency Management Agency (FEMA)
Federal Motor Carrier Safety Administration

International Association of Emergency Managers (IAEM)

Jurisdictions Websites
Jurisdictions Comprehensive Plans

National Climatic Data Center, National Oceanic and Atmospheric Administration-Storm Event Database
National Earthquake Hazards Reduction Program
National Emergency Management Association (NEMA)
National Highway Traffic Safety Administration
National Nuclear Security Administration
National Oceanic and Atmospheric Agency
National Performance of Dams Program-Dam Incident Notification Database
National Response Team (NRT)
National Weather Service
Natural Hazards Center

Office of Domestic Preparedness
Office of Emergency Preparedness

Red Cross/VOAD

Shelby County Chamber of Commerce
Shelby County Newspapers
Shelby County Emergency Management
Shelby County Appraiser and GIS
Shelby County 911
Shelby County Public Health
Shelby County Red Cross
Shelby County Department of Agriculture
Shelby County Sheriff's Office
State of Alabama Hazard Mitigation Plan

U.S. Army Corp of Engineers
USACE. National Inventory of Dams
U.S. Census Bureau
U.S. Department of Agriculture
U.S. Department of Agriculture Forest Service
U.S. Department of Justice
U.S. Department of Transportation
U.S. Fire Administration
U.S. Geological Survey
U.S. Geological Survey Earthquakes Hazard Program
U.S. Health and Human Services

9.2 MITIGATION MEETINGS, NOTICES AND MINUTES

All committee and public meeting notices are copied or scanned into this section.

LEPC Sign In Sheet

	Rich	Barry	RPS	516-2381						
	Roberts	Mike	Pelham Police Department	620-6489		mroberts@pelhamonline.com	3174 Church Street	Pelham	35124
	Robbins	Charles	ARGOS	296-6363		crobbins@argos-us.com	P. O. Box 182	Calera	35040
	Rush	Matt	Southeast Shelby Rescue	669-4866		mrush608@gmail.com		Columbiana	35051
	Saminiego	John	Shelby County Sheriff's Office	669-4181		jsaminiego@shelbyso.com	Post Office Box 1095	Columbiana	35051
	Scroggins	Chad	Shelby County Environmental	669-3737		cscroggins@shelbyal.com	504 Highway 70	Columbiana	35051
	Shirey	Hilton	Calera Fire Department	668-3832		hshirey@calera.org	P. O. Box 1000	Calera	35040
	Shirley	Wayne	Chelsea Fire Department	678-6060		wshirley@cityofchelsea.com	Post Oiifce Box 165	Chelsea	35043
	Shotts	Stanley	ARGOS	281-3714		jshotts@argo-us.com	P. O. Box 182	Calera	35040
	Sides	Blair	Pelham Fire Department			sides@pelhamonline.com	P. O. Drawer 1419	Pelham	35124
	Srygley	James	Vincent Police Department	672-2261		chiefsrygley@bellsouth.net	Post Officce Box 49	Vincent	35078
	Stallings	Bobby	Colonial Pipeline	685-6002	919-4045	BStallings@colpipe.com	P. O. Box 248	Pelham	35124
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Therrien	Josh	ADEM	942-6168		jtherrien@adem.state.al.us	110 Vulcan Road	Birmingham	35209
	Turner	Kevin	Shelby County Sheriff's Office	670-6401		kturner@shelbyso.com	P. O. Box 1095	Columbiana	35051
	Tyler	Buddy	North Shelby Fire	991-6439		chief@northshelbyfire.com		Birmingham	35242
	Valenti	Peter	Helena Fire Department	663-5809		pvalenti@cityofhelena.org		Helena	35080
	Vick	Lamar	Columbiana Police Dept	669-6215		lvick@columbianapolice.com	107 Mildred Street	Columbiana	35051
	Ward	James	HEPACO	251-423-0728		james.ward@hepaco.com	5995 Rangeline RD	Theodore	36532
	Wesson	Mike	Brookwood-Shelby Baptist	620-8984		Michael.wesson@bhsala.com	1000 1st Street North	Alabaster	35007
	Wheat	Jim	Sysco	668-7077		wheat.jim@ccntralal.sysco.com	1000 Sysco Drive	Calera	35040
	Wilder	John	Helena Fire Department	663-5809		jwilder@helena.org			
	Williams	Mike	Colonial Pipeline	478-7005		mwilliam@colpipe.com	P. O. Box 248	Pelham	35124
	Williams	Ross	Plantation Pipeline	663-8844		ross_williams@kindermorgan.com	P. O. Box 489	Helena	35080
	Wingate	Chuck	Hoover Fire Department	444-7655	288-5691	wingatei@ci.hoover.al.us	2020 Valleydale Road	Hoover	35242
	LORD	Jon	RockyRidge Fire	822-0532	966-8741	JonLord@RockyRidgeFire	2911 Metropolitan Way	Birmin	35243

Shelby County Local Emergency Planning Committee February 12, 2017

LEPC Sign In Sheet

Please Sign	Last Name	First	Agency	Phone #	Cell #	Email	Mailing Address	City	Zip
	Agee	Chaed	Helena Fire Department	663-5809		cagee@helenafire.com	103 Oak View Lane	Helena	35080
	Baginski	Corey	Saginaw Fire		253-597	coreybaginski@gmail.com	568 Willow Glen	Alabaster	35007
	Blackburn	Shannon	USES			sblackburn@usesgroup.com			
	Blanton	Scott	Colonial Pipeline	239-4819		sblanton@colpipe.com	P. O. Box 248	Pelham	35124
	Brantley	Chip	Alabaster Fire Department	368-6977		cbrantley@alabasterfire.org	910 1st Street South	Alabaster	35007
	Brasher	Kelli	Shelby County 911	439-6911		kelli@shelby911.org	1000 County Services Dr.	Pelham	35124
	Bray	Mark	Southern Company			mbray@shouthernco.com			
	Brazier	David	Calera Fire Department	670-0710	365-1100	dbrazier@calera.org	P. O. Box 1000	Calera	35040
	Bunn	Chris	Colonial Pipeline	516-0570		cbunn@colpipe.com	POB 248	Pelham	35124
	Campbell	Alan	Shelby County 911	439-6911		acampbell@shelby911.org	1000 County Services Dr.	Pelham	35124
	Cantrell	Charlie	Southern Company			cecantre@southernco.com			
	Cleveland	Brian	Pelham Fire Department	620-6500		bcleveland@pelhamonline.com			
	Connell	Todd	ALDOT	668-0173		connellw@dot.state.al.us	3805 Highway 31	Calera	35040
	Copes	Brent	Shelby County Schools	682-7130	910-8237	bcopes@shelbyed.k12.al.us	116 Industrial Road	Columbiana	35051
	Corina	Byron	Alabama Power Company	669-8301		bvcorina@southernco.com			
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Derzis	Nicholas	Hoover Police Department	444-7700		derzisn@ci.hoover.al.us	100 Municipal Drive	Hoover	35216
	Dillard	Terry	ARES		908-0230	KI4YZI@arrl.net	108 Summer Hill Lane	Alabaster	35007
	Duffey	Scott	Pelham PD	620-6489		sduffey@pelhamonline.com			
	Ferguson	Tom	Shelby County Board of Ed	682-7013	288-3405	tferguson@shelbyed.k12.al.us	410 East College Street	Columbiana	35051
	Flynn	Brad	Helena Police Department	663-6499		bflynn@helenapd.com	P. O. Box 262	Helena	35080
	Fondren	Jay	SCSO	670-6141		jfondren@shelbyso.com	380 McDow Road	Columbiana	35051
	Gibbons	Troy	Colonial Pipeline	663-5162	541-4781	tgibbins@colpipe.com	POB 248	Pelham	35124
	Golden	Jim	Alabaster Fire Department	621-8752		jgolden@alabasterfire.org	910 1st Street South	Alabaster	35007
	Hale	Travis	HEPACO		296-0126	thale@hepaco	266 Commerce Circle	Irondale	35210

Shelby County Local Emergency Planning Committee February 12, 2017

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TL	Livesay	Tommy	DEC. Fire Waters	9072830		Hlivesay@decconstruction.com	130 Commerce Street	Birmingham AL 35217

Shelby County Local Emergency Planning Committee February 12, 2017

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	Gibbons	Troy	Colonial Pipeline	663-5162	541-4781	tgibbins@colpipe.com	POB 248	Pelham	35124
	Golden	Jim	Alabaster Fire Department	621-8752		jgolden@alabasterfire.org	910 1st Street South	Alabaster	35007
	Greene	Don	Harpersville Mayor	672-8000		mayortownofharpersville@aol.com		Harpersville	
	Hale	Travis	HEPACO		296-0126	thale@hepaco	266 Commerce Circle	Irondale	35210
	~~Harvey~~	Hub	Shelby County EMA	669-3999	288-6043	hharvey@shelbyal.com	504 Highway 70	Columbiana	35051
	Heath	Kimberly	ADPH	499-5253		kimberly.heath@adph.state.al.us	3400 MCClellan Blvd	Anniston	36201
	Helmers	Hank	Shelby County Highway Dept	670-6886		hhelmers@shelbyal.com	506 Highway 70	Columbiana	35051
	Hopper	Paula	ADPH	256-548-7631		paula.hopper@adph.state.al.us			
	Hooper	John	Shelby County Health Dept	620-1650		jhooper@adph.state.al.us	P. O. Box 864	Pelham	35124
	Hutchinson	Frank	Shelby Baptist Medical Center	620-8810	317-5579	frank.hutchinson@bhsala.com	1000 First Street North	Alabaster	35007
	Jones	Doug	Helena Police Department	663-6499		dougjones@helenapd.com	816 Highway 52 West	Helena	35080
	Kaylor	Hagen	Alabama Power Company	669-8063		hskaylor@southernco.com			
	Kendrick	Sean	Calera Fire Department	668-3518	229-7115	skendrick@calera.org	1310 17th Avenue	Calera	35040
	King	Ricky	Pelham Fire Department	620-6535		rking@pelhamonline.com	P. O. Drawer 1419	Pelham	35124
	Lauderdale	Jon	Alagasco			jon.lauderdale@alagasco.com			
	Lemley	Sean	Calera Police Department	668-3505		seanl@calera.org	10947 Highway 25	Calera	35040
	Leslie	Skip	Alabaster Fire Department	664-6817		cjleslie@alabasterfire.org	1950 Butler Road	Alabaster	35007
	Letlow	Vicki	DHR			vicki.letlow@			
	Littleton	Jeremy	Montevallo Police Department	665-1264		jlittleton@cityofmontevallo.com	545 Main Street	Montevallo	35115
	Littleton	Randy	Colonial Pipeline	685-6006		jlittlet@colpipe.com	P. O. Box 248	Pelham	35124
	Lord	Jon	Rocky Ridge Fire	822-0532	966-8791	jonlord@rockyridgefire.com	2911 Metropolitan Way	Birmingham	35243
	Lovvorne	John	Colonial Pipeline	678-763-0168		jlovvorn@colpipe.com	P. O. Box 248	Pelham	35124
	Lowe	Rusty	Hoover Fire Department	739-7039	288-5690	lower@ci.hoover.al.us	2020 Valleydale Road	Hoover	35244
	Mashego	Kim	Shelby County DRH	669-3000		Kim.Mashego@dhr.alabama.gov		Columbiana	35051
	McDonnell	Kyle	RPS	664-1036		kyle@rpsems.com	86 Longview Circle	Alabaster	35007
	McLaughling	Gerald	Colonial Pipeline	306-9091		gmclaugh@colpipe.com		Pelham	35124
	Morton	Billy	HEPACO			wmorton@hepaco.com			

Shelby County Local Emergency Planning Committee February 13, 2018

LEPC Sign in Sheet

Please Sign	Last Name	First	Agency	Phone #	Cell #	Email	Mailing Address	City	Zip
	Agee	Chaed	Helena Fire Department	663-5809		cagee@helenafire.com	103 Oak View Lane	Helena	35080
	Baginski	Corey	Saginaw Fire		253-597	coreybaginski@gmail.com	568 Willow Glen	Alabaster	35007
	Blackburn	Shannon	USES			sblackburn@usesgroup.com			
	Blanton	Scott	Colonial Pipeline	239-4819		sblanton@colpipe.com	P. O. Box 248	Pelham	35124
	Brantley	Chip	Alabaster Fire Department	368-6977		cbrantley@alabasterfire.org	910 1st Street South	Alabaster	35007
	Brasher	Kelli	Shelby County 911	439-6911		kelli@shelby911.org	1000 County Services Dr.	Pelham	35124
	Bray	Mark	Southern Company			mbray@shouthernco.com			
	Brazier	David	Calera Fire Department		365-1100	dbrazier@calera.org	P. O. Box 1000	Calera	35040
	Bunn	Chris	Colonial Pipeline	516-0570		cbunn@colpipe.com	POB 248	Pelham	35124
	Campbell	Alan	Shelby County 911	439-6911		acampbell@shelby911.org	1000 County Services Dr.	Pelham	35124
	Cantrell	Bobby	HEPACO	718-6503		bcantrell@hepaco.com			
	Cantrell	Charlie	Southern Company			cccantrc@southernco.com			
	Cleveland	Brian	Pelham Fire Department	620-6500		bcleveland@pelhamonline.com			
	Connell	Todd	ALDOT	668-0173		connellw@dot.state.al.us	3805 Highway 31	Calera	35040
	Cooner	Barry	Stella-Jones	612-6706		jcconer@stella-jones.com	1051 Hwy 25	Montevallo	35115
	Copes	Brent	Shelby County Schools	682-7130	910-8237	bcopes@shelbyed.k12.al.us	116 Industrial Road	Columbiana	35051
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Derzis	Nicholas	Hoover Police Department	444-7700		derzisn@ci.hoover.al.us	100 Municipal Drive	Hoover	35216
	Dillard	Terry	ARES		908-0230	KI4YZI@arrl.net	108 Summer Hill Lane	Alabaster	35007
	Duffey	Scott	Pelham PD	620-6489		sduffey@pelhamonline.com			
	Evans	Lina	Shelby County Coroner	669-3846		levans@shelbyal.com	P. O. Box 1321	Columbiana	35051
	Fednerson	Tanisha	E. C. Gaston	669-8020	288-1988	tfenders@southernco.com			
	Ferguson	Tom	Shelby County Board of Ed	682-7013	288-3405	tferguson@shelbyed.k12.al.us	410 East College Street	Columbiana	35051
	Flynn	Brad	Helena Police Department	663-6499		bflynn@helenapd.com	P. O. Box 262	Helena	35080
	Fondren	Jay	SCSO	670-6141		jfondren@shelbyso.com	380 McDow Road	Columbiana	35051

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	Nash	Mindy	Shelby County EMA	669-3999		mnash@shelbyal.com	504 Highway 70	Columbiana	35051
	Owens	Kenny	USES	335-0214		kowen@usesgroup.com	228 Regency Park Drive	Alabaster	35007
	Parish	Toby	HEPACO	577-8380		tparish@hepaco.com			
	Pitts	Brittany	Alabama Power Company			brpitts@southernco.com			
	Prater	Duane	Hoover Fire Department	739-6902	261-2067	praterd@ci.hoover.al.us	1591 Patton Chapel Road	Hoover	36226
	Reid	Mike	Pelham Fire Department	620-6500		mreid@pelhamalabama.gov	3162 Pelham Parkway	Pelham	35124
	Riether	Kelly	Red Cross	394-9836		kelly.riether@redcross.org			
	Robbins	Charles	ARGOS	296-6363		crobbins@argos-us.com	P. O. Box 182	Calera	35040
	Roberts	Mike	Pelham Police Department	620-6489		mroberts@pelhamonline.com	3174 Church Street	Pelham	35124
	Rush	Matt	Southeast Shelby Rescue	669-4866		mrush608@gmail.com		Columbiana	35051
	Samaniego	John	Shelby County Sheriff's Office	669-4181		jsamaniego@shelbyso.com	Post Office Box 1095	Columbiana	35051
	Scroggins	Chad	Shelby County Environmental	669-3737		cscroggins@shelbyal.com	504 Highway 70	Columbiana	35051
	Shirey	Hilton	Calera Fire Department	668-3832		hshirey@calera.org	P. O. Box 1000	Calera	35040
	Shirley	Wayne	Chelsea Fire Department	678-6060		wshirley@cityofchelsea.com	Post Oiifce Box 165	Chelsea	35043
	Shotts	Stanley	ARGOS	281-3714		jshotts@argo-us.com	P. O. Box 182	Calera	35040
	Srygley	James	Vincent Police Department	672-2261		chiefsrygley@bellsouth.net	Post Officce Box 49	Vincent	35078
	Stallings	Bobby	Colonial Pipeline	685-6002	919-4045	BStallings@colpipe.com	P. O. Box 248	Pelham	35124
	Stubbs	Robbie	ADPH	256-240-7861		robbie.coffman			
	Therrien	Josh	ADEM	942-6168		jtherrien@adem.state.al.us	110 Vulcan Road	Birmingham	35209
	Turner	Kevin	Shelby County Sheriff's Office	670-6401		kturner@shelbyso.com	P. O. Box 1095	Columbiana	35051
	Tyler	Buddy	North Shelby Fire	991-6439		chief@northshelbyfire.com		Birmingham	35242
	Valenti	Peter	Helena Fire Department	663-5809		pvalenti@cityofhelena.org		Helena	35080
	Vick	Lamar	Columbiana Police Dept	669-6215		lvick@columbianapolice.com	107 Mildred Street	Columbiana	35051
	Ward	James	HEPACO	251-423-0728		james.ward@hepaco.com	5995 Rangeline RD	Theodore	36532
	Wesson	Mike	Brookwood-Shelby Baptist	620-8984		Michael.wesson@bhsala.com	1000 1st Street North	Alabaster	35007
	Wheat	Jim	Sysco	668-7077		wheat.jim@centralal.sysco.com	1000 Sysco Drive	Calera	35040
	Wilder	John	Helena Fire Department	663-5809		jwilder@helena.org			

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	Williams	Mike	Colonial Pipeline	478-7005		mwilliam@colpipe.com	P. O. Box 248	Pelham	35124
	~~Williams~~	~~Ross~~	~~Plantation Pipeline~~	~~663-8844~~		~~ross_williams@kindermorgan.com~~	~~P. O. Box 489~~	~~Helena~~	~~35080~~
AR	Russell	Loren	SCIT						
	CAMPBELL	SHANE	SOUTH WEST WATER CO.	332.9489		shcampbell@swwc.com	728 VOLARE DR.	PELHAM	35244
	Ingram	Rick	Plantation Pipe Line	306-4954		rick-ingram@kindermorgan.com	PO Box 489	Helena	35080
	McCary	Terry	Plantation Pipe Line	410-8974		Terry_McCary@KinderMorgan.com	P.O. Box 489	Helena	35080
	Polk	Steve	Plantation Pipeline	601-498-3921		Steve_Polk@KinderMorgan.com	PO Box 1297	Collins, MS	39428
Tommy Lives									
Michael Smith	Smith	Mike	Colonial Pipeline	912)224-0976		michsmith@colpipe.com	P.O. Box 248	Pelham	35124

LEPC Sign In Sheet

Please Sign	Last Name	First	Agency	Phone #	Cell #	Email	Mailing Address	City	Zip
	Agee	Chaed	Helena Fire Department	663-5809		cagee@helenafire.com	103 Oak View Lane	Helena	35080
	Baytop	Tiffany	Amedisys Home Health	810-0065		tiffany.baytop@amedisys.com	2204 Lakeshore Drive Ste 110	Homewood	35209
	Blanton	Scott	Colonial Pipeline	239-4819		sblanton@colpipe.com	P. O. Box 248	Pelham	35124
	Brasher	Kelli	Shelby County 911	439-6911		kelli@shelby911.org	1000 County Services Dr.	Pelham	35124
	Bray	Mark	SESR			ss601@bellsouth.com			
	Brazier	David	Calera Fire Department		365-1100	dbrazier@calera.org	P. O. Box 1000	Calera	35040
	Bunn	Chris	Colonial Pipeline	516-0570		cbunn@colpipe.com	POB 248	Pelham	35124
Campbell	Campbell	Alan	Shelby County 911	439-6911		acampbell@shelby911.org	1000 County Services Dr.	Pelham	35124
	Campbell	Shane	Southwest Water Co.	332-9489		scampbell@swwc.com	728 Volare Drive	Pelham	35124
	Cantrell	Bobby	HEPACO	718-6503		bcantrell@hepaco.com			
	Cantrell	Charlie	Southern Company			cecantre@southernco.com			
	Connell	Todd	ALDOT	668-0173		connellw@dot.state.al.us	3805 Highway 31	Calera	35040
	Cooner	Barry	Stella-Jones	612-6706		jcooner@stella-jones.com	1051 Hwy 25	Montevallo	35115
B Copes	Copes	Brent	Shelby County Schools	682-7130	728-8344	bcopes@shelbyed.org	116 Industrial Road	Columbiana	35051
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Derzis	Nicholas	Hoover Police Department	444-7700		derzisn@ci.hoover.al.us	100 Municipal Drive	Hoover	35216
	Dradford	Loretha	Alabama Power Company	669-8300		ldradfo@southernco.com			
	Evans	Lina	Shelby County Coroner	669-3846		levans@shelbyal.com	P. O. Box 1321	Columbiana	35051
	Fenderson	Tanisha	E. C. Gaston	669-8020	288-1988	tfenders@southernco.com			
	Flynn	Brad	Helena Police Department	663-6499		bflynn@helenapd.com	P. O. Box 262	Helena	35080
	Folmar	Pete	Helena Police Department	663-6499		pfolmar@cityofhelena.org	816 Highway 52 West	Helena	35080
	Fondren	Jay	SCSO	670-6141		jfondren@shelbyso.com	380 McDow Road	Columbiana	35051
M Garrison	Garrison	Michael	NWS	664-3010		michael.garrison@noaa.gov		Calera	35040
Troy Gibbons	Gibbons	Troy	Colonial Pipeline	663-5162	541-4781	tgibbins@colpipe.com	POB 248	Pelham	35124
	Graves	Dennis	Avanti Polar Lipids	663-2494		d.graves@avantilipids.com		Alabaster	35007

LEPC Sign In Sheet

	Greene	Don	Harpersville Mayor	672-8000		mayortownofharpersville@aol.com		Harpersville	
	Hale	Travis	HEPACO		296-0126	thale@hepaco	266 Commerce Circle	Irondale	35210
	Harvey	Hub	Shelby County EMA	669-3999	288-6043	hharvey@shelbyal.com	504 Highway 70	Columbiana	35051
	Heath	Kimberly	ADPH	499-5253		kimberly.heath@adph.state.al.us	3400 MCClellan Blvd	Anniston	36201
	Helmers	Hank	Shelby County Highway Dept	670-6886		hhelmers@shelbyal.com	506 Highway 70	Columbiana	35051
	Hooper	John	Shelby County Health Dept	620-1650		jhooper@adph.state.al.us	P. O. Box 864	Pelham	35124
	Hopper	Paula	ADPH	256-548-7631		paula.hopper@adph.state.al.us			
	Hutchinson	Frank	Shelby Baptist Medical Center	620-8810	317-5579	frank.hutchinson@bhsala.com	1000 First Street North	Alabaster	35007
	Ingram	Ricky	Plantation Pipeline	306-4954		rick-ingram@kindermorgan.com	POB 489	Helena	35080
	Jones	Doug	Helena Police Department	663-6499		dougjones@helenapd.com	816 Highway 52 West	Helena	35080
	Kaylor	Hagen	Alabama Power Company	669-8063		hskaylor@southernco.com			
	Kendrick	Sean	Calera Fire Department	668-3518	229-7115	skendrick@calera.org	1310 17th Avenue	Calera	35040
	Killingsworth	TJ	Colonial Pipeline	688-7830		ckillingsworth@colpipe.com	POB 248	Pelham	35124
	Lauderdale	Jon	Alagasco			jon.lauderdale@alagasco.com			
	Laws	Kevin	NWS	664-3010		kevin.laws@noaa.gov		Calera	35040
	Lemley	Sean	Calera Police Department	668-3505		seanl@calera.org	10947 Highway 25	Calera	35040
	Letlow	Vicki	DHR			vicki.letlow@dhr.alabama.gov	5110 Hwy 55	Wilsonville	35186
	Littleton	Jeremy	Montevallo Police Department	665-1264		jlittleton@cityofmontevallo.com	545 Main Street	Montevallo	35115
	Littleton	Randy	Colonial Pipeline	685-6006		jlittlet@colpipe.com	P. O. Box 248	Pelham	35124
	Liverett	Tommy	Royal Restorations	234-1000					
	Lord	Jon	Rocky Ridge Fire	822-0532	966-8791	jonlord@rockyridgefire.com	2911 Metropolitan Way	Birmingham	35243
	Lovvorne	John	Colonial Pipeline	678-763-0168		jlovvorn@colpipe.com	P. O. Box 248	Pelham	35124
	Lowe	Rusty	Hoover Fire Department	739-7039	288-5690	lower@ci.hoover.al.us	2020 Valleydale Road	Hoover	35244
	Mashego	Kim	Shelby County DRH	669-3000		Kim.Mashego@dhr.alabama.gov		Columbiana	35051
	McCary	Terry	Plantation Pipeline	410-8974		terry_mccary@kindermorgan.com	POB 489	Helena	35080
	McDonnell	Kyle	RPS	664-1036		kyle@rpsems.com	86 Longview Circle	Alabaster	35007
	McLaughling	Gerald	Colonial Pipeline	306-9091		gmclaugh@colpipe.com		Pelham	35124

LEPC Sign In Sheet

	Morton	Billy	HEPACO			wmorton@hepaco.com			
	Mueller	Mary	Nsg Shelby Baptist	620-8753		mary.mueller@bhsala.com			
	Nash	Mindy	Shelby County EMA	669-3999		mnash@shelbyal.com	504 Highway 70	Columbiana	35051
	Owens	Kenny	USES	335-0214		kowen@usesgroup.com	228 Regency Park Drive	Alabaster	35007
	Parish	Toby	HEPACO	577-8380		tparish@hepaco.com			
	Pitts	Brittany	Alabama Power Company			brpitts@southernco.com			
	Polk	Steve	Plantation Pipeline	601-693-3921		steve_polk@kindermorgan.com	POB 1297	Collins, MS	39428
	Prater	Duane	Hoover Fire Department	739-6902	261-2067	praterd@ci.hoover.al.us	1591 Patton Chapel Road	Hoover	36226
	Reid	Mike	Pelham Fire Department	620-6500		mreid@pelhamalabama.gov	3162 Pelham Parkway	Pelham	35124
	Riether	Kelly	Red Cross	394-9836		kelly.riether@redcross.org			
	Robbins	Charles	ARGOS	296-6363		crobbins@argos-us.com	P. O. Box 182	Calera	35040
	Roberts	Mike	Pelham Police Department	620-6489		mroberts@pelhamonline.com	3174 Church Street	Pelham	35124
	Rudner	Glen	Norfolk South	451-4787		glen.rudner@nscorp.com			
	Rush	Matt	Southeast Shelby Rescue	669-4866		mrush608@gmail.com		Columbiana	35051
	Russell	Loren	Shelby County IT	670-6998		lrussell@shelbyal.com		Columbiana	35051
	Samaniego	John	Shelby County Sheriff's Office	669-4181		jsamaniego@shelbyso.com	Post Office Box 1095	Columbiana	35051
	Scroggins	Chad	Shelby County Environmental	669-3737		cscroggins@shelbyal.com	504 Highway 70	Columbiana	35051
	Shirey	Hilton	Calera Fire Department	668-3832	796 5274	hshirey@calera.org	~~P. O. Box 1008~~ 1310 17th AVE	Calera	35040
	Shirley	Wayne	Chelsea Fire Department	678-6060		wshirley@cityofchelsea.com	Post Oiifce Box 165	Chelsea	35043
	Shotts	Stanley	ARGOS	281-3714		jshotts@argo-us.com	P. O. Box 182	Calera	35040
	Smith	Mike	Colonial Pipeline	912-224-0976		michael.smith@colpipe.com	POB 248	Pelham	35124
	Srygley	James	Vincent Police Department	672-2261		chiefsrygley@bellsouth.net	Post Officce Box 49	Vincent	35078
	Stallings	Bobby	Colonial Pipeline	685-6002	919-4045	BStallings@colpipe.com	P. O. Box 248	Pelham	35124
	Stubbs	Robbie	ADPH	256-240-7861		robbie.coffman			
	Therrien	Josh	ADEM	942-6168		jtherrien@adem.state.al.us	110 Vulcan Road	Birmingham	35209
	Turner	Kevin	Shelby County Sheriff's Office	670-6401		kturner@shelbyso.com	P. O. Box 1095	Columbiana	35051
	Tyler	Buddy	North Shelby Fire	991-6439		chief@northshelbyfire.com	4617 Valleydale Road	Birmingham	35242

LEPC Sign In Sheet

	Valenti	Peter	Helena Fire Department	663-5809		pvalenti@cityofhelena.org		Helena	35080
	Vines	Rick	SCBOE	682-7130		rvines@shelbyed.org		Columbiana	35051
	Ward	James	HEPACO	251-423-0728		james.ward@hepaco.com	5995 Rangeline RD	Theodore	36532
	Webb	Jodi	APCO	669-8360		jiwebb@southernco.com	31972 Hwy 25	Wilsonville	35186
	Wesson	Mike	Brookwood-Shelby Baptist	256-404-2269		Michael.wesson@bhsala.com	1000 1st Street North	Alabaster	35007
	Wheat	Jim	Sysco	668-7077		wheat.jim@centralal.sysco.com	1000 Sysco Drive	Calera	35040
	Wilder	John	Helena Fire Department	663-5809		jwilder@helena.org			
	Williams	Mike	Colonial Pipeline	478-7005		mwilliam@colpipe.com	P. O. Box 248	Pelham	35124
	Williams	Ross	Plantation Pipeline	663-8844		ross_williams@kindermorgan.com	P. O. Box 489	Helena	35080
	Willis	Phillip	APCO	669-8325		pjwillis@southernco.com	31972 Hwy 25	Wilsonville	35186
	Love	Tim	Alabaster Fire	915-562		tlove@alabasterfire.org	910 1st St So	Alabaster	35007
	Jackson	Natasha	AEMA	280-2213		natasha.jackson@ema.alabama.gov	5898 County Rd 41	Clanton	
	Quarles	Taylor	"	280-714		taylor.quarles@ema.alabama.gov	5898 Cr 41	Clanton	35045
	Alexander	Tim	University of Montevallo PD	665-8000		talexande montevallo.edu	75 College Dr Station 6055	Montevallo	35115
	Crutcher	Heath	HAFD	672-7959		hcrafter@yahoo.com	58891 Hwy 25	Harpersville	35078
Paula Coker	Coker	Paula	APCO			mcoker@southernco.com	31972 Hwy 25	Wilsonville	35186
	FRANCISCO	ALDIN	APCO			afsancise@southernco.com	PLANT GORGAS	WILSONVILLE	35186
John Shelby			APCO			JSShelby@Southernco.com	HWY 25	Gorgas	

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

Please Initial	Last Name	First	Agency	Phone #	Cell #	Email	Mailing Address	City	Zip
	Agee	Chaed	Helena Fire Department	663-5809		cagee@helenafire.com	103 Oak View Lane	Helena	35080
	Alexander	Tim	University of Montevallo	665-8000		talexander@montevallo.edu	75 College Dr. Station 6055	Montevallo	35115
	Blanton	Scott	Colonial Pipeline	239-4819		sblanton@colpipe.com	P. O. Box 248	Pelham	35124
	Brasher	Kelli	Shelby County 911	439-6911		kelli@shelby911.org	1000 County Services Dr.	Pelham	35124
	Bray	Mark	SESR			ss601@bellsouth.com			
	Brazier	David	Calera Fire Department		365-1100	dbrazier@calera.org	P. O. Box 1000	Calera	35040
	Brown	Jeff	Pelham Water	281-4253		jbrown@pelhamalabama.gov		Pelham	35124
	Bunn	Chris	Colonial Pipeline	516-0570		cbunn@colpipe.com	POB 248	Pelham	35124
	Cain	Michael	Shelby County Water	670-6540		mcain@shelbyal.com		Columbiana	35051
	Campbell	Alan	Shelby County 911	439-6911		acampbell@shelby911.org	1000 County Services Dr.	Pelham	35124
	Campbell	Shane	Southwest Water Co.	332-9489		scampbell@swwc.com	728 Volare Drive	Pelham	35124
	Cantrell	Bobby	HEPACO	718-6503		bcantrell@hepaco.com			
	Cantrell	Charlie	Southern Company			cecantrc@southernco.com			
	Conn	Pat	Alabaster Fire	621-8752		pconn@alabasterfire.org	9101st Street North	Alabaster	35007
	Connell	Todd	ALDOT	668-0173		connellw@dot.state.al.us	3805 Highway 31	Calera	35040
	Cooner	Barry	Stella-Jones	612-6706		jcconer@stella-jones.com	1051 Hwy 25	Montevallo	35115
	Copes	Brent	Shelby County Schools	682-7130	728-8344	bcopes@shelbyed.org	116 Industrial Road	Columbiana	35051
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Dehart	Mike	SCSO	669-4181	288-3771	mdehart@shelbyso.com	McDow Road	Columbiana	35051
	Derzis	Nicholas	Hoover Police Department	444-7700		derzisn@ci.hoover.al.us	100 Municipal Drive	Hoover	35216
	Dradford	Loretha	Alabama Power Company	669-8300		ldradfo@southernco.com			
	Evans	Lina	Shelby County Coroner	669-3846		levans@shelbyal.com	P. O. Box 1321	Columbiana	35051
	Fenderson	Tanisha	E. C. Gaston	669-8020	288-1988	tfenders@southernco.com			
	Folmar	Pete	Helena Police Department	663-6499		pfolmar@cityofhelena.org	816 Highway 52 West	Helena	35080

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Fondren	Jay	SCSO	670-6141		jfondren@shelbyso.com	380 McDow Road	Columbiana	35051
	Garrison	Michael	NWS	664-3010		michael.garrison@noaa.gov		Calera	35040
	Gibbons	Troy	Colonial Pipeline	663-5162	541-4781	tgibbins@colpipe.com	POB 248	Pelham	35124
	Graves	Dennis	Avanti Polar Lipids	663-2494		d.graves@avantilipids.com		Alabaster	35007
	Greene	Don	Harpersville Mayor	672-8000		mayortownofharpersville@aol.com		Harpersville	
	Hale	Travis	HEPACO		296-0126	thale@hepaco	266 Commerce Circle	Irondale	35210
	Harvey	Hub	Shelby County EMA	669-3999	288-6043	hharvey@shelbyal.com	504 Highway 70	Columbiana	35051
	Heath	Kimberly	ADPH	499-5253		kimberly.heath@adph.state.al.us	3400 MCClellan Blvd	Anniston	36201
	Helmers	Hank	Shelby County Highway Dept	670-6886		hhelmers@shelbyal.com	506 Highway 70	Columbiana	35051
	Honeycutt	Tim	Pelham Fire Department	620-6500		thoneycutt@pelhamalabama.gov	3162 Pelham Parkway	Pelham	35124
	Hooper	John	Shelby County Health Dept	620-1650		jhooper@adph.state.al.us	P. O. Box 864	Pelham	35124
	Ingram	Ricky	Plantation Pipeline	306-4954		rick-ingram@kindermorgan.com	POB 489	Helena	35080
	Jackson	Natasha	AEMA	205-280-2274		natasha.jackson@ema.alabama.gov	5898 County Road 41	Clanton	35045
	Johnson	Nick	SCSO	669-4181		njohnson@shelbyso.com		Columbiana	35051
	Jones	Doug	Helena Police Department	663-6499		dougjones@helenapd.com	816 Highway 52 West	Helena	35080
	Kaylor	Hagen	Alabama Power Company	669-8063		hskaylor@southernco.com			
	Kendrick	Sean	Calera Fire Department	668-3518	229-7115	skendrick@calera.org	1310 17th Avenue	Calera	35040
	Killingsworth	TJ	Colonial Pipeline	688-7830		ckillingsworth@colpipe.com	POB 248	Pelham	35124
	Koon	Laura	Alabaster Water Board	663-6155		lkoon@alabasterwater.com	213 1st St. North	Alabaster	35007
	Lauderdale	Jon	Alagasco			jon.lauderdale@alagasco.com			
	Laws	Kevin	NWS	664-3010		kevin.laws@noaa.gov		Calera	35040
	Lemley	Sean	Calera Police Department	668-3505		seanl@calera.org	10947 Highway 25	Calera	35040
	Letlow	Vicki	SCDHR	669-3007		vicki.letlow@dhr.alabama.gov	987 Hwy 70	Columbiana	35051
	Littleton	Jeremy	Montevallo Police Department	665-1264		jlittleton@cityofmontevallo.com	545 Main Street	Montevallo	35115
	Littleton	Randy	Colonial Pipeline	685-6006		jlittlet@colpipe.com	P. O. Box 248	Pelham	35124
	Liverett	Tommy							
	Lord	Jon	Rocky Ridge Fire	822-0532	966-8791	jonlord@rockyridgefire.com	2911 Metropolitan Way	Birmingham	35243

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Love	Tim	Alabaster Fire		915-9622	tlove@alabasterfire.org	910 1st Street South	Alabaster	35007
	Lovett	Shane	Shelby County Water	670-6540		slovett@shelbyal.com		Columbiana	35051
	Lovvorne	John	Colonial Pipeline	678-763-0168		jlovvorn@colpipe.com	P. O. Box 248	Pelham	35124
	Lowe	Rusty	Hoover Fire Department	739-7039	288-5690	lower@ci.hoover.al.us	2020 Valleydale Road	Hoover	35244
	Mashego	Kim	Shelby County DRH	669-3000		Kim.Mashego@dhr.alabama.gov		Columbiana	35051
	Mayfield	Johnnie	Birmingham Water	244-4017		johnnie.mayfield@bwwb.org			
	McCary	Terry	Plantation Pipeline	410-8974		terry_mccary@kindermorgan.com	POB 489	Helena	35080
	McDonnell	Kyle	RPS	664-1036		kyle@rpsems.com	86 Longview Circle	Alabaster	35007
	McLaughling	Gerald	Colonial Pipeline	306-9091		gmclaugh@colpipe.com		Pelham	35124
	Morton	Billy	HEPACO			wmorton@hepaco.com			
Mary Mueller	Mueller	Mary	Nsg Shelby Baptist	620-8753		mary.mueller@bhsala.com			
Ucn	Nash	Mindy	Shelby County EMA	669-3999		mnash@shelbyal.com	504 Highway 70	Columbiana	35051
	Parish	Toby	HEPACO	577-8380		tparish@hepaco.com			
	Pitts	Brittany	Alabama Power Company			brpitts@southernco.com			
	Polk	Steve	Plantation Pipeline	601-693-3921		steve_polk@kindermorgan.com	POB 1297	Collins, MS	39428
DP	Prater	Duane	Hoover Fire Department	~~739-6902~~ 444 7635	261-2067	praterd@ci.hoover.al.us	1591 Patton Chapel Road	Hoover	36226
	Quarles	Taylor	AEMA	205-280-7141		taylor.quarles@ema.alabama.gov	5898 County Road 41	Clanton	35045
LR	Reid	Mike	Pelham Fire Department	620-6500		mreid@pelhamalabama.gov	3162 Pelham Parkway	Pelham	35124
	Riether	Kelly	Red Cross	394-9836		kelly.riether@redcross.org			
	Robbins	Charles	ARGOS	296-6363		crobbins@argos-us.com	P. O. Box 182	Calera	35040
	Roberts	Mike	Pelham Police Department	620-6489		mroberts@pelhamonline.com	3174 Church Street	Pelham	35124
	Roensch	Mary	Sterrett-Vandiver Water	369-7730		svwater@att.net	POB 220	Sterrett	35147
	Rudner	Glen	Norfolk South	451-4787		glen.rudner@nscorp.com	1400 Norfolk Southern	Irondale	35210
	Rush	Matt	Southeast Shelby Rescue	669-4866		mrush608@gmail.com		Columbiana	35051
	Russell	Loren	Shelby County IT	670-6998		lrussell@shelbyal.com		Columbiana	35051
	Samaniego	John	Shelby County Sheriff's Office	669-4181		jsamaniego@shelbyso.com	Post Office Box 1095	Columbiana	35051

Looney Debra American Red Cross - 205-600-5936 debra.looney@redcross.org, 114 22nd St South Bham, AL 35233
Meredith, Tyler Red Cross 205-484-3622 tyler.meredith@redcross.org

FLYNN, BRAD HELENA PD 205-663-6499 BFLYNN@HELENAPD.COM

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Scroggins	Chad	Shelby County Environmental	669-3737		cscroggins@shelbyal.com	504 Highway 70	Columbiana	35051
	Shirey	Hilton	Calera Fire Department	668-3832	796-5274	hshirey@calera.org	1310 17th Avenue	Calera	35040
	Shirley	Wayne	Chelsea Fire Department	678-6060		wshirley@cityofchelsea.com	~~Post Office Box 169~~ 169 CHELSEA DR	Chelsea	35043
	Shotts	Stanley	ARGOS	281-3714		jshotts@argo-us.com	P. O. Box 182	Calera	35040
	Smith	Josh	Birmingham Water	244-4977		josh.smith@bwwb.org			
	Smith	Mike	Colonial Pipeline	912-324-0976		michael.smith@colpipe.com	POB 248	Pelham	35124
	Srygley	James	Vincent Police Department	672-2261		chiefsrygley@bellsouth.net	Post Officce Box 49	Vincent	35078
	Stallings	Bobby	Colonial Pipeline	685-6002	919-4045	BStallings@colpipe.com	P. O. Box 248	Pelham	35124
	Stubbs	Robbie	ADPH	256-340-7861		robbie.coffman			
	Sutton	Shane	Thompson Gas	595-0238		ssutton@thompsongas.com			
	Therrien	Josh	ADEM	942-6168		jtherrien@adem.state.al.us	110 Vulcan Road	Birmingham	35209
	Turner	Kevin	Shelby County Sheriff's Office	670-6401		kturner@shelbyso.com	P. O. Box 1095	Columbiana	35051
	Tyler	Buddy	North Shelby Fire	991-6439		chief@northshelbyfire.com	4617 Valleydale Road	Birmingham	35242
	Valenti	Peter	Helena Fire Department	663-5809		pvalenti@cityofhelena.org	P.O. Box 262	Helena	35080
	Vincent	Nick	Deshazo Crane	966-2817		nvincent@deshazo.com	190 Airpark Industrial Road	Alabaster	35007
	Vines	Rick	SCBOE	682-7130		rvines@shelbyed.org		Columbiana	35051
	Ward	James	HEPACO	251-423-0728		james.ward@hepaco.com	5995 Rangeline RD	Theodore	36532
	Webb	Jodi	APCO	669-8360		jwebb@southernco.com	31972 Hwy 25	Wilsonville	35186
	Wesson	Mike	Brookwood-Shelby Baptist	620-8984	256-404-2268	Michael.wesson@bhsala.com	1000 1st Street North	Alabaster	35007
	Wheat	Jim	Sysco	668-7077		wheat.jim@centralal.sysco.com	1000 Sysco Drive	Calera	35040
	Wilder	John	Helena Fire Department	663-5809		jwilder@helena.org			
	Williams	Melissa	Town of Wilton	281-0876		melissa@wilton-al.org	POB 100	Wilton	35187
	Williams	Mike	Colonial Pipeline	478-7005		mwilliam@colpipe.com	P. O. Box 248	Pelham	35124
	Williams	Ross	Plantation Pipeline	663-8844		ross_williams@kindermorgan.com	P. O. Box 489	Helena	35080
	Willis	Phillip	APCO	669-8325		pjwillis@southerco.com	31972 Hwy 25	Wilsonville	35186
	Hedrick	Lee	Shelby 911	439-6915		lee1@shelby911.org	1004 County Services Dr	Pelham	35124

Shelby County Local Emergency Planning Committee February 11, 2020

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Entrekin	John	Fourmile Vol. Fire	296-0823		fourmilefd@yahoo.com	P.O. Box 768	Wilsonville	35186
	Miller	Chris	Helena Fire Dept	709-33-4395		Rescuer007@yahoo.com	PO Box 762	Helena	35080
JTA	ANTHONY JEFF	ALABASTER PD	663-7401	J.ANTHONY@ALABASTER POLICE.ORG	201 1ST ST N. ALABASTER 35007				
	Hay, Jeff	Pelham FD	620-6500	jhay@pelhamalabama.gov	Pelham, 35124				
	CARTER, JAMES	PELHAM PD	620-6550	jcarter@pelhamalabama.gov	52 Pump House Rd Pelham, 35124				
	Sciascia, Jeff	Shelby Co. Sheriff	669-4181	jsciascia@shelby50.com	Helena 35080				
HB.	Bartlett, Heath	Helena Fire Dept	212-8186	HBartlett@helenafire.com	P.O. Box 262				
CB	Burkhart, Caryn	Colonial Pipeline	205-500-1624	cburkhart@colpipe.com					

Shelby County Local Emergency Planning Committee February 11, 2020

Hazard Mitigation Committee
January 20, 2022

Last Name	First	Title	Agency	Phone #	Cell #	E-mail
Russell	Lorin	Deputy Director	Shelby 911	205-439-6914	434-0521	lrussell@shelby911.org
Hyche	David	Chief	Calera P.D	205-365-1951		dhyche@calera.org
Kendrick	Sean	Chief	Calera Fire	205-222-1111		skendrick@calera.org
Dooley	Matt	Facilities	Shelby County	(205)748-2020		mdooley@shelbyal.com
Green	Griffin	Facilities	Shelby County	205-258-9826		ggreen@shelbyal.com
Rush	Matthew	Assistant chief	SESR	205-365-2775		matthew608@gmail.com
Rainey	Marley	Ops Manager	RVS	205-708-6612		mrainey@RVSEMS.com

Hazard Mitigation Committee
January 20, 2022

Last Name	First	Title	Agency	Phone #	Cell #	E-mail
Lee	Joe	Fire Chief	Chelsea Fire	205 678 6666	205 873-6200	Jlee@Cityofchelsea.com
Russell	Jeff	Deputy Chief	Chelsea Fire	205.678.6060	205.895.1539	jrussell@cityofchelsea.com

Hazard Mitigation Committee
January 20, 2022

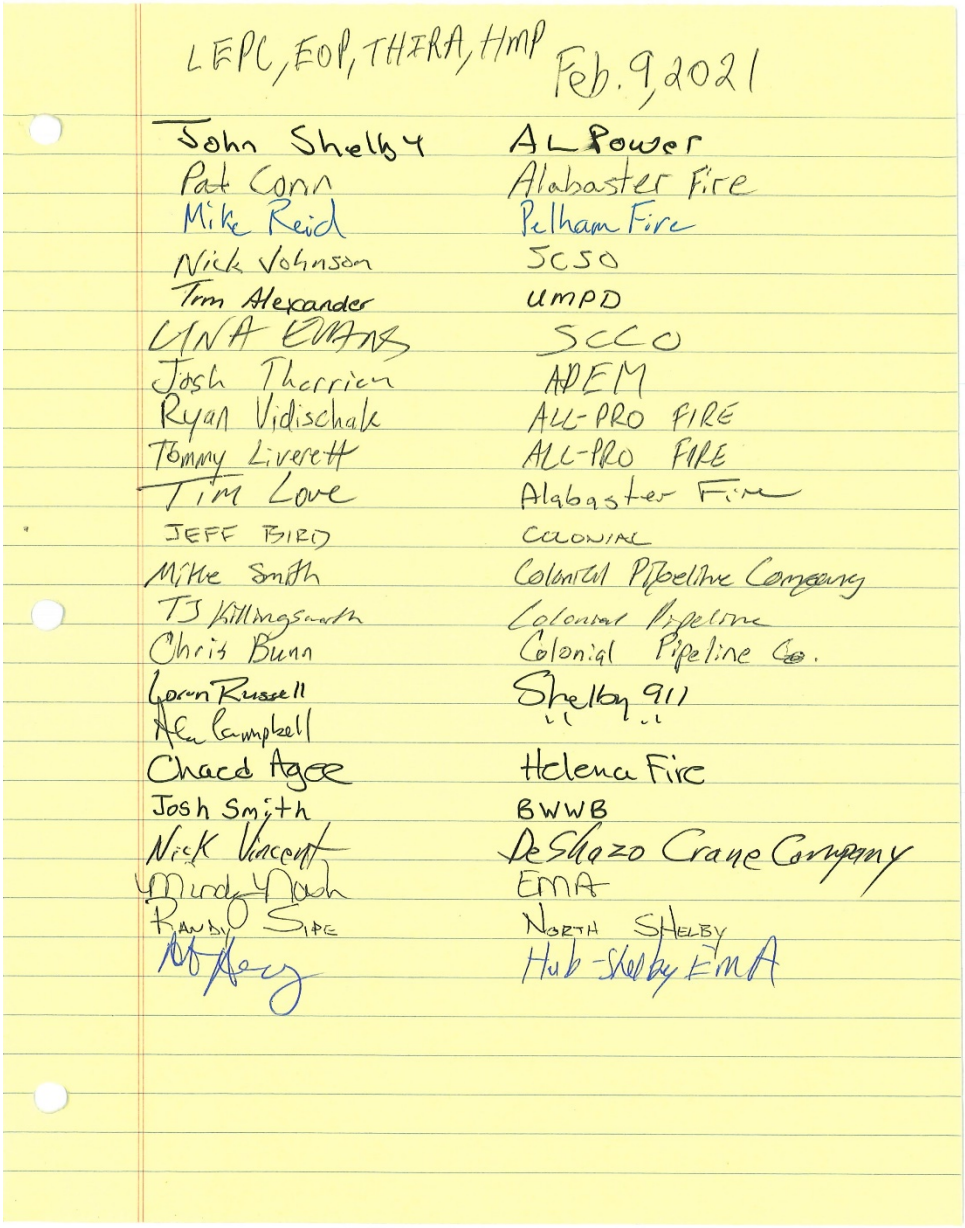
Last Name	First	Title	Agency	Phone #	Cell #	E-mail
Agee	Chad	Captain	Helena FD	205 663 5809	205 283 7332	Cagee@cityofhelena.org
Valenti	Peter	Chief	Helena FD	205 663 5809		pvalenti@cityofhelena.org
CARTER	JAMES	LIEUTENANT	PELHAM PD	205 685-6550	205 729-3325	jcarter@pelhamalabama.gov
Bradley	Eric	Representative	AL FIRE College	205 9196180		abradley@alabamafire.edu.org
High	Heather	Supervisor	RPS	(205) 2916043		heather@rpsems.com

Hazard Mitigation Committee
January 20, 2022

Last Name	First	Title	Agency	Phone #	Cell #	E-mail
DAVIS	BRAD	FIRE CHIEF	MONTEVALLO FIRE	205-665-2555	205-368-0984	BDAVIS@CITYOFMONTEVALLO.COM
HARLEY	RICHARD	COUNCIL	INDIAN SPRINGS V	205-305-7761		RJHARLEY@BELLSOUTH.NET

Hazard Mitigation Committee
January 20, 2022

Last Name	First	Title	Agency	Phone #	Cell #	E-mail
FOSTER	RICHARD	COMP. SPECIALIST	ALABAMA POWER	770.310-2691	←	RAFOSTER@SOUTHERNCO.COM
Pickett	Gerson	Comp Spec	Alabama Power	205 936-7982	←	GLpickett@southernco.com
Willis	Phillip	Comp. Safety	AL. Power	205-669-8335		PJwillis@southernco.com
Bowers	Jeff	Chief of Police	Columbiana	205-669-6315	337-4014	jbowers@columbianapolice.com



LEPC, EOP, THIRA, HMP Feb. 9, 2021

John Shelby	AL Power
Pat Conn	Alabaster Fire
Mike Reid	Pelham Fire
Nick Johnson	SCSO
Tim Alexander	UMPD
UNA EVANS	SCCO
Josh Thorrien	ADEM
Ryan Vidischak	ALL-PRO FIRE
Tommy Liverett	ALL-PRO FIRE
Tim Love	Alabaster Fire
JEFF BIRD	COLONIAL
Mike Smith	Colonial Pipeline Company
TJ Killingsworth	Colonial Pipeline
Chris Bunn	Colonial Pipeline Co.
Loran Russell	Shelby 911
Alex Campbell	" "
Chacd Agee	Helena Fire
Josh Smith	BWWB
Nick Vincent	DeSazo Crane Company
Mindy Nash	EMA
Randy Sipe	North Shelby
	Hub - Shelby EMA

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

Please Initial	Last Name	First	Agency	Phone #	Cell #	Email	Mailing Address	City	Zip
	Agee	Chaed	Helena Fire Department	663-5809		cagee@helenafire.com	103 Oak View Lane	Helena	35080
	Alexander	Tim	University of Montevallo	665-8000		talexander@montevallo.edu	75 College Dr. Station 6055	Montevallo	35115
	Bowers	Jeff	Columbiana Police			jbowers@columbianapolice.com			
	Brazier	David	Calera Fire Department		365-1100	dbrazier@calera.org	P. O. Box 1000	Calera	35040
	Brown	Jeff	Pelham Water	281-4253		jbrown@pelhamalabama.gov		Pelham	35124
	Bunn	Chris	Colonial Pipeline	516-0570		cbunn@colpipe.com	POB 248	Pelham	35124
	Cain	Michael	Shelby County Water	670-6540		mcain@shelbyal.com		Columbiana	35051
	Campbell	Alan	Shelby County 911	439-6911		acampbell@shelby911.org	1000 County Services Dr.	Pelham	35124
	Campbell	Shane	Southwest Water Co.	332-9489		scampbell@swwc.com	728 Volare Drive	Pelham	35124
	Cantrell	Charlie	Southern Company			cecantre@southernco.com			
	Cheatwood	Pat	Pelham Police Department			pcheatwood@pelhamalabama.gov			
	Conn	Pat	Alabaster Fire	621-8752		pconn@alabasterfire.org	9101st Street North	Alabaster	35007
	Cooner	Barry	Stella-Jones	612-6706		jcooner@stella-jones.com	1051 Hwy 25	Montevallo	35115
	Copes	Brent	Shelby County Schools	682-7130	728-8344	bcopes@shelbyed.org	116 Industrial Road	Columbiana	35051
	DeBlock	John	National Weather Service	664-3010		John.Deblock@noaa.gov	465 Weathervane Road	Calera	35040
	Dradford	Loretha	Alabama Power Company	669-8300		ldradfo@southernco.com			
	Evans	Lina	Shelby County Coroner	669-3846		levans@shelbyal.com	P. O. Box 1321	Columbiana	35051
	Flynn	Brad	Helena Police Department			bflynn@helenapd.com			
	Fondren	Jay	SCSO	670-6141		jfondren@shelbyso.com	380 McDow Road	Columbiana	35051
	Graves	Dennis	Avanti Polar Lipids	663-2494		d.graves@avantilipids.com		Alabaster	35007
	Hale	Travis	HEPACO		296-0126	thalc@hepaco	266 Commerce Circle	Irondale	35210
	Harvey	Hub	Shelby County EMA	669-3999	288-6043	hharvey@shelbyal.com	504 Highway 70	Columbiana	35051
	Heath	Kimberly	ADPH	499-5253		kimberly.heath@adph.state.al.us	3400 MCClellan Blvd	Anniston	36201
	Helmers	Hank	Shelby County Highway Dept	670-6886		hhelmers@shelbyal.com	506 Highway 70	Columbiana	35051

Shelby County Local Emergency Planning Committee February 8, 2022

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Hyche	David	Calera Police Department			dhyche@calera.org			
	Ingram	Ricky	Plantation Pipeline	306-4954		rick-ingram@kindermorgan.com	POB 489	Helena	35080
	Jackson	Natasha	AEMA	205-280-2274		natasha.jackson@ema.alabama.gov	5898 County Road 41	Clanton	35045
	Kendrick	Sean	Calera Fire Department	668-3518	229-7115	skendrick@calera.org	1310 17th Avenue	Calera	35040
	Killingsworth	TJ	Colonial Pipeline	688-7830		ckillingsworth@colpipe.com	POB 248	Pelham	35124
	Koon	Laura	Alabaster Water Board	663-6155		lkoon@alabasterwater.com	213 1st St. North	Alabaster	35007
	Lauderdale	Jon	Alagasco			jon.lauderdale@alagasco.com			
	Laws	Kevin	NWS	664-3010		kevin.laws@noaa.gov		Calera	35040
	Littleton	Jeremy	Montevallo Police Department	665-1264		jlittleton@cityofmontevallo.com	545 Main Street	Montevallo	35115
	Littleton	Randy	Colonial Pipeline	685-6006		jlittlet@colpipe.com	P. O. Box 248	Pelham	35124
	Liverett	Tommy							
	Lord	Jon	Rocky Ridge Fire	822-0532	966-8791	jonlord@rockyridgefire.com	2911 Metropolitan Way	Birmingham	35243
	Love	Tim	Alabaster Fire		915-9622	tlove@alabasterfire.org	910 1st Street South	Alabaster	35007
	Lovett	Shane	Shelby County Water	670-6540		slovett@shelbyal.com		Columbiana	35051
	Lovvorne	John	Colonial Pipeline	678-763-0168		jlovvorn@colpipe.com	P. O. Box 248	Pelham	35124
	Mashego	Kim	Shelby County DRH	669-3000		Kim.Mashego@dhr.alabama.gov		Columbiana	35051
	Mayfield	Johnnie	Birmingham Water	244-4017		johnnie.mayfield@bwwb.org			
	McCary	Terry	Plantation Pipeline	410-8974		terry_mccary@kindermorgan.com	POB 489	Helena	35080
	McDonnell	Kyle	RPS	664-1036		kylc@rpsems.com	86 Longview Circle	Alabaster	35007
	McLaughling	Gerald	Colonial Pipeline	306-9091		gmclaugh@colpipe.com		Pelham	35124
	Medlin	Jeremy	Alabaster Police Department	663-7401		jmedlin@alabasterpolice.org	201 1st Street North	Alabaster	35007
	Morton	Billy	HEPACO			wmorton@hepaco.com			
	Mueller	Mary	Shelby Baptist	620-8753		mary.mueller@bhsala.com			
	Nash	Mindy	Shelby County EMA	669-3999		mnash@shelbyal.com	504 Highway 70	Columbiana	35051
	Pitts	Brittany	Alabama Power Company			brpitts@southernco.com			
	Polk	Steve	Plantation Pipeline	601-693-3921		steve_polk@kindermorgan.com	POB 1297	Collins, MS	39428

Shelby County Local Emergency Planning Committee February 8, 2022

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Prater	Duane	Hoover Fire Department	444-7655	261-2067	duane.prater@hooveralabama.gov	1591 Patton Chapel Road	Hoover	36226
	Quarles	Taylor	AEMA	205-280-7141		taylor.quarles@ema.alabama.gov	5898 County Road 41	Clanton	35045
	Reid	Mike	Pelham Fire Department	620-6500		mreid@pelhamalabama.gov	3162 Pelham Parkway	Pelham	35124
	Robbins	Charles	ARGOS	296-6363		crobbins@argos-us.com	P. O. Box 182	Calera	35040
	Roberts	Mike	Pelham Police Department	620-6489		mroberts@pelhamonline.com	3174 Church Street	Pelham	35124
	Roensch	Mary	Sterrett-Vandiver Water	369-7730		svwater@att.net	POB 220	Sterrett	35147
	Rudner	Glen	Norfolk South	451-4787		glen.rudner@nscorp.com			
	~~Rush~~	Matt	Southeast Shelby Rescue	669-4866		mrush608@gmail.com		Columbiana	35051
	Russell	Loren	Shelby County 911	439-6914		lrussell@shelby911.org		Pelham	35124
	Samaniego	John	Shelby County Sheriff's Office	669-4181		jsamaniego@shelbyso.com	Post Office Box 1095	Columbiana	35051
	Sciascia	Jeff	Shelby County Sheriff's Office	669-4181	288-9595	jsciascia@shelbyso.com		Columbiana	35051
JS	Shelby	John	Gaston			jsshelby@southernco.com			
	Shotts	Stanley	ARGOS	281-3714		jshotts@argo-us.com	P. O. Box 182	Calera	35040
	Smith	Josh	Birmingham Water	244-4477		josh.smith@bwwb.org			
	Srygley	James	Vincent Police Department	672-2261		chiefsrygley@bellsouth.net	Post Officce Box 49	Vincent	35078
	Stallings	Bobby	Colonial Pipeline	685-6002	919-4045	BStallings@colpipe.com	P. O. Box 248	Pelham	35124
	Sutton	Shane	Thompson Gas	595-0238		ssutton@thompsongas.com			
JPT	Therrien	Josh	ADEM	942-6168		jtherrien@adem.state.al.us	110 Vulcan Road	Birmingham	35209
	Turner	Kevin	Shelby County Sheriff's Office	670-6401		kturner@shelbyso.com	P. O. Box 1095	Columbiana	35051
	Sipe	Randy	North Shelby Fire	991-6439		chief@northshelbyfire.com	4617 Valleydale Road	Birmingham	35242
	Valenti	Peter	Helena Fire Department	663-5809		pvalenti@cityofhelena.org		Helena	35080
	Vincent	Nick	Deshazo Crane	966-2817		nvincent@deshazo.com	190 Airpark Industrial Road	Alabaster	35007
	Vines	Rick	SCBOE	682-7130		rvines@shelbyed.org		Columbiana	35051
	Webb	Jodi	APCO	669-8360		jwebb@southernco.com	31972 Hwy 25	Wilsonville	35186
	Wesson	Mike	Brookwood-Shelby Baptist	620-8984	256-404-2268	Michael.wesson@bhsala.com	1000 1st Street North	Alabaster	35007
	Wilder	John	Helena Fire Department	663-5809		jwilder@helena.org			

Shelby County Local Emergency Planning Committee

February 8, 2022

LEPC, EOP Update, THIRA and HMP Update
Sign In Sheet

	Williams	Melissa	Town of Wilton	281-0876		melissa@wilton-al.org	POB 100	Wilton	35187
	Willis	Phillip	APCO	669-8325		pjwillis@southerco.com	31972 Hwy 25	Wilsonville	35186
	Pickett	Gerson	APCO	668 8202		gpickett@shelbyso.com			
	Johnson	Nick	SCSO	728-4995		njohnson@shelbyso.com			
	WALLACE	TIM	ALDOT (SHELBY	668-0175		WALLACE T@dot.State.AL.US	P.O. Box 948, CALERA, AL	CALERA	35040
	SUMMERS	DAMON	RED CROSS	205-234-5478		damon.summers@redcross.org			

Shelby County Local Emergency Planning Committee

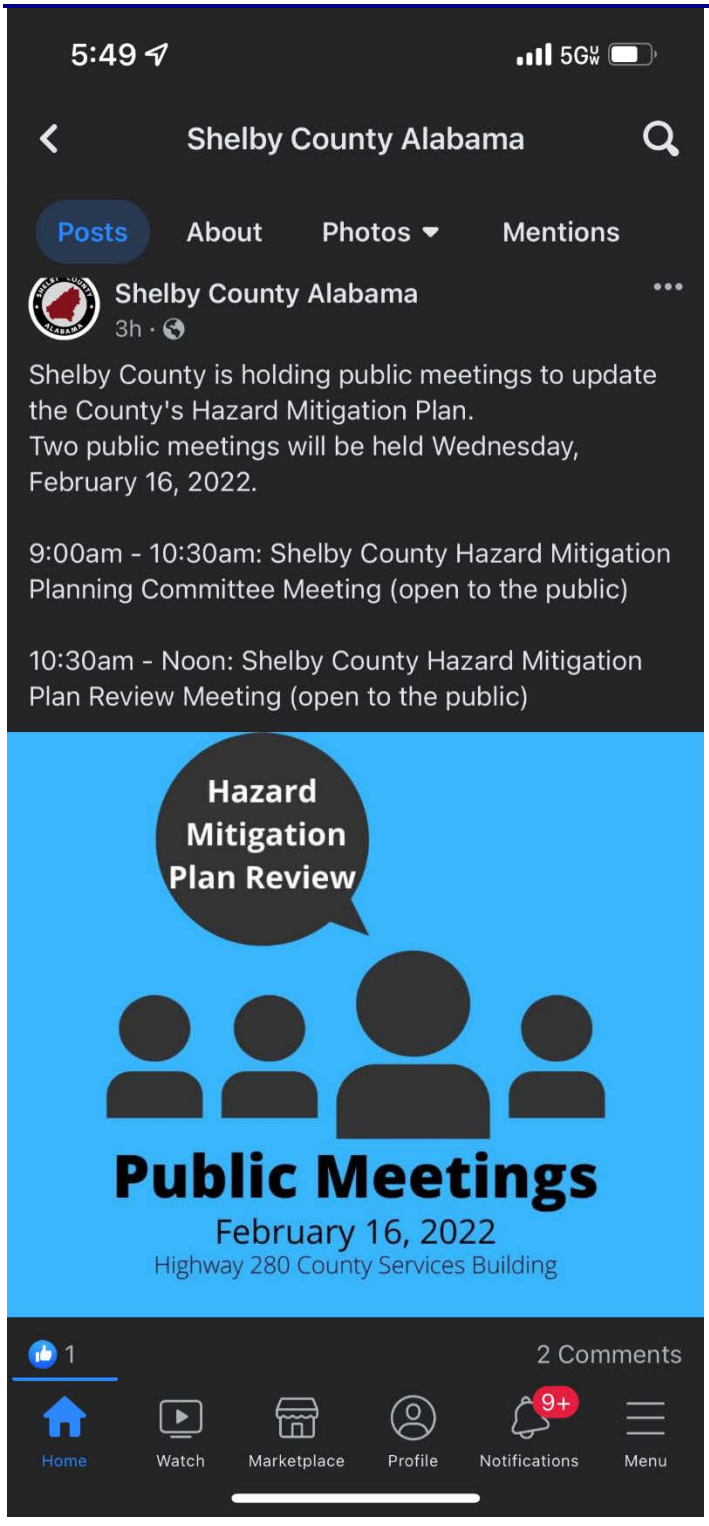
February 8, 2022

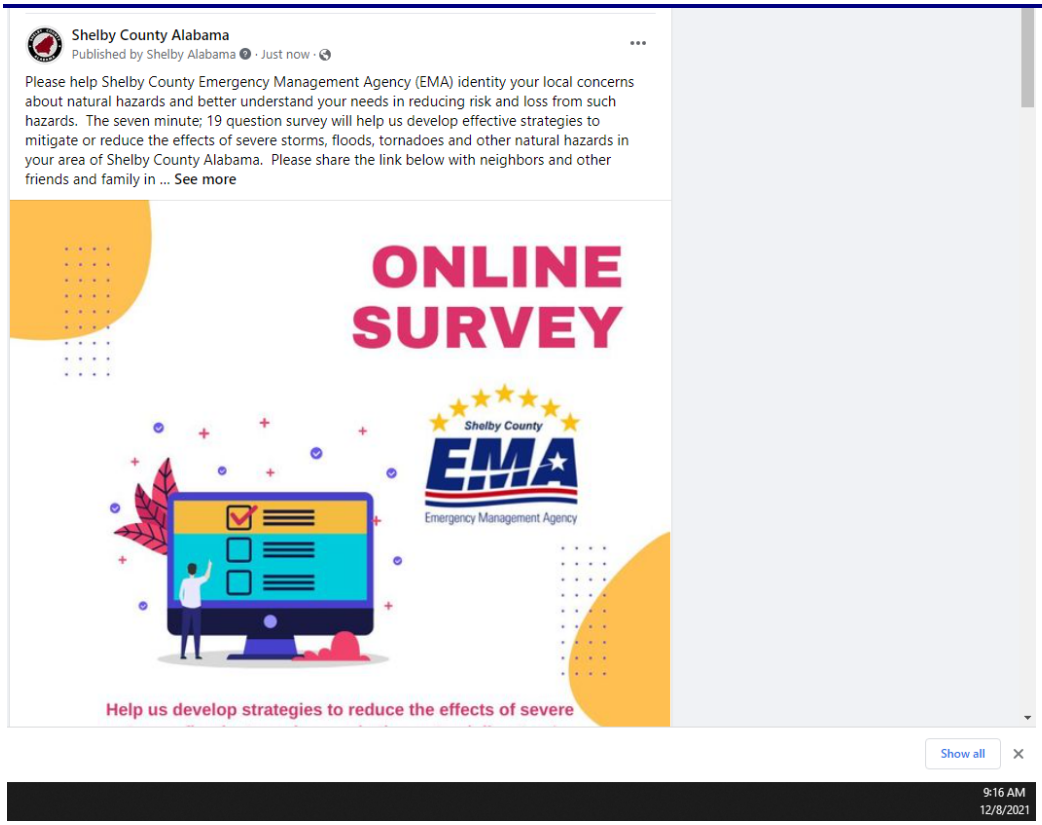
Shelby County EMA
2022 HMP Update
Sign-in Sheet
February 16, 2022

Last Name	First	Agency	Phone #	Cell #	E-mail
Nash	Mindy	S.C.E.M.A.	669-3099	788-6043	mnash@Shelbyal.com
~~Smiley~~ Smiley	Michael	Vincent Fire	205-296-2167		vfrs150@bellsouth.net
Martin	Keith	Helena Building	205.440.7589	—	Kmartin@Cityofhelena.org
Jones	DJ	Helena Building	205 7320159	—	DWJones@Cityofhelena.org
Reid	Mike	Pelham Fire	(205)617-9233		mreid@pelhamalabama.gov
Valenti	Peter	Helena Fire	(205)663-5809	—	pvalenti@cityofhelena.org
Harley	Richard	INDIAN Springs V	2053057761		RHARLEY@Bellsouth.Net
Higgins	Larry	Westover	205 678-3375		LHiggins@Westoverandalabama.org
Foster	Andy	Alabama Power	770-310-2091	←	RAFOSTER@SOUTHERNCO.COM
Lee	Joe	Chelsea Fire	205 873 0200	←	jlee@Cityofchelsea.com
Russell	Jeff	"	205 895 1539	←	jrussell@Cityofchelsea.com
Davis	Brad	Montevallo Fire	205.3680984	←	BDavis@Cityofmontevallo.com
Cofer	Jennifer	Shelby Co. Schools	205-914-7075	←	jcofer@shelbyed.org
Rainey	Marley	RPS	205-703-6677	—	mrainey@rpsems.com
High	Heather	RPS	296 0743		heather@rpsems.com.
Sipe	Randy	North Shelby	205.281.2116		CHIEF@NORTHSHELBYFIRE.COM
Carter	James	Pelham PD	205-729-3325		jcarter@pelhamalabama.gov
Kendrick	Sean	Calera Fire	205-229-7115		skendrick@Calera.org
Russell	Loren	Shelby 911	205-439-6911		lrussell@Shelby911.org

Shelby County EMA
2022 HMP Update
Sign-in Sheet
February 16, 2022

Last Name	First	Agency	Phone #	Cell #	E-mail
Campbell	Alan	Shelby 911	205-541-3595	~~205-541~~	acampbell@shelby911.org


5:49
Shelby County Alabama
Posts
About
Photos
Mentions
Shelby County Alabama
3h ·
Shelby County is holding public meetings to update the County's Hazard Mitigation Plan.
Two public meetings will be held Wednesday, February 16, 2022.
9:00am - 10:30am: Shelby County Hazard Mitigation Planning Committee Meeting (open to the public)
10:30am - Noon: Shelby County Hazard Mitigation Plan Review Meeting (open to the public)
Hazard Mitigation Plan Review
Public Meetings
February 16, 2022
Highway 280 County Services Building
1
2 Comments
Home
Watch
Marketplace
Profile
Notifications
9+
Menu


Shelby County Alabama
Published by Shelby Alabama · Just now ·
Please help Shelby County Emergency Management Agency (EMA) identity your local concerns about natural hazards and better understand your needs in reducing risk and loss from such hazards. The seven minute; 19 question survey will help us develop effective strategies to mitigate or reduce the effects of severe storms, floods, tornadoes and other natural hazards in your area of Shelby County Alabama. Please share the link below with neighbors and other friends and family in ... See more
ONLINE SURVEY
Shelby County
EMA
Emergency Management Agency
Help us develop strategies to reduce the effects of severe
Show all
9:16 AM
12/8/2021

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 1:32 PM
To: 'Brooks, Lewis'; Jennifer Cofer
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan update

Tracking:

Recipient	Read
'Brooks, Lewis'	
Jennifer Cofer	
HUBBARD HARVEY	Read: 1/14/2022 1:45 PM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 1:31 PM
To: Jeff Atkins Alabaster ; Adam Moseley
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan update

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 1:30 PM
To: Scott Coefield ; 'blavett@pelhamcityschools.org'; 'tdunnaway@pelhamcityschools.org'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Tracking:

Recipient	Read
Scott Coefield	
'blavett@pelhamcityschools.org'	
'tdunnaway@pelhamcityschools.org'	
HUBBARD HARVEY	Read: 1/14/2022 1:45 PM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 9:28 AM
To: 'wallacet@dot.state.al.us'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan update

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Todd Connell attended on behalf of your jurisdiction.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 9:04 AM
To: 'Loren Russell (rrussell@shelby911.org)'; 'Alan Campbell'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Tracking:

Recipient	Read
'Loren Russell (rrussell@shelby911.org)'	
'Alan Campbell'	
HUBBARD HARVEY	Read: 1/14/2022 9:12 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Kelli Brasher and Alan Campbell attended on behalf of your jurisdiction.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 9:03 AM
To: Loren Russell (rrussell@shelby911.org); Alan Campbell
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Tracking:

Recipient	Read	Recall
Loren Russell (rrussell@shelby911.org)		
Alan Campbell		
HUBBARD HARVEY	Deleted: 1/14/2022 9:04 AM	Succeeded: 1/14/2022 9:04 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Kelli Brasher attended on behalf of your jurisdiction.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 9:00 AM
To: 'andrew.nichols@forestry.alabama.gov'; 'shelby.forestry@forestry.alabama.gov'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Tracking:

Recipient	Read
'andrew.nichols@forestry.alabama.gov'	
'shelby.forestry@forestry.alabama.gov'	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Carey Rhodes attended on behalf of your jurisdiction.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:56 AM
To: 'summer.danzer@gmail.com'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Eric Bradley attended on behalf of your jurisdiction.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:53 AM
To: Kyle McDonnell
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan

Tracking:

Recipient	Read
Kyle McDonnell	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Barry Rich attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:53 AM
To: Michael Minor
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Tracking:

Recipient	Read
Michael Minor	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Joe Acker attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:52 AM
To: Matthew Rush; Coby Carden
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Matt Rush attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:50 AM
To: Mary Mueller; 'daniel.listi@bhsala.com'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan Update

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Frank Thomas attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:48 AM
To: 'jsmartin3476@gmail.com'; 'pistolpacker238@gmail.com'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: WILTON MITIGATION ACTION PLAN 2022.doc; Wilton CI.docx

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, April Price attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 3:27 PM
To: 'jsmartin3476@gmail.com' <jsmartin3476@gmail.com>; 'pistolpacker238@gmail.com' <pistolpacker238@gmail.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

Please let me know if you have any questions.

Thank you.

Mindy Nash

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:46 AM
To: Randy Sipe; Chief Randy Sipe; 'joan@indianspringsvillage.org'; 'brenda@indianspringsvillage.org'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: INDIAN SPRINGS VILLAGE MITIGATION ACTION PLAN 5-17-16.doc; Indian Springs Village CI.docx

Tracking:

Recipient	Read
Randy Sipe	
Chief Randy Sipe	
'joan@indianspringsvillage.org'	
'brenda@indianspringsvillage.org'	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

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Please send a representative from your organization.

Previously, Buddy Tyler, Joan Downs and Herb Robbins attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:03 AM
To: Chief Randy Sipe <chief@northshelbyfire.com>; 'joan@indianspringsvillage.org' <joan@indianspringsvillage.org>; 'brenda@indianspringsvillage.org' <brenda@indianspringsvillage.org>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:44 AM
To: 'Heath Confer'; 'biglee432@icloud.com'; 'hvillemayor@gmail.com'; 'hvillemayor@aol.com'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: Harpersville CI.docx; HARPERSVILLE MITIGATION ACTION PLAN 2022.doc

Tracking:

Recipient	Read
'Heath Confer'	
'biglee432@icloud.com'	
'hvillemayor@gmail.com'	
'hvillemayor@aol.com'	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

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Please send a representative from your organization.

Previously, Theo Perkins, Wade White, Stacy Walkup, and Jimmy Macon attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:00 AM
To: 'Heath Confer' <hconfer98@yahoo.com>; 'biglee432@icloud.com' <biglee432@icloud.com>; 'hvillemayor@gmail.com' <hvillemayor@gmail.com>; 'hvillemayor@aol.ccom' <hvillemayor@aol.ccom>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:41 AM
To: Jeff; 'firechief@cityofcolumbiana.com'; David Mitchell
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: COLUMBIANA MITIGATION ACTION PLAN 2022.doc; Columbiana CI.docx

Tracking:

Recipient	Read
Jeff	
'firechief@cityofcolumbiana.com'	
David Mitchell	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

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Please send a representative from your organization.

Previously, Stancil Handley, Lamar Vick, and Jerry Lamb attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 10:58 AM
To: Jeff <jbowers@columbianapolice.com>; 'firechief@cityofcolumbiana.com' <firechief@cityofcolumbiana.com>; David Mitchell <dmitchell@cityofcolumbiana.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:40 AM
To: Joe Lee; 'Tony Picklesimer'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: CHELSEA MITIGATION ACTION PLAN 2022.doc; Chelsea CI.docx

Tracking:

Recipient	Read
Joe Lee	
'Tony Picklesimer'	
HUBBARD HARVEY	Read: 1/14/2022 9:13 AM

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Please send a representative from your organization.

Previously, Wayne Shirley attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 10:56 AM
To: 'Joe Lee' <JLee@CityOfChelsea.com>; 'tpicklesimer@cityofchelsea.com' <tpicklesimer@cityofchelsea.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

Please let me know if you have any questions.

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:39 AM
To: David Hyche; Sean Kendrick; 'jgraham@calera.org'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: CALERA MITIGATION ACTION PLAN 2022.doc; Calera CI.docx

Tracking:

Recipient	Read
David Hyche	
Sean Kendrick	
'jgraham@calera.org'	
HUBBARD HARVEY	Read: 1/14/2022 9:14 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Sean Kendrick, Sean Lemley, Reggie Darden, and Chris Pappas attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 10:53 AM
To: David Hyche <dhyche@calera.org>; Sean Kendrick <Skendrick@calera.org>; 'jgraham@calera.org' <jgraham@calera.org>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:38 AM
To: Tim Love; Curtis Rigney; 'cityhall@cityofalabaster.com'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: ALABASTER MITIGATION ACTION PLAN 2022.doc; ALabaster CI.docx

Tracking:

Recipient	Read
Tim Love	
Curtis Rigney	
'cityhall@cityofalabaster.com'	
HUBBARD HARVEY	Read: 1/14/2022 9:14 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Pat Conn and Mike Jones attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 10:51 AM
To: Tim Love <tlove@alabasterfire.org>; Curtis Rigney <crigney@alabasterpolice.org>; 'cityhall@cityofalabaster.com' <cityhall@cityofalabaster.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:37 AM
To: 'Larry Riggins'; Micah Woodley
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: Westover CI.docx; WESTOVER MITIGATION ACTION PLAN 2022.doc

Tracking:

Recipient	Read
'Larry Riggins'	
Micah Woodley	
HUBBARD HARVEY	Read: 1/14/2022 9:14 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Mark McLaughlin and Kelly Morris attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:08 AM
To: 'lriggins@westoveralabama.org' <lriggins@westoveralabama.org>; 'chief@westoveralabama.org' <chief@westoveralabama.org>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:36 AM
To: Mike Smiley; James Srygley (chiefsrygley@bellsouth.net); 'jlatimer@cityofvincental.com'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: VINCENT MITIGATION ACTION PLAN 2022.doc; Vincent CI.docx

Tracking:

Recipient	Read
Mike Smiley	
James Srygley (chiefsrygley@bellsouth.net)	
'jlatimer@cityofvincental.com'	
HUBBARD HARVEY	Read: 1/14/2022 9:25 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Ray McAllister, Mike Smiley, James Srygley, and Joy Marler attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:07 AM
To: Mike Smiley <vfrs150@bellsouth.net>; James Srygley (chiefsrygley@bellsouth.net) <chiefsrygley@bellsouth.net>; 'jlatimer@cityofvincental.com' <jlatimer@cityofvincental.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:34 AM
To: 'Brad Davis'; Jeremy Littleton; 'rnix@cityofmontevallo.com'
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: MONTEVALLO MITIGATION ACTION PLAN 2022.doc; Montevallo CI.docx

Tracking:

Recipient	Read
'Brad Davis'	
Jeremy Littleton	
'rnix@cityofmontevallo.com'	
HUBBARD HARVEY	Read: 1/14/2022 9:25 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, Brad Davis, Bill Reed, and Jeremy Littleton attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:05 AM
To: 'Brad Davis' <bdavis@CityofMontevallo.com>; Jeremy Littleton <jlittleton@cityofmontevallo.com>; 'rnix@cityofmontevallo.com' <rnix@cityofmontevallo.com>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:33 AM
To: Brad Flynn (bflynn@helenapd.com); 'Brian Puckett'; Peter Valenti
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: HELENA MITIGATION ACTION PLAN 2022.doc; Helena CI.docx

Tracking:

Recipient	Read
Brad Flynn (bflynn@helenapd.com)	
'Brian Puckett'	
Peter Valenti	
HUBBARD HARVEY	Read: 1/14/2022 9:25 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

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Please send a representative from your organization.

Previously, John Wilder, Chaed Agee and Chad Campbell attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:01 AM
To: Brad Flynn (bflynn@helenapd.com) <bflynn@helenapd.com>; Peter Valenti <pvalenti@cityofhelena.org>; 'Brian Puckett' <BPuckett@cityofhelena.org>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

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Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

MINDY NASH

From: MINDY NASH
Sent: Friday, January 14, 2022 8:28 AM
To: Davy Edwards
Cc: HUBBARD HARVEY
Subject: FW: Shelby County Hazard Mitigation Plan update
Attachments: WILSONVILLE MITIGATION ACTION PLAN 2022.doc; Wilsonville CI.docx

Tracking:

Recipient	Read
Davy Edwards	
HUBBARD HARVEY	Read: 1/14/2022 9:26 AM

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

Previously, David Edwards attended on behalf of your jurisdiction.

Please have them bring a copy of the updated Mitigation Action Plan and Critical Infrastructure documents sent to you in late November.

Mindy Nash
Shelby County

From: MINDY NASH
Sent: Tuesday, November 30, 2021 11:14 AM
To: Davy Edwards <echief160@aol.com>; 'kmraywilsonvilleclerk@bellsouth.net' <kmraywilsonvilleclerk@bellsouth.net>
Cc: HUBBARD HARVEY <HHARVEY@shelbyal.com>
Subject: Shelby County Hazard Mitigation Plan update

We are in the process of updating our Shelby County Multi-Jurisdictional Hazard Mitigation Plan. We will be holding a planning meeting in the coming weeks.

Please review the attached documents, make necessary changes and return a copy to us ***no later than December 10, 2021***. Share this plan with anyone who will need to review these documents.

Also, we are asking that you share the HMP survey with your staff and citizens.

- **Please share the following website/link: hmpsurvey.shelbyal.com**

Please let me know if you have any questions.

Thank you.

MINDY NASH

Subject:	Shelby County Hazard Mitigation Plan Update
Location:	19200 Hwy 280, Room 130 - Highwya 280 County Services Building
Start:	Thu 1/20/2022 9:00 AM
End:	Thu 1/20/2022 11:00 AM
Show Time As:	Tentative
Recurrence:	(none)
Meeting Status:	Not yet responded
Organizer:	MINDY NASH
Required Attendees:	twallace@dot.state.al.us; Loren Russell (rrussell@shelby911.org); Alan Campbell; gpickett@southernco.com; afoster@southernco.com; Phillip Willis-APCO; Mary Mueller; daniel.farris@acsboe.org; Tim Love; Curtis Rigney; cityhall@cityofalabaster.com; David Hyche; Sean Kendrick; HUb Harvey; jgraham@calera.org; David Mitchell ; Jeff; firechief@cityofcolumbiana.com; Joe Lee; Tony Picklesimer; hvillemayor@aol.com; hvillemayor@gmail.com; Heath Confer; biglee432@icloud.com; Brad Flynn (bflynn@helenapd.com); Peter Valenti; Brian Puckett; wilsonvillemayor@gmail.com; Chaed Agee ; Brad Davis; Jeremy Littleton; rnix@cityofmontevallo.com; Mike Reid; Pat Cheatwood; gdifante@pelhamalabama.gov; Randy Sipe; Chief Randy Sipe; joan@indianspringsvillage.org; brenda@indianspringsvillage.org; Mike Smiley; James Srygley (chiefsrygley@bellsouth.net); jlatimer@cityofvincental.com; Larry Riggins; Micah Woodley; Davy Edwards; jsmartin3476@gmail.com; pistolpacker238@gmail.com; Matthew Rush; Coby Carden ; Kyle McDonnell; Michael Minor; Scott Coefield ; blavett@pelhamcityschools.org; tdunnaway@pelhamcityschools.org; Jeff Atkins Alabaster ; Adam Moseley; Lewis Brooks; Jennifer Cofer
Optional Attendees:	Chief Brad Flynn; Foster, Richard A. (Andy); Chris Key; Nancy Martin

Shelby County will be holding a meeting of the County Hazard Mitigation Committee Thursday, January 20th, from 9am to 11 am at the County Services Building on 280, 19200 Highway 280, Birmingham, Alabama 35242.

We will be reviewing a rough draft of the Hazard Mitigation Plan and looking at possible Hazard Mitigation opportunities.

Please send a representative from your organization.

If you received an email with a Mitigation Action Plan and a critical infrastructure form, please bring those with you.

Please let me know if you have any questions.

Thank you!

HUBBARD HARVEY

From: MINDY NASH
Sent: Tuesday, February 8, 2022 7:39 AM
To: Allen Campbell; 'Andy Harrison'; 'Barbara Cargle'; Barry Cooner; 'Billy Morton'; 'bobby cantrell'; 'Bobby Stallings'; 'Brad Flynn'; Brent Copes ; Brittany Pitts; 'Chaed Agee'; Chaed Agee ; 'Charles Robbins '; Charles Wise; 'Charlie Cantrell'; Chief Randy Sipe; Chris Bunn; 'Chris Johnson'; CILINA EVANS; Cindy Warner; Coby Carden; Connell, William; Damon Summers; 'David Brazier'; David Hyche; 'Duane Prater'; 'Eddie Carter'; 'Gerald McLaughlin'; 'Glen Rudner'; HANK HELMERS; HUBBARD HARVEY; James Srygley (chiefsrygley@bellsouth.net); 'James Ward'; JAY FONDREN; Jeff; Jeff Atkins Alabaster ; 'Jeff Brown'; Jeremy Littleton; 'Jodi Webb'; 'John Deblock'; 'John Lovvorn'; John Roy; JOHN SAMANIEGO; 'John Wilder'; 'Johnnie Mayfield'; 'Jon Lauderdale'; Jon Lord; Josh Smith; Josh Therrien; Kevin Laws; KEVIN TURNER; Kim Mashego; Kimberly Heath; Kyle McDonnell; Laura Koon; 'Lewis Brooks'; 'Lisa Glasgow'; Loren Russell (lrussell@shelby911.org); Loretha Debradford; Mark Bray; 'Mark Cowell'; Mary Mueller; 'Mary Roensch'; Matthew Rush; MICHAEL CAIN; Melissa Williams; MICHAEL CAIN; 'Michael Garrison'; Michael Minor; MIKE DEHART; Mike Reid; Mike SMith; Mike Wesson; 'Mike Williams'; MINDY NASH; 'Natasha Jackson'; Nathan Smitherman; NICHOLAS JOHNSON; Nick Vincent; Pat Cheatwood; Pat Conn; 'Patricia Pierce Biolife'; Paul Rogers ; Peter Valenti; 'Peter Valenti'; 'Phillip Crumpton'; Phillip Willis-APCO; 'Randy Littleton'; Randy Sipe; Reginald Marshall; Rick Vines ; 'Ricky Ingram'; 'Ricky King'; 'Robbie Coffman'; 'Ross Williams'; 'Rusty Lowe '; 'Scott Blanton'; Scott Coefield ; 'Scott Duffey'; Sean Kendrick; 'Shane Campbell'; SHANE LOVETT; 'Shane McCray'; 'Shane Sutton'; Stanley Shotts ; Steve Polk; Taylor Quarles; Terry McCary; Tim Alexander; Tim Love; Tim Wallace; 'TJ Killingsworth'; 'Toby Parish'; Tommy Liverett; 'Travis Hale'; Trent Page; 'Triskin Harden'; Wayne Vickers; William Ratcliffe
Subject: LEPC reminder

Just a reminder about today's LEPC meeting.

280 County Services Building
19220 Hwy 280
Birmingham, AL. 35242

We will also review the Hazard Mitigation Plan for Shelby County during this meeting.

Lunch will be provided.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

HUBBARD HARVEY

From: MINDY NASH
Sent: Tuesday, February 8, 2022 7:39 AM
To: Allen Campbell; 'Andy Harrison'; 'Barbara Cargle'; Barry Cooner; 'Billy Morton'; 'bobby cantrell'; 'Bobby Stallings'; 'Brad Flynn'; Brent Copes ; Brittany Pitts; 'Chaed Agee'; Chaed Agee ; 'Charles Robbins '; Charles Wise; 'Charlie Cantrell'; Chief Randy Sipe; Chris Bunn; 'Chris Johnson'; CILINA EVANS; Cindy Warner; Coby Carden; Connell, William; Damon Summers; 'David Brazier'; David Hyche; 'Duane Prater'; 'Eddie Carter'; 'Gerald McLaughlin'; 'Glen Rudner'; HANK HELMERS; HUBBARD HARVEY; James Srygley (chiefsrygley@bellsouth.net); 'James Ward'; JAY FONDREN; Jeff; Jeff Atkins Alabaster ; 'Jeff Brown'; Jeremy Littleton; 'Jodi Webb'; 'John Deblock'; 'John Lovvorn'; John Roy; JOHN SAMANIEGO; 'John Wilder'; 'Johnnie Mayfield'; 'Jon Lauderdale'; Jon Lord; Josh Smith; Josh Therrien; Kevin Laws; KEVIN TURNER; Kim Mashego; Kimberly Heath; Kyle McDonnell; Laura Koon; 'Lewis Brooks'; 'Lisa Glasgow'; Loren Russell (lrussell@shelby911.org); Loretha Debradford; Mark Bray; 'Mark Cowell'; Mary Mueller; 'Mary Roensch'; Matthew Rush; MICHAEL CAIN; Melissa Williams; MICHAEL CAIN; 'Michael Garrison'; Michael Minor; MIKE DEHART; Mike Reid; Mike SMith; Mike Wesson; 'Mike Williams'; MINDY NASH; 'Natasha Jackson'; Nathan Smitherman; NICHOLAS JOHNSON; Nick Vincent; Pat Cheatwood; Pat Conn; 'Patricia Pierce Biolife'; Paul Rogers ; Peter Valenti; 'Peter Valenti'; 'Phillip Crumpton'; Phillip Willis-APCO; 'Randy Littleton'; Randy Sipe; Reginald Marshall; Rick Vines ; 'Ricky Ingram'; 'Ricky King'; 'Robbie Coffman'; 'Ross Williams'; 'Rusty Lowe '; 'Scott Blanton'; Scott Coefield ; 'Scott Duffey'; Sean Kendrick; 'Shane Campbell'; SHANE LOVETT; 'Shane McCray'; 'Shane Sutton'; Stanley Shotts ; Steve Polk; Taylor Quarles; Terry McCary; Tim Alexander; Tim Love; Tim Wallace; 'TJ Killingsworth'; 'Toby Parish'; Tommy Liverett; 'Travis Hale'; Trent Page; 'Triskin Harden'; Wayne Vickers; William Ratcliffe
Subject: LEPC reminder

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We will also review the Hazard Mitigation Plan for Shelby County during this meeting.

Lunch will be provided.

Mindy Nash
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Shelby County Development Services - Emergency Management
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504 Highway 70
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Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

MINDY NASH

From: MINDY NASH
Sent: Wednesday, February 9, 2022 3:52 PM
To: 'Kirk Smith'; Patrice Kurzejeski; leighann Butler; 'andy.mcwilliams@talladegacountyal.org'; James Coker; 'dwwright@chiltoncounty.com'; 'coosaema1@gmail.com'
Cc: HUBBARD HARVEY
Subject: Shelby County Hazard Mitigation Plan approval Final meeting

Shelby County will be holding a meeting of the County Hazard Mitigation Committee for final approval of the Shelby County Hazard Mitigation Plan.

Our committee meeting, open to the public, will take place from 9:00 am – 10:30 am.

A public input meeting will be from 10:30 am – 12:00 pm.

Both meetings will be held at the 280 County Services Building, 19220 Highway 280, Birmingham, Alabama 35242.

We look forward to seeing you at this meeting.

Please let us know if you have any questions.

Mindy Nash
Coordinator
Shelby County Development Services - Emergency Management
Shelby County, Alabama
504 Highway 70
Ray Building
Columbiana, AL 35051
(205) 669-3999 (Office)
(205) 669-3871 (Facsimile)
mnash@shelbyal.com

EMERGENCY MANAGEMENT AGENCY (EMA)

Hazard Mitigation Plan Review Meetings

Shelby County is holding public meetings to update the County's Hazard Mitigation Plan.

Two public meetings will be held Tuesday, February 8th, 2022 at 11:30am and again at 1:00pm in the 280 Event Room #130 at the 280 County Services Building, 19220 Hwy 280 East, 35242. There will be opportunities to review the plan and make comments at each meeting:

11:30 am: Shelby County Local Emergency Planning Committee (LEPC)

1:00 pm: Shelby County Hazard Mitigation Plan Review Meeting

Shelby County EMA needs help to identify your concerns about natural hazards and better understand your needs in reducing risk and loss from such hazards.

By investing seven minutes or less to answer 19 questions, you will be helping us develop effective strategies to mitigate or reduce the effects of severe storms, floods, tornadoes and other natural hazards in your area of Shelby County, Alabama.

Please complete the survey by going to HMPSURVEY.SHELBYAL.COM.

CLICK HERE FOR LATEST COVID-19 INFORMATION

Click Here to SIGN UP for ShelbyALerts Everbridge Notifications

ShelbyALerts: Emergency Notification System

Get emergency alerts and other important community news by signing up for ShelbyALerts. This system enables us to quickly provide you with critical information in situations such as:

- severe weather
- road closures

EMERGENCY MANAGEMENT AGENCY (EMA)

Hazard Mitigation Plan Review Meetings

Shelby County is holding public meetings to update the County's Hazard Mitigation Plan.

Two public meetings will be held Wednesday, February 16th, 2022 in the 280 Event Room #130 at the 280 County Services Building, 19220 Hwy 280 East, 35242. There will be opportunities to review the plan and make comments at each meeting:

9:00 am - 10:30 am: Shelby County Hazard Mitigation Planning Committee Meeting (open to the public)

10:30 am - Noon: Shelby County Hazard Mitigation Plan Review Meeting (open to the public)

Shelby County EMA needs help to identify your concerns about natural hazards and better understand your needs in reducing risk and loss from such hazards.

By investing seven minutes or less to answer 19 questions, you will be helping us develop effective strategies to mitigate or reduce the effects of severe storms, floods, tornadoes and other natural hazards in your area of Shelby County, Alabama.

Please complete the survey by going to HMPSURVEY.SHELBYAL.COM.

CLICK HERE FOR LATEST COVID-19 INFORMATION

Shelby County
Hazard Mitigation Committee
19200 Highway 280
Birmingham, Alabama 35242

January 20, 2022

I. Opening Remarks and Introductions

a. Everyone introduced themselves.
b. Members Present 22 (sign sheets attached)

Richard Foster, Alabama Power	Gerson Pickett, Alabama Power
Phillip Willis, Alabama Power	Jeff Bowers, Columbiana Police Chief
Brad Davis, Montevallo Fire Chief	Richard Harley, Indian Springs Village
Loren Russell, Shelby 911 Dep. Dir.	David Hyche, Calera Police Chief
Sean Kendrick, Calera Fire Chief	Matt Dooley, Shelby County Facilities
Griffin Green, Shelby County Fac.	Matt Rush, SESR Assistant Chief
Marley Rainey, RPS Ops. Mngr.	Joe Lee, Chelsea Fire Chief
Jeff Russell, Chelsea Fire Dep. Chief	Chad Agee, Helena Fire Captain
Pete Valenti, Helena Fire Chief	James Carter, Pelham Police Lieutenant
Eric Bradley, Alabama Fire College	Heather High, RPS Supervisor
Mindy Nash, Shelby County EMA	Hub Harvey, Shelby County EMA

II. Review of history and updated Shelby County Multi-Jurisdictional Hazard Mitigation Plan 2022 draft plan

a. The committee reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.
b. Individual Jurisdictions Plans were reviewed
c. Any changes to reviewed Individual Mitigation Action Plans must be submitted to Shelby County EMA no later than 5:00 PM January 27, 2022.
d. An opportunity for Public Comments ensued and all comments were addressed by the Committee.
e. An opportunity for statements or comments was made for all Public Officials present.

III. 4596-DR-AL: Community Safe Rooms

Discussion was held on applying for 4596-DR-AL Hazard Mitigation funds from the March 25th, 2021 severe storms, straight-line winds and tornadoes.

A proposal was presented to pursue multiple applications for community safe rooms in Shelby County. The following locations were discussed: Beeswax Park, Pea Ridge Park, Shoal Creek Park, Town of Wilton, Heardmont Park, Town of Vincent, Veteran's Park Alabaster, and Cahaba River Park.

The following motion was made by Captain Chaed Agee, seconded by Chief Mike Reid and carried unanimously.

Motion: *To submit Letters of Intent (LOIs) under 4596-DR-AL Hazard Mitigation Funding for community safe rooms to reduce or eliminate future emergency or disaster costs in the following priority order: Beeswax Park, Pea Ridge Park, Shoal Creek Park, Town of Wilton, Heardmont Park, Town of Vincent, Veteran's Park Alabaster, and Cahaba River Park.*

IV. 4503-DR-AL: Acquisitions and Elevations

Discussion was held on applying for 4503-DR-AL Hazard Mitigation Funds for acquisition and elevation of flood properties in the City of Pelham.

The following motion was made by Captain Chaed Agee, seconded by Chief Sean Kendrick.

Motion: *To submit Letters of Intent (LOIs) under 4503-DR-AL Hazard Mitigation Funding for flood related acquisitions and elevations to reduce or eliminate future emergency or disaster costs based upon priority order provided by the City of Pelham.*

Discussion ensued and the following motion was made by Jennifer Cofer, seconded by Philip Willis and carried unanimously.

Motion: *To close discussion and call for the vote on the original motion.*

Vote was held on original motion and carried unanimously.

V. Next Meeting

February, 16, 2022, same location.

VI. Adjournment

Motion to adjourn by Chief David Hyche, seconded by Chief Sean Kendrick and carried unanimously.

The meeting was adjourned at this time.

Hub Harvey, Shelby County EMA Director

9.3 MITIGATION PLAN ADOPTION

This section of the plan includes copies of local resolutions passed by each of Shelby County's local jurisdictions.

Shelby County
Hazard Mitigation Committee
19200 Highway 280
Birmingham, Alabama 35242

February 16, 2022

I. Opening Remarks and Introductions

a. Everyone introduced themselves.
b. Members Present 21 (sign sheets attached)

Larry Riggins, Westover Mayor	Mike Smiley, Vincent Fire Chief
Keith Martin, Helena Building Dept.	DJ Jones, Helena Building Dept.
Mike Reid, Pelham Fire Chief	Mindy Nash, Shelby County EMA
Andy Foster, Alabama Power	Brad Davis, Montevallo Fire Chief
Richard Harley, Indian Springs Village	Pete Valenti, Helena Fire Chief
Loren Russell, Shelby 911 Dep. Dir.	Randy Sipe, North Shelby Fire Chief
Joe Lee, Chelsea Fire Chief	Jeff Russell, Chelsea Fire Dep. Chief
Heather High, RPS Supervisor	Jennifer Cofer, Shelby County Schools
Marley Rainey, RPS Ops. Mngr.	James Carter, Pelham Police Lieutenant
Sean Kendrick, Calera Fire Chief	Alan Campbell, Shelby 911 Director
Hub Harvey, Shelby County EMA	

II. Review of history and updated Hazard Mitigation 2022 draft plan

a. The committee again reviewed and evaluated completed mitigation actions for effectiveness, reviewed status of high-priority and ongoing mitigation actions, discussed possible changes to hazard vulnerability or other elements of risk assessment based upon recent incidents and exercise After Action Reviews and Improvement Plans, assessed major land use changes and discussed any other relevant issues pertaining to the Hazard Mitigation Plan.
b. Town of Westover met February 15, 2022 and approved the Hazard Mitigation Plan for the Town.

III. Opportunity for Public Comments

a. All public comments were addressed by the committee.

IV. Statements by Public Officials

V. Being no further discussion, the following motion to approve Shelby County Multi-Jurisdictional Hazard Mitigation Plan 2022 draft was made by Chief Sean Kendrick and seconded by Chief Randy Sipe and carried unanimously.

Motion: *As the Draft Shelby County Multi-Jurisdictional Hazard Mitigation Plan 2022 has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6, and this Committee recognizes the threat that natural hazards pose to people and property, and that hazard mitigation actions taken before disasters occur will reduce the potential for harm to people*

and property and save taxpayer dollars, and an adopted hazard mitigation plan is required as a condition of future grant funding for mitigation projects, this Committee formally adopts the Shelby County Multi-Jurisdictional Hazard Mitigation Plan 2022 as the current Hazard Mitigation Plan for Shelby County.

Shelby County EMA will now present the approved plan to Alabama EMA for their approval and then approval by FEMA.

VI. Adjournment

Motion to adjourn by Chief Sean Kendrick, seconded by Chief Mike Reid.

The meeting was adjourned at this time.

Hub Harvey, Shelby County EMA Director

Council Member FARRELL introduced the following Resolution, which was seconded by Council Member RAKESTRAW

Alabaster
CITY UNLIMITED

RESOLUTION 031422-A

CITY OF ALABASTER
2022 SHELBY COUNTY HAZARD MITIGATION PLAN UPDATE
RESOLUTION OF ADOPTION

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

WHEREAS, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

WHEREAS, City of Alabaster recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, City of Alabaster participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

NOW, THEREFORE, BE IT RESOLVED, that City of Alabaster, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

BE IT FURTHER RESOLVED, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON, said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed at the regular meeting of the City Council in the City of Alabaster.

ADOPTED AND APPROVED THIS 14TH DAY OF MARCH 2022.

ATTEST:

J. Mark Frey, City Clerk

CITY OF ALABASTER

Sophie Martin, Council President

APPROVED:

Scott Brakefield, Mayor

City of Calera
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution No. 2022-09

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, City of Calera recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, City of Calera participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that City of Calera**,** hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council Member Cost moved and Council Member Turner seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 4th day of April, 2022 at the regular meeting of the City Council in the City of Calera.

Jon Graham

Jon Graham, Mayor

Connie B Payt

Connie B. Payton ,City Clerk

CITY OF CHELSEA
RESOLUTION 2022-03-15-981

2022 Shelby County Hazard Mitigation Plan Update

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, City of Chelsea recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, City of Chelsea participated jointly in the planning process with the other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that City of Chelsea, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Councilmember Sumners moved and Councilmember Weygand seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Presented and adopted this the 15th day of March, 2022

Tony Picklesimer, Mayor

Cody Sumners, Councilmember

Scott Weygand, Councilmember

Chris Grace, Councilmember

Tiffany Bittner, Councilmember

Casey Morris, Councilmember

Introduced by Mayor Mitchell

RESOLUTION 03-22-01
2022 SHELBY COUNTY HAZARD MITIGATION PLAN UPDATE

WHEREAS, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

WHEREAS, City of Columbiana recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, City of Columbiana participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

NOW, THEREFORD, BE IT RESOLVED, that City of Columbiana, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

BE IT FURTHER RESOLVED, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council Member King moved and Council Member Phillips seconded the motion that said resolution be given vote, and said resolution passed by unanimous vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 1st day of March, 2022.

David Mitchell, Mayor

ATTEST

Charlene Tucker, City Clerk

CITY OF COLUMBIANA
SEAL
STATE OF ALABAMA

City of Harpersville
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution # 2022-03-21-01

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazards Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, City of Harpersville recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, City of Harpersville participated jointly in the planning process with the other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that City of Harpersville, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member Beverly Johnson moved and Council member Martin Dates seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 21st day of March, 2022 at the regular meeting of the City Council in the City of Harpersville.

TOWN OF HARPERSVILLE ALABAMA SEAL

Certifying Official

City Clerk

RESOLUTION

No. 02282022

Adopting the Shelby County Multi-jurisdictional, Multi-Hazard Mitigation Plan

WHEREAS, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

WHEREAS, City of Helena recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, City of Helena participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

NOW, therefore, be it resolved, that City of Helena, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

BE it further resolved, that Shelby County Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREFORE, Resolved by Mayor J. Brian Puckett, Mayor of the City of Helena, Alabama, and the Helena City Council do hereby pass by vote and adopted on this 28th day of February 2022.

J. Brian Puckett, Mayor

Attest: Amanda C. Traywick, City Clerk

Town of Indian Springs Village
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution # 03152022-001

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, Town of Indian Springs Village recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, Town of Indian Springs Village participated jointly in the planning process with the other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that Town of Indian Springs Village, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member Richard Harlee moved and Council member Dale Elliott seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 15th day of March, 2022 at the regular meeting of the Town Council in the Town of Indian Springs Village.

Brenda Bell-Guercio
Certifying Official

Brenda Bell-Guercio, Mayor
Name and Title

Joan Orrow
City Clerk

City of Montevallo

2022 Shelby County Hazard Mitigation Plan Update

Resolution of Adoption # 02282022-355

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, City of Montevallo recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, City of Montevallo participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that City of Montevallo, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member David King moved and Council member Kenneth Dukes seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 14 day of March, 2022 at the regular meeting of the City Council in the City of Montevallo.

Certifying Official
Rusty Nix, Mayor

Steve Gilbert, City Clerk

RESOLUTION 2022-03-21-07

Adopting the 2022 Shelby County Multi-Jurisdictional, Multi-Hazard Mitigation Plan

WHEREAS, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

WHEREAS, City of Pelham recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, City of Pelham participated jointly in the planning process with the other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

NOW, THEREFORE, BE IT RESOLVED, that City of Pelham, hereby adopts the Shelby County Multi-Hazard Mitigation Plan as an official plan.

BE IT FURTHER RESOLVED that Shelby County Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

BE IT FURTHER RESOLVED a copy of the Hazard Mitigation Plan is available for review in the Shelby County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON David Coram, a councilmember, moved and Mildred Lanier, a councilmember, seconded the motion that Resolution 2022-03-21-07 be given vote, and said resolution passed by majority vote of the Council present, and the President of the Council declared the same passed and adopted.

ADOPTED this 21st day of March 2022.

Maurice Mercer, President of the Council

[SEAL]

ATTEST

Tom Seale, MMC, City Clerk/Treasurer

I, the undersigned City Clerk/Treasurer of the City of Pelham, Alabama, do hereby certify that the above and foregoing is a true copy of a resolution lawfully passed and adopted by the City Council of the City named herein, at a regular meeting of such Council held on the 21st day of March 2022 and that such Resolution is on file in the office of the City Clerk/Treasurer and that no action has been taken to rescind or modify said Resolution.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the City on this 21st day of March 2022.

Tom Seale, MMC, City Clerk/Treasurer

[SEAL]

Resolution
2022-03-28-11

Shelby County Commission
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution 2022-03-28-11

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, Shelby County recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, Shelby County participated jointly in the planning process with the other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that Shelby County Commission**,** hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Commission member Parker moved and Commission member Edwards seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Commission present, and the Chair declared the same passed.

Adopted this 28th day of March, 2022 at the regular meeting of the Shelby County Commission in the City of Columbiana.

Shelby County Commission Chair

Kim Reynolds, Administrative Assistant
to the County Manager

Town of Vincent
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution # 2022-03-01

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazards Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, Town of Vincent recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted all hazards mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, Town of Vincent participated jointly in the planning process with the other local units of government within the County to prepare an All Hazards Mitigation Plan;

Now, therefore, be it resolved, that Town of Vincent, hereby adopts the SHELBY COUNTY Multi-Hazards Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted All Hazards Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member Ralph Kimble moved and Council member Corey Abrams seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 1st day of March, 2022 at the regular meeting of the Town Council in the Town of Vincent.

Certifying Official

James Latimer Mayor
Name and Title

City Clerk

City of Westover
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution # 2022-02-15-2065

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, City of Westover recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, City of Westover participated jointly in the planning process with the other local units of government within the County to prepare an Multi-Hazard Mitigation Plan;

Now, therefore, be it resolved, that City of Westover**,** hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member Annette Tyler moved and Council member Wayne Jones seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 15th day of February, 2022 at the regular meeting of the City Council in the City of Westover.

Bonnie Meacham
Certifying Official

Larry Riggins
Larry Riggins, Mayor

Bonnie Meacham
Bonnie Meacham, City Clerk - Treasurer

Town of Wilsonville
2022 Shelby County Hazard Mitigation Plan Update
Resolution of Adoption

Resolution # 220307

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazards Mitigation Plan

Whereas, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

Whereas, Town of Wilsonville recognizes the threat that natural hazards pose to people and property; and

Whereas, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

Whereas, an adopted all hazards mitigation plan is required as a condition of future grant funding for mitigation projects; and

Whereas, Town of Wilsonville participated jointly in the planning process with the other local units of government within the County to prepare an All Hazards Mitigation Plan;

Now, therefore, be it resolved, that Town of Wilsonville, hereby adopts the SHELBY COUNTY Multi-Hazards Mitigation Plan as an official plan; and

Be it further resolved, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted All Hazards Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON Council member Melissa Rosetta moved and Council member Lauren Kennamer seconded the motion that said resolution be given vote, and said resolution passed by vote of all members of the Council present, and the Mayor declared the same passed.

Adopted this 7th day of March, 2022 at the regular meeting of the Town Council in the Town of Wilsonville.

Certifying Official

Kay M. Ray
City Clerk

Town of Wilton

2022 Shelby County Hazard Mitigation Plan Update

Resolution of Adoption

RESOLUTION 3122

Adopting the SHELBY COUNTY Multi-jurisdictional, Multi-Hazard Mitigation Plan

WHEREAS, the Shelby County Hazard Mitigation Plan has been updated in accordance with FEMA requirements at 44 C.F.R. 201.6; and

WHEREAS, Town of Wilton recognizes the threat that natural hazards pose to people and property; and

WHEREAS, undertaking hazard mitigation actions before disasters occur will reduce the potential for harm to people and property and save taxpayer dollars; and

WHEREAS, an adopted multi-hazard mitigation plan is required as a condition of future grant funding for mitigation projects; and

WHEREAS, Town of Wilton participated jointly in the planning process with other local units of government within the County to prepare a Multi-Hazard Mitigation Plan;

NOW, THEREFORE, BE IT RESOLVED, that Town of Wilton, hereby adopts the SHELBY COUNTY Multi-Hazard Mitigation Plan as an official plan; and

BE IT FURTHER RESOLVED, that SHELBY COUNTY Emergency Management will submit on behalf of the participating municipalities the adopted Multi-Hazard Mitigation Plan to Federal Emergency Management Agency officials for final review and approval.

A copy of the Hazard Mitigation Plan is available for review in the County Manager's Office and the Shelby County Department of Development Services-Emergency Management.

THEREUPON, Council member Clyde Crockett moved and Council member Victoria Barnes seconded the motion that said resolution be given vote, and said resolution passed by roll call vote of all members of the Council present,

Valerie Brown District 1 Absent

Victoria Barnes District 2 yes

JoAnn Hamm District 3 yes

Clyde Crockett District 4 yes

LaToya Chappell District 5 yes

Jessica S. Martin Mayor yes

Adopted this 1st day of March, 2022 at the regular meeting of the Town Council in the Town of Wilton.

Jessica S Martin

Jessica S. Martin, Mayor

Melissa Williams

Melissa Williams, Town Clerk

SECTION 2
CRITICAL FACILITIES DETAIL

2.1 DETAILED CRITICAL FACILITIES

The following tables detail the critical facilities that are summarized in the mitigation plan. The detailed information is in this supporting Annex as some of this information could be considered sensitive.

Table 1.1 Shelby County Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
County Courthouse	112 Main St. Columbiana	85	R	H	G	B	3	Y	100	10,000	2,206,800
County Administration Center	200 W College St. Columbiana	85	R	G	N	M	1	Y	100	3200	882,720
County Government Offices	108 W College St Columbiana	85	R	G	N	M	1	Y	50	6,000	375,156
Development Services Bldg	1123 County Services Dr. Pelham	85	RH	G	N	M	1	Y	300	29,880	1,754,406
County Exhibition Center	1 Argo Rd. Columbiana	85	R	G	N	M	1	Y	100	3000	662,040
County IT/GIS Bldg	102 Depot St Columbiana, AL	85	R	G	Y	B	1	Y	100	16,250	673,074
Inverness License Office	Inverness Corners Shopping Center, Hoover, AL	85	RH	G	N	B	1	Y	75	3,500	275,850
Columbiana License Offices	104 Depot St. Columbiana, AL	85	RH	G	N	B	1	Y	75	8,340	604,663
County 911 Services	19220 Hwy 280 Suite 220 Birmingham, AL.	85	RH	G	Y	C	1	Y	50	3000	1,774,146
Shelby County Sheriff	380 Mcdow Rd Columbiana, AL	247	RH	G	N	B	2	Y	200	6000	1,324,080

Shelby County Jail	380 Mcdow Rd Columbiana, AL	24 7	R H	S	Y	C	3	Y	200	9000	4,192,920
Shelby County Training Center	543 Mcdow Rd Columbiana, AL	8 5	R	G	N	M	1	Y	150	4000	882,720
Shelby County Work Release Center	260 Mcdow Rd Columbiana, AL	24 7	R H	S	N	W	1	Y	50	2000	441,360
Juvenile Detention Center	222 Mcdow Rd. Columbiana, AL	24 7	R H	S	N	C	1	Y	100	6000	1,324,080
Environmental, EMA and Hwy Bldg	504 Hwy 70, Columbiana, AL	24 7	R H	G	Y	B	2	Y	50	4000	662,040
County Water and Sewer Services	200 W College St. Columbiana, AL	24 7	R H	E	Y	B	1	Y	10	1000	92,465
Shelby County Airport	265 Weather Vane Rd. Calera, AL	24 7		E	Y	B	2	Y	100	8000	4,413,600
Cahaba Valley Fire Station 181	5487 Hwy 280, Birmingham, AL	24 7	R	G	N	M	1	Y	40	1,500	209,778
Cahaba Valley Fire Station 183	60 Manning Place, Chelsea, AL	24 7	R	G	N	M	1	Y	40	2,000	548,313
Cahaba Valley Fire Station 185	145 Narrows Dr. Chelsea, AL	24 7	R	G	N	M	1	Y	40	3,000	829,867
County 17 Fire Station	9360 Hwy 17, Maylene, AL.	24 7		G	N	M	1	Y	40	2,000	171,877
Dry Valley Fire Station	46 County Rd 19, Montevallo, AL.	24 7		G	N	W	1	Y	30	1,600	165,289
Dunnavant Fire Station	57095 Hwy 25, Dunnavant, AL	24 7		G	N	W	1	Y	30	1,500	147,635
East Shelby Rescue	42030 Hwy 25, Columbiana, AL	24 7		G	N	M	1	Y	10	2,000	319,092
Four Mile Fire Station	941 Hwy 55, Wilsonville, AL	24 7		G	N	M	1	Y	30	1,500	171,027
Kingdom Fire Station	3471 Hwy 28, Columbiana, AL	24 7		G	N	W	1	Y	30	2,000	239,990
Pea Ridge Fire Station	6158 Hwy 10, Montevallo, AL.	24 7		G	N	M	1	Y	30	1,200	138,256
Saginaw Fire Station	566 Hwy 26 E, Saginaw, AL.	24 7		G	N	M	1	Y	30	1,400	156,903
Shelby Fire Station	4895 Hwy 47, Columbiana, AL	24 7		G	N	M	1	Y	30	1,500	167,055
Vandiver Fire Station	12177 Hwy 43, Vandiver, AL.	24 7		G	N	W	1	Y	30	1,400	165,422
SE Shelby Rescue	105 Hwy 47 S, Columbiana, AL.	24 7		G	N	M	1	Y	10	1,500	165,510

West Shelby Fire and Rescue	4185 Hwy 22, Montevallo, AL.	247		G	N	M	1	Y	12	1,500	169,482
County Chamber of Commerce	1301 County Services Drive Pelham, AL.	85	RH	G	N	B	1	Y	200	10,000	1,103,400
County Museum	1854 N Main St. Columbiana, AL	85	RH	G	N	W	2	Y	50	2000	5,517,000
Creek View Elementary Grd K-3	8568 Hwy. 17 Alabaster, AL	75	N	S	N	B	1	Y	800	100,432	14,406,167
Meadow View Elementary Grd K-3	2800 Smokey Rd. Alabaster, AL	75	N	S	N	B	1	Y	900	120,189	17,240,151
Thompson Intermediate Grd 4-5	10019 Hwy 119 Alabaster, AL	75	R	S	N	B	1	Y	850	99,663	14,295,860
Thompson Middle Grd 6-8	1509 Kent Dairy Rd Alabaster, AL	75	R	S	N	B	1	Y	1000	153,825	22,064,966
Thompson High Grades 9-12	100 Warrior Dr Alabaster, AL	75	R	S	N	B	1	Y	1200	209,365	30,031,734
Linda Nolen Learning Center	10111 Hwy 119 Alabaster, AL	75	R	S	N	B	1	Y	175	44,352	6,361,940
Shelby County Instructional Svcs Ctr	601 1st Street S Alabaster, AL	75	R	S	Y	B	1	Y	500	70,852	10,163,153
Calera Elementary Grades K-3	855 10th St Calera, AL	75	R	S	N	B	1	Y	700	61,364	9,140,720
Calera Middle Grades 4 -6	8454 Hwy 31 Calera, AL	75	R	S	N	B	1	Y	500	86,458	12,878,697
Calera High Grades 7 - 12	Calera, AL	75	N	S	N	B	1	Y	1000	179,098	27,585,000
Chelsea Park Elementary Grd K-3	9000 Chelsea Park Trail Chelsea, AL	75	H	S	N	B	1	Y	800	118,000	17,577,162
Mt Laurel Elementary Grades K-3	1 Jefferson Place Birmingham, AL	75	N	S	N	B	1	Y	575	79,490	11,840,751
Chelsea Intermediate Grades 4-5	2315 Hwy 39 Chelsea, AL	75	R	S	N	B	1	Y	700	61,041	9,092,275
Chelsea Middle Grades 6-8	2321 Hwy 39 Chelsea, AL	75	R	S	N	B	1	Y	650	78,728	11,727,244
Chelsea High Grades 9-12	10510 Hwy 11 Chelsea, AL	75	N	S	N	B	1	Y	700	150,688	22,446,334
Elvin Hill Elementary Grades K - 5	201 Washington St, Columbiana, AL	75	N	S	N	B	1	Y	575	68,643	10,224,993

Shelby Elementary Grades K - 5	19099 Hwy 145 Shelby, AL	7 5	N	S	N	B	1	Y	250	51,913	7,732,909
Wilsonville Elementary Grades K - 5	71 School St Wilsonville, AL	7 5	N	S	N	B	1	Y	250	42,076	6,267,599
Columbiana Middle Grades 6 - 8	222 Joinertown Rd Columbiana, AL	7 5	R	S	N	B	1	Y	500	61,014	9,088,584
Shelby County High Grades 9 - 12	101 Washington St Columbiana, AL	7 5	N	S	N	B	1	Y	600	98,265	14,637,456
School Of Technology Grades 9 - 12	701 Hwy 70 Columbiana, AL	7 5	N	S	N	B	1	Y	300	58,586	8,726,912
Central Office	410 E. College St. Columbiana, AL	7 5	N	H	Y	B W	1	Y	200	28,108	4,031,868
Bus Shop	116 Industrial Parkway Columbiana, AL	7 5	N	S	N	B	1	Y	50	17,543	2,516,403
Cnp Building	105 Ferry Road Columbiana, AL	7 5	N	S	N	W	1	Y	15	2,640	220,680
Maintenance And Facilities	125 Industrial Parkway Columbiana, AL	7 5	R	S	N	W M	1	Y	100	47,790	6,855,093
Montevallo Elementary Grades K - 5	171 Jeter Circle Montevallo, AL	7 5	N	S	N	B	1	Y	800	73,267	10,913,779
Montevallo Middle Grades 6 -8	235 Sanford St Montevallo, AL	7 5	N	S	N	B	1	Y	400	52,459	7,814,240
Montevallo High Grades 9 - 12	980 Oak St Montevallo, AL	7 5	N	S	N	B	1	Y	400	100,746	15,007,023
Inverness Elementary Grades K - 3	5251 Valleydale Rd Birmingham, AL	7 5	N	S	N	B	1	Y	550	80,000	11,916,720
Oak Mt. Elementary Grade K - 3	5640 Cahaba Valley Rd Birmingham, AL	7 5	N	S	N	B	1	Y	800	111,710	16,640,210
Oak Mt. Intermediate Grades 4 - 5	5486 Caldwell Mill Rd Birmingham, AL	7 5	N	S	N	B	1	Y	750	79,361	11,821,535
Oak Mt. Middle Grades 6 - 8	5650 Cahaba Valley Rd Birmingham, AL	7 5	N	S	N	B	1	Y	1200	148,518	22,123,093
Oak Mt. High Grades 9 - 12	5476 Caldwell Mill Rd Birmingham, AL	7 5	N	S	N	B	1	Y	1700	237,396	35,362,271

Helena Elementary Grades K - 3	187 Third St Helena	7 5	N	S	N	B	1	Y	800	80,209	11,947,852
Valley Elementary Grades K - 3	310 Opportunity Dr Pelham	7 5	N	S	N	B	1	Y	700	65,078	9,693,954
Helena Intermediate Grades 4 - 5	3500 Hwy 52 Helena	7 5	N	S	N	B	1	Y	700	90,249	13,443,401
Valley Intermediate Grades 4 - 5	2200 Hwy 33 Pelham, AL	7 5	N	S	N	B	1	Y	700	82,246	12,251,282
Helena Middle Grade 6 - 8	1299 Hillsboro Parkway Helena, AL	7 5	N	S	N	B	1	Y	800	157,783	26,481,600
Riverchase Middle Grades 6 - 8	853 Willow Oak Dr Birmingham, AL	7 5	N	S	N	B	1	Y	800	93,282	13,895,193
Pelham High Grades 9 - 12	2500 Panther Circle Pelham, AL	7 5	N	S	N	B	1	Y	1200	194,770	29,012,744
Vincent Elementary Grades K - 5	40800 Hwy 25 Vincent, AL	7 5	N	S	N	B	1	Y	500	71,493	10,649,526
Vincent Middle/High Grade 6 - 12	42505 Hwy 25 Vincent, AL	7 5	N	S	N	B	1	Y	500	92,313	13,750,852
Chase Learning Center And Daycare Inc.	330 Canyon Park Dr Shelby, AL	6		E S	N		1	Y	30	400	165,510
Shelby Headstart Center	19099 Highway 145 Shelby, AL	6		E S	N		1	Y	50	500	2,206,800
New Hope Cumberland Church	5521 Double Oak Ln Birmingham, AL										
The Church of Brook Hills	3145 Brook Highland Birmingham, AL										
Alabaster Senior Center	808 15th Ave. Alabaster, AL	7	R H	S	N	M	1	Y	200	2100	5,517,000
Calera Senior Center	15863 Hwy 25 Calera, AL	7 7	R H	S	N	M	1	Y	200	2500	1,566,828
Chelsea Senior Center	Yellow Leaf Lodge 680 Hwy 36, Chelsea, AL	7 7	R H	S	N	M	1	Y	100	1200	551,700
Columbiana Senior Center	194 Washington Street Columbiana, AL	7 7	R H	S	N	M	1	Y	100	1500	551,700

Dunnavant Senior Center	11690 Hwy 41 Dunnavant, AL	7 7	R H	S	N	W	1	Y	50	600	165,510
Helena Senior Center	222 Tucker Rd Helena, AL 35080	7 7	R H	S	N	W	1	Y	150	1800	882,720
Heardmont Senior Center	5452 Cahaba Valley Rd Birmingham, AL	7 7	R H	S	N	B	1	Y	250	2000	827,550
Pea Ridge Senior Center	6161 Hwy 10 Montevallo, AL	7 7	R H	S	N	M	1	Y	75	600	220,680
Pelham Senior Center	50 Racquet Club Dr., Pelham, AL	7 7	R H	S	N	B	1	Y	300	2400	1,655,100
Vincent Senior Center	19 John Sparkman Court Vincent, AL	7 7	R H	S	N	W	1	Y	75	1500	551,700
Westover Senior Center	3312 Westover Rd Westover, AL	7 7	R H	S	N	M	1	Y	50	600	165,510
								TOTALS	677064	4116474	627,836,250

Table 1.1 City of Alabaster Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Alabaster Police Department	201 1st St. N., Alabaster, AL	24 7	R	G	Y	B	1	Y	25	3,400	2,206,800
Alabaster City Hall	201 1st St. N., Alabaster, AL.	8 5	R	G	Y	B	2	Y	90	1,875	2,206,800
Shelby Baptist Medical Center	1000 1st St. N., Alabaster, AL.	24 7	R	E S	Y	B	4	Y	1,500	200,000	55,170,000
Intergraded Health Center	850 9th St NW, Alabaster, AL.	24 7	R	E S	Y	B	2	Y	500	79,960	11,034,000
AT&T switching station	1012 1st St. N., Alabaster, AL.	24 7	R	E U	Y	M	1	Y	0	13,200	2,912,976
Alabaster Fire Station 1	850 1st Ave W Alabaster, AL.	24 7	R	G	N	M	1	Y	54	5,400	827,550
Alabaster Fire Station 2	1950 Butler Rd Alabaster, AL.	24 7		G	N	M	1	Y	55	5,551	838,584
Alabaster Fire Station 3	910 1st St. N, Alabaster, AL.	8 5	R	E M	Y	B	2	Y	1,300	130,000	13,902,840
Alabaster Post Office	50 Kentstone Blvd Alabaster, AL.	8 5		G	N	B	1	Y	850	13,428	2,979,180

Maylene Post Office	10011 Hwy 17 Alabaster, AL.	85	R	G	N	B	1	Y	96	1,440	331,020
Alabaster Well#1 and Filter Plant	8th St NW Alabaster, AL.	247		EU	N	M	1	Y	0	10,000	3,861,900
Alabaster Waste Water Treatment Plant	122 8th Ave NW Alabaster, AL.	85	R	EU	Y	M	1	Y	5	1000	110,340
Alabaster Well#2	Ball Park Road, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	1,103,400
Alabaster Well#3	10th St. SW., Alabaster, AL.	247		EU	N	M	1	Y	0	1000	1,103,400
Water Tank 300,000 Gal Booster Station	Hickory Hill, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	551,700
2-300,000 Gal Tank	County Road 44, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	1,324,080
100,000 Gal Tank	Navajo Trail, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	331,020
Booster Station	Hwy 264, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	551,700
3,000,000 Gal Tank	Kent Dairy Road, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	2,206,800
500,000 Gal Tank	Hwy 31 S. Alabaster, AL.	247		EU	N	M	1	Y	0	1000	1,103,400
500,000 Gal Tank and Booster Station	County Rd 12, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	1,655,100
500,000 Gal Tank	Hwy 80, Alabaster, AL.	247		EU	N	M	1	Y	0	1,000	1,103,400
500,000 Gal Tank	Chestnut Circle, Alabaster, AL.	247		EU	N	M	1	Y	0	1,000	1,103,400
1,500,000 Gal Tank	Forest Park, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	2,206,800
Booster Station	Henry Drive, Alabaster, AL.	247		EU	N	M	1	Y	0	1000	331,020
300,000 Gal Tank	3rd St. NE., Alabaster, AL.	247		EU	N	M	1	Y	0	1000	551,700
500,000 Gal Tank	New Gate Road, Alabaster, AL.	247		EU	N	M	1	Y	0	1,000	1,103,400
Physiotherapy Association	304 1st St N, Alabaster, AL.	85	R	EM	N	B	1	Y	60	5,500	1,224,774
Shelby Cancer Center	1024 1St St N, Alabaster, AL.	247	R	ES	N	B	2	Y	96	9,600	1,986,120
Alabama Family Dental Care	1120 1st St N, Alabaster, AL.	85	R	E	N	B	2	Y	400	40,600	8,827,200
Hillside Medical Plaza	224 1st St S Alabaster, AL.	85	R	E	N	B	2	Y	243	12,150	2,648,160
Alas are Opt homology	613 1st S Alabaster, AL.	85	R	E	N	M	1	Y	125	12,400	2,736,432

Alabaster Family Medical Center	395 1st St S Alabaster, AL.	8 5	R	E	N	M	1	Y	45	4,500	993,060
Chandler Health& Rehab Ctr	850 9th St NW Alabaster, AL.	24 7		E S	N	B	1	Y	660	709,960	15,447,600
Masonic Lodge	120 Plaza Circle Alabaster, AL.	8 12		N	N	M	1	Y	320	4,900	1,059,264
Shelby Medical Plaza	1004 1st N Alabaster, AL.	8 5	R	E	N	B	2	Y	500	46,772	11,254,680
Physicians Medical Tower 1	1022 1st St N Alabaster, AL.	8 6	R	E	Y	B	4	Y	1,250	100,000	26,481,600
Shelby Baptist Ext Care Nursing Home	1000 1st St N Alabaster, AL.	24 7	R	S	Y	B	4	Y	200	12000	3,310,200
First United Methodist Church	10903 Hwy 119, Alabaster, AL.	8 5	R	S	N	B					2,445,600
Shelby Baptist Surgery Center	1010 1st St N Alabaster, AL.	8 6	R	E	Y	B	4	Y	765	72,874	17,102,700
American Family Care	120 Pkwy Colonial Promenade, Alabaster, AL.	8 6		E	N	B	1	Y	70	8,463	1,875,780
Brackin Medical Building	626 2nd St NE Alabaster, AL.	8 6		E	N	B	1	Y	50	4,500	993,060
Shelby Medical Building	644 2nd St NE, Alabaster, AL.	8 6	R	E	Y	B	2	Y	500	11,466	2,537,820
Thomas Dudney DDS Bldg	122 7TH Ave NE Alabaster, AL.	8 5	R	E	N	B	2	Y	84	8,400	1,875,780
Shelby Ridge Nursing Home	881 3rd St NE Alabaster, AL.	24 7		E S	Y	B	2	Y	3000	49,631	10,371,960
Laurelton Rehab & Nursing Home	850 9 St NW Alabaster, AL.	24 7		S	N	B	2	Y	200	15,000	5,517,000
Clayton Therapy & Rehab	420 1st St N Alabaster	6 6		E s	N		1	Y	50	1500	2,206,800
Noah's Park Child Care	61 Weatherly Club Dr. Alabaster	6 6		E S	N		1	Y	60	900	827,550
Liberty Missionary Bapt Church Day Care	306 - 5th Ave. Southeast Alabaster Al	6 6		E S	N		1	Y	50	900	882,720
Kingwood Assembly Of God Day Care	100 Harvest Way Alabaster, AL.	6 6		E s	N		1	Y	300	30,000	3,310,200
Evangel Presbyterian Church Day Care	423 Thompson Road Alabaster, AL.	6 6		E S	N		1	Y	300	25,000	2,758,500
Child Care Network, Inc	1624 Kent Dairy Rd Alabaster Al	6 6		E S	N		1	Y	60	800	827,550

Bullfrogs And Butterflies Day Care	8033 Hwy 119 Alabaster, AL.	66		Es	N		1	Y	30	400	165,510
Alabaster Head Start Center	1425 Montevallo Hwy Alabaster, AL.	66		ES	N		1	Y	60	800	882,720
Westwood Bapt Edu Ministry Day Care	1155 Alabaster Blvd. Alabaster, AL.	66		ES	N		1	Y	200	24,000	2,758,500
Young Impression Child Care Center	1321 7th St. Sw Alabaster, AL.	66		ES	N		1	Y	20	400	110,340
								TOTALS	14,173	1693670	246131490

Table 1.1 City of Calera Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall & Calera Police Dept.	10947 Hwy 25, Calera	247	R	G	Y	B	1	Y	70	9,000	1,012,172
Police Station #2	360 George Roy Pkwy, Calera	247	R	G	N	B	1	Y	10	6532	463,428
Police Station #3	15843 Hwy 25, Calera	247	R	G	N	B	1	Y	10	10,710	1,567,380
Fire Station #1	1310 17th Ave, Calera	247	R	G	Y	B	1	Y	50	10332	1,081,332
Fire Station #2	360 George Roy Parkway, Calera	247	R	G	Y	B	1	Y	25	6532	463,428
Fire Station #3	15843 Hwy 25, Calera	247	R	G	N	B	1	Y	35	10,710	1,567,380
Waste Water Treatment Plant #1	255 Hwy 70, Calera	62	T	EU	Y	B	1	Y	5	14,000	7,723,800
Waste Water Treatment Plant #2	Hwy 5TH St., Calera	62	T	EU	Y	B	1	Y	15	9,000	5,517,000
27 Lift Waste Stations	Various Locations, Calera	247	T	EU	Y				0	27,000	5,517,000
Water Filter Plant	8811 Hwy 22	247	F	EU	Y	B	1		6	6,000	2,206,800
Well #1	Hwy 107, Calera	247	F	EU	Y	M	1		2	1000	82,755
Well # 2	Hwy 22, Calera	247	F	EU	Y	B	1		2	1000	55,170

6 Water tanks	Various Locations Calera	24 7	T	E U	N	M	1	Y	0	6000	4,192,920
Inspections Building	51070 10th St, Calera	7 5	R	G	N	M	1	Y	30	2,000	331,020
Public Works Building	1122 20th Ave, Calera	7 5	R	G	N	M	1	Y	40	2,000	220,680
Fire Training Facility	00000 Hwy 70, Calera	8 4	R	G	N	M	1	Y	200	10,000	2,648,160
Calera Library	9700 Hwy 70, Calera	8 4	R	G	N	M	1	Y	30	2,000	248,265
Community Center	8560 Hwy 31 S., Calera	8 4	R	S	N	M	1	Y	100	2,500	275,850
Post Office	8088 Hwy 31, Calera	8 4	R	G	N	B	1	Y	30	5,000	2,206,800
Railroad Museum	1919 9th St Calera	8 4	R	E	N	M	1	Y	500	999,999	551,700
Football Stadium		8 10	R	E	N	C	1	Y	10,000	999,999	1,103,400
Presbyterian Church	1965 Hwy 31 S, Calera	8 8	R	H	N	W	1	Y	200	5,000	1,103,400
Masonic Lodge	0000 Hwy 31 S, Calera	8 4	R	H	N	W	1	Y	100	3,000	331,020
Calera Old Town	0000 Hwy 31 S, Calera	8 4	R	H	N	W	2	Y	1,000	30,000	5,517,000
Impact Rehab and Sports medicine	101 Hwy 87 Calera	8 4	R		N	B	1	Y	50	1500	827,550
Calera Christian School K-12	1725 22nd Avenue Calera, Al	6 6	R	S	N	B	1	Y	200	15,000	1,103,400
First United Methodist Church	6107 Hwy 31, Calera	8 5	R	S	N	B					
Calera Head Start Center	802 8th Avenue Calera	6 6	R	S	N	B	1	Y	30	250	275,850
Concord Baptist Church Day Care	11215 Hwy 22 Calera	6 6	R	S	N	B	1	Y	50	1500	275,850
Lit'l Bit Of Fun Child Dev Center	938 14th St Calera	6 6	R	E S	N	W	1	Y	30	600	193,095
Morningstar Child Care, Llc	53 Leah Lane Calera	6 6		E S	N	W	1	Y	30	800	165,510
Mrs. Cynthia's Preschool & D C, Inc	1208 5th Ave Calera Al	6 6	R	E S	N	W	1	Y	50	1200	331,020
South Shelby Baptist Church Day Care	1734 14th Street Calera	6 6	R	S	N	B	1	Y	75	2000	827,550
Sprit And Truth Ministries, Day Care	8651 Hwy 31 Calera Al	6 6	R	S	N	B	1	Y	40	1000	275,850

								TOTALS	13,015	2203164	50263534
Table 1.1 City of Chelsea Critical Facilities											
Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall	11611 Chelsea Rd, Chelsea, AL	8 5	R	G	N	B	2	Y	200	15,000	2,607,962
Fire Station 31	104 Chelsea Dr, Chelsea, AL	2 4 7	R	G	N	B	1	Y	30	3,000	199,223
Fire Station 32	1469 Hwy 69, Chelsea, AL	2 4 7	H	G	N	M	1	Y	45	4,800	56,448
Fire Station 33	7387 Hwy 51 Chelsea, AL	2 4 7	R	G	N	M	1	Y	45	4,800	491,651
Post Office	16738 Hwy 280, Chelsea, AL	8 5	R	G	N	B	1	Y	30	1,200	264,816
Kings Ranch-Boys	102, 231, 274, 350, 351 Kings Ranch Dr Chelsea, AL	24 7		S	N	W	1	Y	40	10,500	1,103,400
Kings Ranch Girls	420, 520, 525 Kenebrew Dr Chelsea, AL	24 7		S	N	W	1	Y	40	10,000	1,103,400
Kings Adult Abuse Center	162 Kings Home Dr Chelsea, AL	24 7		S	N	B	2	Y	30	6,000	1,324,080
YMCA Camp	928 Hargis Dr, Chelsea, AL	24 7		S	N	W	1	Y	500	16,500	2,206,800
Girls Scout Camp	300 Girl Scott Rd, Chelsea, AL	24 7		S	N	W	1	Y	400	16,000	2,096,460
Chelsea Hidden Acres Day Care	254 Hidden Acres Chelsea, AL	6 6		S	N	B	1	Y	25	400	220,680
Ready, Set, Grow, C.D.C. Day Care	110 Hwy 337 Chelsea, AL	6 6		E S	N	B	1	Y	30	500	275,850
Liberty Church Day Care	11050 Chelsea Rd, Chelsea, AL	6 6	R	S	N	B	1	Y	100	3,000	827,550
Morning Church Child Care	11072 Hwy 11 Chelsea, AL	6 6	R	S	N	M	1	Y	200	8,000	
Thera-Chem Research	100 Jade Park Dr Chelsea, AL	8 5			Y	B	1	Y	20	7,900	6,025,000

Shelby County Water Facility	8200 Hwy 39 Chelsea, AL.	24 7			Y	B	1	Y	5	6,000	
Miss Christy's Preschool	22 Forest Ridge Cir Chelsea, AL				N	W	1	Y	20	1,900	265,000
Barbara Grass Daycare	705 Shelby Forest Tr Chelsea, AL				N	W	1	Y	20	1,900	265,000
Unique Blessings	848 Tara Dr Chelsea, AL.				N	W	1	Y	20	4,000	750,000
Magnolia Creek Treatment Center	159 Magnolia Creek Dr Chelsea, Al	24 7			N	W	2	Y	50	10,000	1,799,000
Lathams Hair Clnic Carl B. Shory MD	109 Foothills Pkwy Suite #111 Chelsea, AL.	9 5			N	M	1	Y	20	1,000	
Kolbe Clinic	109 Foothills Pkwy Suite #113 Chelsea, AL.	9 5			N	M	1	7	20	1,000	
Elite Dentistry	100 Chelsea Corners Suite 113 Chelsea, AL.	9 5			N	B	1	Y	20	1,200	
Chelsea Comprehensive Dental	407 Chelsea Crossroads Chelsea, AL.	9 5			N	B	1	Y	20	1,200	
Ortho Express Urgent Care	104 Chelsea Point Dr. Chelsea, AL.	9 5			N	B	1	Y	40	3,000	
Pathway Pediatrics	398 Chesser Dr Chelsea, AL.	8 6			N	B	1	Y	20	1,500	
Chelsea Eye Care	300 Chesser Dr Chelsea, AL.	9 5			N	B	1	Y	20	1,000	
Summit Pediatrics	134 Foothills Parkway Chelsea, AL.	8 6			N	B	1	Y	40	3,500	
Alabama Allergy & Asthma	16691 Hwy 280 Chelsea, AL.	9 5			N	B	1	Y	30	3,000	
Eyes on Chelsea	10699 Old Hwy 280 Chelsea, AL.	9 5			N	B	1	Y	20	4,000	
Hayes Family Eye Care	16223 Hwy 280 Chelsea, AL.	9 5			N	B	1	Y	20	1,200	
Chelsea Orthodonticts	300 Jade Park Suite 301 Chelsea, AL.	9 5			N	B	1	Y	30	2,500	
Chelsea Family Dentisty	302 Jade Park Dr Chelsea, AL.	9 5			N	B	1	Y	30	2,500	

Chelsea Urgent Care	15582 Hwy 280 Suite 106 Chelsea, AL.	9 6			N	B	1	Y	30	1,200	
								TOTALS	1515	159,200	21,882,319.82

Table 1.1 City of Columbiana Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity		Structure Value
City Hall and Police Dept	107 Mildred St. Columbiana, AL	5 8	R	G	N	B	2	Y	200		1,103,400
Public Works Bldg	116 S Main St. Columbiana, AL	7 4	R	G	N	M	1	Y	20		882,720
Fire Dept Storage Bldg	105 Hwy 47 Columbiana, AL	8 4	R	G	N	W	1	Y	10		171,910
Fire and Rescue Bldg	103 Hwy 47 Columbiana, AL	24 7	R	G	N	M	1	Y	20		170,696
Recreation Ctr	194 Washington St Columbiana, AL	8 4	R	S	N	M	1	Y	100		882,720
Park Facilities	196 Washington St Columbiana, AL	7 9	R	S	N	M	1	Y	500		579,285
Fire Station #1	105 Hwy 47 S, Columbiana, AL	24 7	R	G	N	M	1	Y	50		882,720
Community Storm Shelter	105 Hwy 47 S, Columbiana, AL	24 7	R	S	Y	B	1	Y	100		220,680
Columbiana Library	50 Lester Street. Columbiana, AL	24 7	R	H	N	B	2	Y	70		1,103,400
Columbiana Water Works	50 Water Works Street Columbiana, AL	7 5	R	E	Y	M	1	Y	10		110,340
Water Treatment Plant	455 Hwy 70, Columbiana, AL	7 5	R	E	Y	M	1	Y	5		110,340
Cornerstone Christian School PK-12	24975 Highway 25 Columbiana, AL	7 5	R	S	N	B	1	Y	30		1,103,400
Columbiana Health & Rehab Center	22969 Hwy 25 Columbiana, AL	7 5	R	S	N	B	2	Y	80		1,544,760
Southern Family Health Clinic	201 Old Hwy 25 E Columbiana, AL	8 5	R	E S	N	B	1	Y	40		717,210
A Touch Of Home Day Care	21015 Hwy 25 Columbiana, Al	6 6	R	E S	N	W	1	Y	30		220,680

Columbiana Head Start Center	201 Washington Street Columbiana, AL	66	R	S	N	W	1	Y	25		242,748
Piggly Wiggly	211 W College St. Columbiana, AL	79	R	E	N	B	1	Y	100		4,413,600
Brown Lumber	Hwy 25 Columbiana, AL	76	R	E	N	M	1	Y	100		3,310,200
McDonalds	300 W College St Columbiana, AL	69	R	E	N	B	1	Y	50		717,210
								TOTALS	1570		18,488,019

Table 1.1 City of Harpersville Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Harpersville City Hall	83 Town Hall Drive Harpersville, AL	85	R	N	N	B	1	Y	150	4,000	551,700
Harpersville Fire Department	38891 Hwy 25 Harpersville, AL	247	R	N	N	M	1	Y	100	5,000	331,020
Harpersville Post Office	41 Wheat Street Harpersville, AL	85	R	N	N	B	1	Y	20	800	220,680
Harpersville City Park	2973 Sun Valley Rd Harpersville, AL	77	R	N	N	C	1	Y	500	999,999	882,720
Russell Building Supply	110 Wheat Street Harpersville, AL.	86	R	Y	N	M	1	Y	50	20,000	551,700
Harpersville Water Tower #1	Sun Valley Road Harpersville, AL	247	R	Y	N	M	1	Y	0	1000	1,103,400
Harpersville Water Tower #2	Gallops Crossroads, Harpersville, Al	247	R	Y	N	M	1	Y	0	1000	1,103,400
Harpersville Library	39397 Hwy 25 Harpersville, AL	85	R	N	N	C	1	Y	20	1,000	33,102
Harpersville Community Center	39321 Hwy 25 Harpersville, AL	86	R	N	N	W	1	Y	150	7,500	275,850

Harpersville Police Department	34 Town Hall Ln Harpersville, AL	85	R	S	S	B	1	Y	75	5,000	331,020
Harpersville City Well #1	292 Sunny Dale Ln Harpersville, AL	247	R	Y	N	M	1	Y	0	1000	220,680
Russell Building Supply	110 Wheat Street Harpersville, AL	86	R	Y	N	M	1	Y	50	20,000	551,700
Coosa Valley Academy	179 Park Street Harpersville, AL	75	R	S	N	B	1	Y	400	100,000	2,758,500
								TOTALS	1555	1168299	8,915,472

Table 1.1 City of Helena Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Helena City Hall	816 Hwy 52E Helena, AL.	85	R	G	Y	B	1	Y	150	20,000	5,517,000
Police Department	816 Hwy 52E Helena, AL.	247	R	G	Y	B	1	Y	30	8,000	0
Fire Station #1	816 Hwy 52 E, Helena	247	R	G	Y	W	1	Y	40	4,000	882,720
Fire Station #2	103 Oak View Lane Helena, AL.	247	R	G	Y	W	1	Y	100	5750	1,324,080
Fire Station #3	4828 South Shades Crest Road Helena	247	R	G	Y	W	1	Y	100	3600	2,648,160
Helena Sewage Treatment	590 Old Town Place Helena, AL.	247	FH	EU	Y	C	1	N	12	12,000	11,034,000
City Well #3	1505 Dearing Downs Helena, AL.	247		EU	N	C	1	Y	8	576	551,700
City Well #2	Sharm Glen Helena, AL.	247		EU	N	C	1	Y	4	288	55,170
City Well #1	Elm Street Helena, AL.	247	RF	EU	N	C	1	N	4	144	55,170
Pelham City Well #4	675 Site St.	247	R	EU	N	C	1	Y	8	576	551,700
Water Towers – 8 total	Helena, AL.	247		EU	N	M	1	Y	0	8000	13,240,800

Helena City Library	220 Tucker Road Helena, AL.		R		N	B	1	Y	120	6,000	882,720
Helena Post Office	800 Highway 52 Helena, AL.		R			B	1	Y	20	4,000	551,700
Helena Senior Citizen Center	816 Hwy 52E Helena, AL.		R		Y	B	1	Y	80	3,200	662,040
Helena Amphitheater	4151 Helena Road Helena, AL.		F	H E	N	C	1	N	7,500	2,800	1,103,400
Helena Community Center	110 Sports Complex Helena										
Helena Olde Town	HI - 261 Helena Road Helena, AL.		F R	E H	N	W B	1	N	1200	25,000	11,034,000
Maplewood Lane Assisted Living	223 Tucker Rd Helena	24 7	H R	S	N	B	2	Y	40	3600	551,700
Dayspring Child Care, Inc	5141 Hwy 17 Helena Al	6 6		E S	N		1	Y	20	500	110,340
Pink & Blue, Llc Day Care	500 Hwy 52 Helena	6 6		E S	N		1	Y	30	600	165,510
Sunrise Child Care	209 Village Pkwy Helena	6 6		E S	N		1	Y	25	600	165,510
Trinity Church Of The Nazarene Day Care	120 Laurel Woods Drive Helena	6 6		S	N		1	Y	60	1800	1,655,100
Plantation Pipe Line	900 County Road 52 Helena, AL.	24 7	R H	E	Y	B		Y	24	7,500	1,655,100
Charter Communication Switch	HI – 17 Helena, AL.	24 7		E	Y	B		Y	2	144	22,068
								TOTALS	9,577	118,678	54,419,688

Table 1.1 Indian Springs Village Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall	2635 Cahaba Valley Rd	8 5		G	N	W	1	Y	20	1,200	275,850
North Shelby Fire Station #1	4617 Valleydale Rd, Birmingham	24 7		G	Y	B	1	Y	30	3,700	286,730
North Shelby Fire Station #2	4996 Caldwell Mill Ln. Birmingham	24 7		G	Y	B	1	Y	30	3,000	331,020
North Selby Fire Station #3	6902 Lyndon Dr Birmingham	24 7		G	N	B	1	Y	30	3,250	331,020
Indian Springs School	190 Woodward Drive Indian Springs, Al	7 5		E S		B	1	Y	400	16000	10,482,300
Indian Springs First Baptist Church	3375 Cahaba Valley Rd Pelham										
Oak Mountain Presbyterian Day Care	5080 Cahaba Valley Trace Birmingham	6 6		E S	N		1	Y	100	15,000	2,758,500
								TOTALS	810	49,150	14,465,420

Table 1.1 City of Montevallo Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall Administration	545 Main St Montevallo	8 4	T R	G	Y	B	1	Y	100	7,000	1,103,400
Police Department	545 Main St Montevallo	8 5	R	G	Y	B	1	Y	40	2,000	441,360
Fire Station #1	1140 Ashville Rd Montevallo	24 7	R	G	N	M	1	Y	50	5,200	573,768

Fire Station #2	4560 Hwy 119 Montevallo	24 7	R	G	N	M	1	Y	40	3,000	441,360
Water Utility	613 Valley St Montevallo	8 5	R	E	Y	M	1	Y	20	5,000	5,517,000
Waste water Treatment Plant	0000 Salem Rd, Montevallo	7 5	F R	E	Y	M	1	Y	50	10,000	11,034,000
Spring, Wells & Water Tanks	Various Locations	0 0	R	E	Y	M	1	Y	5	7,000	6,620,400
Public Works Building	0000 Salem Rd Montevallo	7 5	H R	G	N	M	1	Y	20	8,000	937,890
Community Storm Shelter	4175 Hwy 22 Montevallo	24 7	R	G	N	C	1	Y	50	2,000	59,142
Library & Auditorium	845 Valley St Montevallo	8 5	R	G	N	B	2	Y	200	25,000	4,413,600
Senior Center	154 Vine St, Montevallo	8 5	R	S	N	B	1	Y	50	2,500	275,850
Senior Recreation Center	156 Vine St Montevallo	8 5	R	S	N	M	1	Y	100	8,000	551,700
Post Office	720 Vine St. Montevallo	8 5	R	G	N	B	1	Y	50	5,000	2,758,500
AT&T Switching Station	000 Ashville Rd Montevallo	0 0	R	E	Y	M	1	Y	5	2,000	220,680
Montevallo Historic Center	0000 Main St. Montevallo	8 7	R	H E	N	B W	2	Y	1000	150,000	110,340,000
American Village Recreation Park	3727 Hwy 119 S, Montevallo	8 10	R	E	N	B M	1	Y	10,000	999,999	165,510,000
1st United Methodist Church	861 Middle St. Montevallo	8 8	R	H	N	B	2	Y	600	15,000	8,827,200
1st Baptist Church	660 Main St. Montevallo	8 8	R	H	N	B	2	Y	600	50,000	11,034,000
Montevallo Medical Clinic	33 Salem Rd Montevallo	8 5	R	E S	N	B	1	Y	100	12,000	1,324,080
Veterans Administration	000 Mill St. Montevallo	8 5	R	S	N	W	1	Y	50	5,000	1,103,400
Knowlwood Assisted Living Facility	4804 Hwy 25 Montevallo	24 7	R	S	Y	B	2	Y	50	5,000	2,758,500
Montevallo Head Start Center	100 Jimmy Jones Dr Montevallo	6 6		E S	N		1	Y	40	1000	441,360
Shelby Academy PK-12	9178 Hwy 22 Montevallo	6 6		E S	N		1	Y	300	30,000	2,206,800
University Baptist Child Dev Center	440 Overland Road Montevallo	6 6		E S	N		1	Y	40	1000	220,680
								TOTALS	13,560	1360699	338,714,670.24

Table 1.1 City of Pelham Critical Facilities

Shelby County
Multi-Jurisdiction
Hazard Mitigation Plan Supporting Annex
2022 Plan Update

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Police Department	3174 Church Street	24 7	H R	G	Y	N	1	Y	500	50,000	4,634,280
City Hall	3162 Pelham Parkway	8 5	H R	G	Y	N	2	Y	296	17,000	1,949,766
Fire Station # 1	3162 Pelham Parkway (Behind City Hall)	24 7	H R	G	Y	N	1	Y	15	6,600	882,720
Fire Station 2	2298 Pelham Pkwy	24 7	R	G	Y	N	1	Y	5	4,000	827,550
Fire Station 3	2050 Co. 52	24 7	R	G	Y	N	1	Y	5	5,200	662,040
Fire Station 4	100 N. Chandalar Dr	24 7		G	N	N	1	Y	5	3,800	662,040
Fire Station 5	Ballantrae	24 7		G	N	Y	1	Y	5	4,200	827,550
Training Center	Stewart Lane	8 5	R	G	N	W	1	Y	40	2,000	524,115
Public Works Building	3111 Cummins Street	7 4	H R	G	Y	B	1	Y	65	9,850	518,598
Civic Complex	500 Amphitheater Road	7 9	F	G	N	M	1		10,592	108,069	9,930,600
Oak Mountain Amphitheater	1000 Amphitheater Road	V	F	E	N	M	1		1000	500000	2,206,800
Maplewood Ridge I Assisted Living	2124 Old Montgomery Hwy Pelham	24 7		E S					30	3,000	1,103,400
Frasenius Medical Care Facility	120 Cahaba Valley Parkway Pelham	24 7		E S					30	1500	275,850
Oak Mountain Youth Services	2280 Hwy 35 S Pelham	24 7		E s					100	3000	1,103,400

Chase Learning Center Infant Care	100 Canyon Park Cir Pelham	6 6		E S	N		1	Y	25	600	275,850
Chase Youth Center Day Care	3050 Lee Street Pelham	6 6		E S	N		1	Y	40	800	331,020
Creative Stages Child Care, Inc	2307 Pelham Parkway Pelham	6 6		E S	N		1	Y	10	400	110,340
La Petite Academy-Pelham Day Care	2825 Hwy 31 South Pelham	6 6		E S	N		1	Y	40	800	331,020
Lapetite Academy Day Care	1968 Chandalar Office Pk Pelham	6 6		E S	N		1	Y	40	800	331,020
Little Learners Pre-School	290 Yeager Parkway Pelham	6 6		E S	N		1	Y	20	600	331,020
Shelby Bapt. Church Wee Care Preschool	419 Phillipians Blvd Pelham	6 6		S	N		1	Y	40	900	496,530
Shepherd's Promise Child Care, Inc.	2975 Pelham Parkway Pelham	6 6		E S	N		1	Y	10	400	165,510
Stepping Stones Playschool	8293 Helena Rd Pelham	6 6		E S	N		1	Y	10	800	220,680
Thomas Learning Center, Inc.	200 Ridge Road Pelham	6 6		E S	N		1	Y	30	1500	275,850
Heritage Preschool	450 Huntley Parkway	12			Y	M	1	Y	250	14141	1,984,000
Colonial Pipeline Tank Farm	2999 Hwy 52 East Pelham	8 6	T	E	N	M	1	Y	5	999,999	11,034,000
Alabama Power Substation	Highway 261	24 7		E U	N	M	1	Y	0	1000	551,700
Alabama Power Substation	Highway 31 (South Pelham)	24 7	R	E U	N	M	1	Y	0	1000	551,700
Encompass Health Rehab Center	900 Oak Mountain Commons Lane	24 7			Y	M	1	Y	34	44230	11,041,390
Alabama Power Substation	Highway 31 (North Pelham)	24 7		E U	N	M	1	Y	0	1000	551,700
								TOTALS	12958	1728818	54,692,039.28

Table 1.1 City of Vincent Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Vincent City Hall	25 Florey St Vincent, AL.	8 5	R	N	N	B	1	Y	100	3600	551,700
Vincent Police Department	20 Florey St Vincent, AL.	24 7	R	N	N	B	1	Y	40	1800	275,850
Vincent Fire Station	42030 Hwy 25 Vincent, AL.	24 7	R	N	N	M	1	Y	300	6720	827,550
Water Board Office Bldg	35 Florey St Vincent, AL.	8 5	R	N	N	B	1	Y	10	2,500	331,020
Robert E. Green National Guard Amory	H-way 85, Lee Lane Vincent, AL.	8 5	R	N	N	B C	1	Y	250	15,000	6,620,400
Senior Citizen Nutrition Center	4498 Hwy 83 Vincent, AL.	8 5	R	S	N	B	1	Y	70	1,300	165,510
Vincent Library	42860 Hwy 25 Vincent, AL.	8 5	R	N	N	B W	1	Y	50	2100	331,020
Water Treatment Plant	Hwy 25 Vincent, AL.	24 7	F R	N	N	M B	1	Y	2	516	110,340
Vincent Water Towers	Hwy 25 Vincent, AL.	24 7	R	N	N	M	1	Y	0	1000	827,550
Vincent Water Towers	Randle Lane Road / Hi- way 231 Vincent, AL.	24 7		N	N	M	1	Y	0	1000	827,550
Vincent Water Towers	Hwy 464 Vincent, AL.	24 7		N	N	M	1	Y	0	1000	827,550
Vincent Water Towers	Shelby Road 85 Vincent, AL.	24 7		N	N	M	1	Y	0	1000	827,550
Cotton Gin Building	8684 Hwy 85 Vincent, AL.	8 5	R	H	N	W	1	Y	30	3,500	551,700
Vincent Post Office	4280 Hwy 25 Vincent, AL.	8 5	R	N	N	B	1	Y	25	1600	220,680
Vincent Municipal Park	Park Road Vincent, AL.	6 9		Y	N	C W	1	Y	1000	999,999	1,103,400
Shelby County Medical	125 Florey St Vincent, AL.	8 5	R	S	N	B	1	Y	50	2400	937,890

First Baptist Church Vincent Day Care	12 - Waite Street Vincent	6 6	R	E S	N		1	Y	100	5,000	275,850
Vincent Head Start Center	40800 Highway 25 Vincent Al	6 6	R	E S	N		1	Y	100	5,000	275,850
Vincent First Baptist	15 Waite St. Vincent, AL.	8 5	R	S	N	W B	1	Y	250	6,000	2,758,500
Vincent Revival Center	6121 Hwy 85 Vincent										
Calary Baptist Church	376 – Hwy 60 Vincent, AL.	8 5	H	S	N	W B	1	Y	350	8,000	3,310,200
Vincent United Methodist Church	55 Embry Road Vincent, AL.	8 5	R	S	N	W B	1	Y	150	5,000	1,655,100
AT&T Switching	Vincent, AL.	24 7	R	N	Y	B	1	Y	0	800	275,850
Vulcan Information Package	1 Loose Leaf Lane Vincent, AL.	8 5	R	E	N	B	1	Y	150	62,500	11,034,000
Smith Grocery Store	42746 Hwy 25 Vincent, AL.	7 6	R	E	N	C	1	Y	50	5,000	551,700
								TOTALS	3077	1142335	10,750,002.00

Table 1.1 City of Westover Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall, Police Dept and Library	3312 Westover Rd, Westover, AL	8 4	R	G	N	W	1	Y	40	1200	308,952
Community Shelter	3313 Westover Rd. Columbiana	2 4 7	R	S	N	C	1	Y	160	1400	143,442
Fire Station #1	Old Hwy 280 and Creast Rd Westover	2 4 7	R	G	N	M	1	Y	40	4000	882,720
Park Facilities	3317 Westover Rd. Westover	8 9	R	S	N	M	1	Y	500	999,999	441,360
Alabama Youth Home	Highway 55 and Old Hwy 280 Westover	2 4 7	R	S	N	W	1	Y	20	2500	275,850
Whitehouse	Hwy 55 and Old 280	7 9	R	H E	N	W	2	Y	40	4,000	882,720
Rambo Marine	Hwy 280	7 6	R	E	N	M	1	Y	40	5000	882,720

								TOTALS	840	1018099	3,817,764.00

Table 1.1 City of Wilsonville Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
City Hall & Sheriffs Office	9905 N Main St, Wilsonville	8 5	R	G	N	B	1	Y	50	3,000	656,523
Fire Station #1	9939 N Main St, Wilsonville	2 4 7	R	G	N	M	1	Y	30	3,600	278,057
Fire Station #2	345 Hebb Rd, Wilsonville	2 4 7	R	G	N	M	1	Y	30	3,600	193,757
Public Works Bldg #1/2	9755 S Main St, Wilsonville	7 5	R	G	N	M	1	Y	5	1,600	182,061
Vincent Community Shelter	5484 Hwy 62 Vincent	2 4 7	R	S	N	C	1	Y	100	1200	176,544
Waste Water Treatment Plant	9755 S main St, Wilsonville	7 5	R	G	N	M	1	Y	3	1000	351,985
Water Well, Pump Station & Storage tank	9600 N main St Wilsonville	2 4 7	R	G	N	M	1	Y	1	1000	6,751,705
Post Office	3111 Hwy 21 N, Wilsonville	8 5	R	G	N	B	1	Y	20	2,000	386,190
Wilsonville Baptist Church	9851 N main St Wilsonville	8 5	R		N	B	2	Y	900	10,600	2,317,140
								TOTALS	1139	27600	11293961

Table 1.1 Town of Wilton Critical Facilities

Education Fire Service Law Enforcement Medical/Nursing Child/Elderly Care Utility, etc Facility Name and Type	Street Address, City/Town	Time Open	n Hazard/Type?	Asset Type	Emergency Generator	Construction B/C/M/W	Floors	Elevation or above Base Flood Elevation?	People Capacity	Building Sq. Feet	Structure Value
Town Hall	100 Depot St, Wilton	8 5	R	G	N	B	2	Y	10	2,000	220,680
Municipal Annex	474 Church St. Wilton	8 5	R	G	N	W	1	Y	30	8,000	551,700

Public Works Bldg	100 Depot St Wilton	7 5	R	G	N	B	1	Y	4	4,000	220,680
Post Office	00000 Hwy 25, Wilton	8 4	R	G	N	B	1	Y	20	2,000	331,020
City Well, pump and Water Tower	00000 Hwy 139	2 4 6		G	Y	M	1	Y	2	2,000	1,234,705
Chevron Station & Food Store	00000 Hwy 25, Wilton	5 9	R	E	N	W	1	Y	1	5,000	1,103,400
								TOTALS	67	23000	3,662,184.60

CITY OF ALABASTER INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

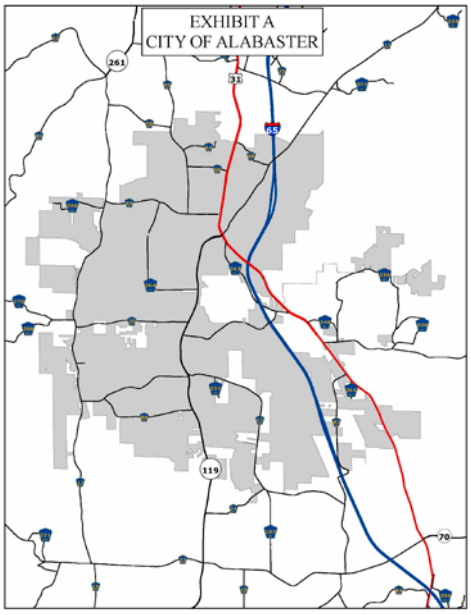
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CITY OF ALABASTER MITIGATION PLAN

Geography/History

Alabaster is located on Interstate 65, 20 miles South of Birmingham, six miles south of Interstate 459 and less than an hour from Montgomery in Shelby County. Alabaster is a sprawling Suburban city located at 33°13′52″N, 86°49′26″W (33.231162, -86.823829). According to the U.S. Census Bureau, the city has a total area of 25.4 square miles (53.2 km), of which, 25.3 square miles (53.0 km) of it is land and 0.1 square miles (0.1 km) of it (0.24%) is water.



The Alabaster area began as Siluria the old muster ground where the “Shelby County Volunteers” for the Indian War was organized in 1836. Early area settlers included Robert McClellan, 1805-1858, and Blassengame Nabors, 1787-1874.

In 1872, Thaddeus G. Holt served as Siluria’s first Postmaster. James M. Reynolds opened the Longview post office, including the Saginaw area. Thomas C. Thompson organized and built on the banks of Buck Creek in Siluria a textile manufacturing plant. Soon thereafter, a village to house employees was built. In 1902 the Siluria Cotton Mill Co. was incorporated

In 1925, located next door to Siluria, the “growth potential” of the community that later became known as Alabaster, was recognized by Joseph E. Walker. He opened the first retail business and started rendering free delivery service to his customers.

U.S. Highway 31, a two-lane highway at that time, was the main artery from Birmingham to Montgomery, and played an important part in the growth of the community. George L. Shelby, Sr., an Alabaster pioneer, owned and operated Alabaster Lime Co. Later, housing was built to accommodate some of the employees, and the community acquired its name Alabaster from the "white calcium carbonate mineral".

In 1951, Alabaster, formerly served by Siluria, acquired their first post office. The First Bank of Alabaster opened in 1952, and its president was George L. Shelby, Jr., who later became the first mayor of Alabaster. The first attempt in 1952 to incorporate Alabaster failed. In January 1953, the petition was again filed, and on 23 Feb 1953, Alabaster was officially incorporated with a favorable vote of 79 to 23, and 427 residing inhabitants.

In 1954, the Town of Siluria was incorporated, with a population of approximately 600. In 1965, Buck Creek Industries, Inc. sold the village houses to the employees, and in 1971, the people of Siluria voted to merge with Alabaster. In 1955, the Alabaster Water and Gas Board was formed

Construction on the new Shelby County Hospital at Alabaster began in July 1958. Shelby Memorial Hospital had its dedication on Sunday, 27 Sept 1959. The present day City Hall was completed in 1960 and was the home of the Alabaster Public Library.

Significant Characteristics

The Colonial Promenade shopping center offers many specialty stores as well as a Wal-Mart Super Center, Belks Department Store and a variety of restaurants and financial institutions. The shopping center is located on Highway 31 at Interstate 65 (Exit 238 off of Interstate 65)

The CityFest Celebration was started to celebrate Alabaster's 50th birthday in 2003 and has grown into one of the most popular celebrations in the area. Thousands of visitors attend the celebration which features live music, a large children's area with games, rides and other fun activities. Many vendors set up during the celebration to sell merchandise and food items.

The Brookwood Baptist Medical Center has 24-hour medical service and has grown along with the community over the years. It recently marked a milestone by opening a new cancer treatment center and the performing open-heart surgeries. The hospital is the medical hub for the tri-county area with an increasing number of patients from Shelby, Chilton and Bibb Counties.

The Alabaster Christmas Parade is one of Alabama's largest Christmas Parades. Over 100 entries join the parade including floats from area churches, schools, and civic organizations along with city and county officials, scouts, dance troops, motorcycles, car clubs, horses, and Santa Claus.

Population and Demographics

As of the 2020 Census, the city covers 25.3 square miles and there were 33,284 people. The population density was 1,315 people per square mile. The racial makeup of the city was 73.3% White, 14.5% Black or African American, 0.92% Native American, 1.62% Asian, 0.02% Pacific Islander, 6.89% from other races, and 2.81% from two or more races. 12.6% of the population was Hispanic or Latino of any race. 90.22% of town residents speak English while Spanish is spoken by 8.11% of the population.

According to the 2019 American Community Survey, there were 11,568 households out of which 3,952 had children under the age of 18 living with them, 7,258 were married couples living together, 11.08% had a female householder with no spouse present, and 29.01% were non-families. 21.5% of all householders were made up of individuals and 8% had someone living alone who was 65 years of age or older. The average household size was 2.84 and the average family size was 3.31. Mobile homes made up 4.7% of structures.

In the city the population was spread out with 26.2% under the age of 18, 8.2% from 18 to 24, 39.9% from 15 to 44, 26.4% from 45 to 64, and 12% who were 65 years of age or older. The median age was 37.5 years. For every 100 females there were 95.5 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 2.9% of the city's population had a hearing difficulty, 2.4% vision difficulty, 4.5% cognitive difficulty, 5.6% ambulatory difficulty, 1.8% self-care difficulty, and 5.2% an independent living difficulty. 11.8% of the population had some type of disability.

Year	2010	2020	Change
Population	30,352	33,284	11.06
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $80.072.00 and the median income for a family was $88468. Males had a median income of $55,012.00 versus $38,138.00 for females. The per capita income for the city was $46,491.00. About 8.1% of the population were below the poverty line, including 10.49% of females and 7.86% of males.

Major Employers	Employees
Brookwood Baptist Health-Shelby Baptist Medical Center	1100
Wal-Mart	350
Shelby Ridge Rehab	200
AGC Automotive	200
Cardiovascular Associates	200
The Healthcare Center at Buckcreek	200

Single-family new house construction building permits in Alabaster include:

- 2008: 99 buildings, average cost: $191,900.00
- 2009: 48 buildings, average cost: $183,000.00
- 2010: 29 buildings, average cost: $172,800.00
- 2011: 30 buildings, average cost: $170,200.00
- 2012: 56 buildings, average cost: $182,200.00
- 2013: 59 buildings, average cost: $210,900.00
- 2014: 74 buildings, average cost: $225,300.00
- 2015: 98 buildings, average cost: $267,900.00
- 2016: 98 buildings, average cost: $254,900.00
- 2017: 69 buildings, average cost: $310,300.00
- 2018: 59 buildings, average cost: $334,380.00
- 2019: 45 buildings, average cost: $350,600.00
- 2020: 152 buildings, average cost: $311,500.00

Infrastructure

The City of Alabaster Police Department consisting of 82 employees offers excellent coverage from well-trained and professional officers.

The Fire and Rescue Department is serving over 30 square miles of territory with three fire stations and is staffed with 63 full-time personnel.

The Alabaster City School System officially separated from the Shelby County School System on July 1, 2013.

School	Type	Enrollment
Creekview	Elementary	905
Meadowview	Elementary	905

Thompson	Intermediate	884
Thompson	Middle	1,537
Thompson	High	2,062
Evangel Classical Christian School	Private	910

The City of Alabaster's total sewer treatment capacity is 7.6 million gallons per day.

The Alabaster Water Board is in the process expanding its daily supply for the city to provide for substantial growth. Currently Alabaster has a water capacity of over 4 million gallons a day. They have purchase agreements with Bessemer and Shelby County for another 2 million per day, if needed.

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Alabaster Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited**	**Higher Authority**	**Electronic copy Available**
Building Codes	International Building Codes	2015	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2020	**Y**	**N**	**N**	**Y**
Comprehensive Plan	Resolution	2016	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System		2014		**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2005	**Y**	**N**	**N**	**Y**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2013	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance	Zoning Ord., Mountain Overlay District	2007	**Y**	**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2006	**Y**	**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2005	**Y**	**N**	**N**	**Y**

Subdivision Regulations	Zoning Ordinance	2009	**Y**	**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	2005	**Y**	**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Alabaster Administrative And Technical Capabilities

CI= City, C=County Provides, S=State Provides, F=Federal Provides

Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	4	4	4
Emergency Manager	Certified Professional	Emergency Management	C2	C2	C2
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	63	63	63
Environmental (Sewer)	Professional(s)	Jurisdiction	25	25	25
Fire Personnel	Professional(s)	Fire Dept.	63	63	63
Floodplain Manager	Engineer(s)	Engineering/Public Works Engineer	C1 CI 1	C1 CI 1	C1 CI 1
GIS Specialist	Professional(s)	Property Assessor/IT City IT	C1 CI 1	C1 CI 1	C1 CI 1
Government Elected	Elected Officials	Mayor/Council	8	8	8
Government Administration	Employees	Jurisdiction	12	12	12
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	47	47	47
Information Systems	Certified Professional	IT department	3	3	3
Land Use/Management	Engineer(s)/Planners	State/Local Planning	3	3	3
Law Enforcement	Sheriff, Police, Trooper	Police Department	70	70	70
Medical Practioners	Professional(s)	Medical Facilities	35	35	35
Public Works	Directors/Engineers	Public Works	20	20	20
Public Communication	911 specialists Police	E-911 Police	C35 CI 12	C35 CI 12	C35 CI 12

Public Utilities (Water)	Professionals	Public Utilities	33	33	33
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Alabaster Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**Y**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**N**
	PDM for disaster resistant universities		**X**		**N**
	PDM Grants for communities	**X**			**Y**
	Department of Health Grants	**X**			**Y**
	Department of Justice Grants	**X**			**Y**
	Department of Agriculture Grants		**X**		**N**
	Department of Energy Grants		**X**		**N**
	Department of Education Grants		**X**		**N**
	Fire department grants	**X**			**Y**
	Flood Management Grants (FMA)	**X**			**Y**
	Homeland Security Grant Program (HSGP)	**X**			**Y**
	Repetitive Flood Claims Grants (RFC)	**X**			**Y**
	Severe Repetitive Loss Grants (SRL)	**X**			**N**
	Private foundation grants	**X**			**N**
	Private business/industry grants	**X**			**N**
Debt Procurement	Incur debt through special tax/revenue bonds	**X**			**Y**
Dept Procurement	Incur debt through private activity bonds		**X**		**N**
Impact Fees	Developer fees for new developments	**X**			**Y**
Jurisdiction Bonds	Incur debt through general obligation bonds	**X**			**Y**
Project Funding	Capital improvement	**X**			**Y**
Spending Restrictions	Withhold spending in hazard-prone areas			**X**	**N**
Special Taxes	Authority to levy taxes for specific purposes	**X**			**Y**
Utility Fees	Fees for water, sewer, gas, or electric service	**X**			**Y**

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Alabaster. The following goal statements represent a broad target for City of Alabaster and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the city of Alabaster	Objective AH.1: Improve the city of Alabaster's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the city of Alabaster	Objective FL.1: Improve the city of Alabaster's flood warning and information distribution to citizens Objective FL.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the city of Alabaster	Objective HW.1: Improve the city of Alabaster's High Winds warning and information distribution to citizens Objective HW.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the city of Alabaster	Objective IS.1: Improve the city of Alabaster's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the city of Alabaster	Objective WF7.1: Improve the city of Alabaster's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the city of Alabaster	Objective UF.1: Improve the city of Alabaster's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the city of Alabaster's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the city of Alabaster's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The actual table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire

Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Appendix 1 to this document contains the 2019 update to the 2017 City of Alabaster Floodplain Management Plan. Starting on page 5-6 of Appendix 1, Section 5.2.3 Individual Mitigation Action Plan of the County Plan, lists activities related to the mitigation of flooding and related hazards also included in the 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan. Section 5.3 Floodplain Management Action Plan, starting on Appendix 1 page 5-10, includes additional City of Alabaster specific flood and related hazard Mitigation Actions. This section shows the current status of all City of Alabaster FMA actions as continuing at this time.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1b	Schedule regular hazard warning unit's maintenance and testing, monthly.	City Officials EMA	City Budget	5,518	2022 2027	78
AH1f	Provide citizen's information to develop preparedness, response and recovery plans. Due to the influx of new students and citizens this event is continual	Police Fire EMA	City Budget Grants	1,104 110,350	2022 2027	88
HW1c	Educate special needs/education and the community on High Wind preparedness and response and recovery. Annually through newsletter and fire department safety talks.	City Govt	Local funds	1,104 110,350	2022 2027	87
HW1c	Distribute High Wind preparedness information to special needs/education and the community. Published in city newsletter.	City Govt	Local funds	1,104 11,035	2022 2027	87
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan. Annual meetings going forward.	All City Departments		1,104 11,035	2022 2027	85
AH1e	Distribute safe room/Shelter in place information to schools, special needs and the public. Due to the influx of new students and citizens this event is continual. Storm spotter classes.	Police/Fire/ Schools/ NWS/EMA	City Budget Grants	1,104 Saves Lives	2022 2027	84
UF1a	Educate school, special needs and the community populations on fire safety and response. Ongoing through public education.	Fire Dept.	Local funds	1,104 110,350	2022 2027	84

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1b	Educate school, special needs and the community population on fire extinguisher use. Ongoing through public education.	Fire Dept.	Local funds	1,104 1,103,500	2022 2027	84
UF3d	Develop fire plans for all major businesses and critical facilities. Required through pre-fire planning. Annual.	Fire Dept.	Local funds	1,104 1,103,500	2022 2027	83
AH1h	Develop a media warning program to warn the public of a hazard event. Social media and Reverse 911.	City Officials EMA	City Budget Grants	1,104 110,350	2022 2027	82
FL1a	Distribute flood awareness and preparedness literature at events. City website.	Local Govt	Local funds	1,104 110,350	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation. Use the IBC codes.	Planning	Local funds	1,104 110,350	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested. Fire Marshall inspects annually.	Fire Dept.	Local funds	11,035 110,350	2022 2027	81
PD3a	Participate in the national Pandemic surveillance program.	City Govt ADPH	Local funds	1,104 551,750	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	Fire Dept.	Local funds	20,000 33,105	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS). NIMS has been adopted and due to the constant influx on new employees training is continual.	1st Responders City Officials	City Budget	1,104 11,035	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects.	Building Services	Local funds	11,035 110,350	2022 2027	79
FL3a	Participate in the National Flood Insurance Program (NFIP).	City Govt	Local funds	1,104 110,350	2022 2027	78
PD1b	Educate schools, special needs and local populations on preparing for a pandemic. Schools have a pandemic plan. Review annually.	BOE	Local funds	5,518 551,750	2022 2027	78
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry.	Fire Dept.	Local funds	11,035 110,350	2022 2027	78
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions.	Building	Local Funds	1,104 110,350	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks. Enforce through Building Regulations.	Planning	Local funds	5,518 110,350	2022 2027	77
PD1c	Develop/distribute Pandemic preparedness information to limited English speaking residents.	ADPH	Local funds	1,104 551,750	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations. Fire Marshall enforces codes.	Fire Dept.	Local funds	11,035 110,350	2022 2027	77
WF1c	Educate school and local populations on causes of, preparedness for and response to wildfires.	FD AFC	Local funds	5,518 551,750	2022 2027	77
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons. Public Education, stations go to the schools twice a month.	AFC FD	Local funds	1,104 11,035	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques. Due to updated techniques as well as new employees training is continual.	1st Responder Departments	City Budget Grants	5,518 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events. Conducted through storm spotter classes.	FD	Local funds	11,035 110,350	2022 2027	76
PD1a	Educate the public on preparedness and self care for a Pandemic event.	Public Health EMA	Cnty Budget BOE Budget	5,518 110,350	2022 2027	76
PD2c	Develop a list of 1st responders for early infectious disease vaccination. City offers flu vaccine yearly.	City Govt	Local funds	1,104 551,750	2022 2027	75
UF2a	Obtain fire PPE for all personnel responding to fire incidents. Review annually.	Fire Dept.	Local Funds	2,000 110,350	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually.	Fire Dept.	Local funds	11,035 110,350	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt FD	Local funds	1,104 110,350	2022 2027	75
UF3j	Adopt/enforce legislation to restrict the disposal of flammable liquids and hazardous materials.	ADEM, EPA, ADPH, City Govt	Local funds	1,104 110,350	2022 2027	75
AH1i	Develop/maintain a public information web site on hazard preparedness and response. City website.	City Officials	City Budget	11,035 551,750	2022 2027	74
AH2b	Evaluate/maintain 1st responders emergency kits annually	1st Responder Departments	City Budget Grants	1,104 11,035	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	Fire Dept EMA	City Budget Grants	1,104 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Operations and the EOP. Due to updated techniques as well as new employees training is continual.	1st Responder Departments	City Budget Grants	1,104 11,035	2022 2027	74
FL3d	Participate in the NFIP Community Rating System.	City Govt	Local funds	1,104 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities.	Citywide	Grant Local Funds	11,035 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response.	EMA City Govt	Grant Local Funds	11,035 551,750	2022 2027	74
HW3h	Adopt/enforce legislation controlling construction standards of mobile homes moved into the city.	City Govt Planning	Local funds	5,518 551,750	2022 2027	74
WF1d	Distribute wildfire awareness and prevention information to schools and local populations. Conducted through public education.	AFC FD	Local funds	5,518 551,750	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports.	FD	Local funds	1,104 110,350	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices. Batteries inspected periodically.	City Officials EMA	Grant Local Funds	55,175	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders. This is a continuing process with updating radio equipment.	1st Responder Dept's EMA	City Budget Grants	110,350 1,103,500	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events. Due to updated techniques as well as new employees training is continual.	1st Responder Departments	City Budget Grants	1,104 110,350	2022 2027	73
FL3l	Identify alternative access points for single access neighborhoods. New construction over 150 homes is required to have 2nd entrance.	Street Planning	Local Funds	1,104 11,035	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually.	City Govt FD	Local Funds	33,105 110,350	2022 2027	73
PD3b	Identify storage location, inventory management, security for Pandemic supplies/materials.	EMA, ADPH	Local funds	1,104 551,750	2022 2027	73
PD3h	Adopt/enforce Pandemic Flu legislation to cancel large public and private events.	City Govt	Local funds	1,104 11,035	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120. Reviewed annually.	Fire Dept.	Local funds	1,104 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens for all uncovered areas (3 Locations).	City Officials EMA	Grant Local Funds	55,175	2022 2027	72
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas.	Building	Local funds	8,828 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service. Storm spotter training.	NWS, EMA	Local funds	1,104 11,035	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF2b	Train firefighters to obtain for state and national certifications.	Fire Dept.	Local funds	13,242	2022 2027	72
UF3f	Adopt/enforce commercial and special needs facilities sprinkler legislation. Follow building codes.	Fire Dept.	Local funds	11,035 110,350	2022 2027	72
WF1a	Educate homeowners and businesses on wildfire fuels reduction. Case by case basis. Education on burning.	FD, AFC	Local funds	5,518 551,750	2022 2027	72
FL3c3	Adopt/enforce mobile home legislation to restrict lot development within the 100-year flood plain.	Planning	Local funds	1,104 110,350	2022 2027	71
FL3f	Identify roadways, culverts and bridges damaged by flooding (Several Locations). Inspected every 2 years.	Street	Grant Local Funds	1,104 11,035	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents.	EMA FD	Grant Local Funds	11,035 110,350	2022 2027	71
IS3d	Establish snow and ice removal methods. Sand problem areas.	Planning Street Dept	Local funds	5,518 551,750	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing. Must follow building codes.	City Govt	Local funds	1,104 110,350	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	Fire Dept.	Local funds, Grant	11,035 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly. Due to updated techniques as well as new employees training is continual.	1st Responder Departments	City Budget Grants	25,000 551,750	2022 2027	70
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans.	City Govt, EMA	Grant Local Funds	55,175 551,750	2022 2027	70
FL2b	Train all 1st responders on repetitive flooding areas and structures. Review annually.	City All Depts	Local funds	1,104 11,035	2022 2027	70
FL3a4	Educate developers, builders and the public on the location of NFIP designated floodplains.	City Govt Planning	Local funds	1,104 11,035	2022 2027	70
FL3f3	Obtain/Install barriers to block flooding roadways and bridges.	Street	Grant Local Funds	11,035 110,350	2022 2027	70
WF3h	Adopt/enforce wildfire and burning restriction legislation.	City Govt	Local funds	5,518 1,655,250	2022 2027	70
AH1g	Obtain/install an automated wide area rapid notification system.	City Officials EMA	City Budget Grants	110,350 1,103,500	2022 2027	69
FL3a1	Adopt/enforce an NFIP flood plain management plan that includes wetlands and watersheds.	City Govt	Local funds	11,035 110,350	2022 2027	68

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a2	Adopt/enforce floodplain legislation to require structures to be elevated above the NFIP BFE.	City Govt	Local funds	1,104 110,350	2022 2027	68
HW3e	Obtain funding to build mobile home community storm shelters.	EMA City Govt	Grant Local Funds	551,750 1,655,250	2022 2027	67
PD2a	Obtain infectious disease PPE for all personnel responding to a pandemic.	Fire Dept. ADPH	Local funds	15,000 551,750	2022 2027	67
PD3c	Develop a traffic flow and security plan for medical dispensing sites. Reviewed annually.	EMA, Police Dept	Local funds	15,000 551,750	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques. Train annually.	Fire Dept.	Local funds	5,518 551,750	2022 2027	67
AH3e	Obtain/install emergency generators Fire Stations 1 & 2. Several locations needs backup generators.	City Govt, FD, Water Services	Grant Local Funds	32,000 110,350	2022 2027	66
AH	Obtain/install sewer bypass pumps.	Environmental	Local funds, Grant	40,000 75,000	2022 2027	
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP). Continual.	City Govt Planning	Local funds	1,104 110,350	2022 2027	65
FL3f	Develop a storm water management plan for the jurisdiction.	Planning City Govt	Local Funds	1,104 11,035	2022 2027	65
PD2b	Train Pandemic event 1st responders on preparedness and response actions.	City Govt Fire Services	Grant Local Funds	5,518 551,750	2022 2027	65
UF3h	Acquire and install six inch water mains/hydrants city wide.	Water Services	Fed Grant State Grant	1,103,500 5,000,000	2022 2027	65
FL3c	Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures.	EMA, City Govt	Grants Local Funds	1,103,500 5,000,000	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning. No zoning for restrictive use areas.	City Govt	Local funds	1,104 110,350	2022 2027	64
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 11,035	2022 2027	64
WF2b	Obtain specialized equipment to combat wild-land fires. Obtained wildland unit in 2013.	FD	Grant Local Funds	551,750 1,103,500	2022 2027	62
UF2e	Obtain fire equipment to combat fires in high rise buildings.	Fire Dept.	Local funds	1,103,500 5,000,000	2022 2027	61
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding. Review annually or as needed.	Street	Grant Local Funds	551,750 1,103,500	2022 2027	60
PD2e	Exercise response to a pandemic event in conjunction with the medical community.	City Govt ADPH	Grant Local Funds	25,000 551,750	2022 2027	60

"STAPLEE" Mitigation Actions Prioritization Table

	Social				Technical			Administrative			Political			Legal			Economic				Environmental				Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF 1=9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Provide citizen's information to develop preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators Fire Stations3, critical facilities.	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate special needs/education and community populations on High Wind preparedness and response and recovery	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information to special needs/education and the community	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	9	6	9	3	3	3	2	3	1	2	2	3	3	3	3	4	4	3	2	3	3	3	3	3	85
Distribute safe room/Shelter in place info to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Educate school and local populations on Meth Lab awareness	3	6	2	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Develop a media warning program to warn the public of a hazard event	3	9	0	9	3	3	3	2	3	2	2	2	2	3	3	3	6	4	2	3	3	3	3	3	3	82
Distribute flood awareness and preparedness literature at events	2	6	2	6	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	81

Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Participate in the national Pandemic surveillance program	2	6	0	4	3	3	3	3	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	80
Obtain/maintain firefighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Educate schools, special needs and local population on hazmat evacuation	3	6	0	7	3	2	3	2	3	2	2	3	3	3	3	3	6	6	1	3	3	3	3	3	3	79
Develop/maintain hazmat SOG's/FOG's for 1st responders	2	6	2	7	3	2	3	1	3	1	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Schedule regular hazard warning units maintenance and testing of	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	6	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	78
Educate schools, special needs and local populations on preparing for a pandemic	3	6	0	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Educate school and the community on causes of, preparedness for and response to a wildfires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Educate the public on preparedness and self care for a Pandemic event	2	6	0	4	3	2	3	2	3	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	76

Develop a list of 1st responders for early infectious disease vaccination	2	3	0	4	3	2	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Develop/maintain a public information web site on hazard preparedness and response	2	6	4	9	3	3	3	2	1	1	1	1	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Operations and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Participate in the NFIP Community Rating System	3	0	0	6	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Distribute wildfire awareness and prevention information to schools and local populations	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Identify alternative access points for single access neighborhoods	2	3	0	6	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	73
Obtain PPE for all personnel responding to hazmat incidents Decon Unit	2	6	2	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73

Identify storage location, inventory management, security for Pandemic supplies/materials	2	3	0	4	3	2	2	3	3	2	3	3	3	3	3	3	6	6	1	3	3	3	3	3	3	73
Adopt/enforce Pandemic Flu legislation to cancel large public and private events	2	6	0	4	3	2	2	2	3	2	2	2	3	3	3	2	6	6	2	3	3	3	3	3	3	73
Train fire 1st responders to "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens for all uncovered areas (3 Locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	6	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce commercial and special needs facilities sprinkler legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Adopt/enforce mobile home legislation to restrict lot development within the 100-year flood plain.	2	6	4	6	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	71
Identify roadways, culverts and bridges damaged by flooding (Several Locations)	3	0	2	6	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	71
Acquire signage to indicate water depth at flooding points	2	6	2	6	3	2	3	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	71
Maintain and annually update an inventory of hazmat sites.	2	0	0	7	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Establish snow and ice removal methods	2	6	2	2	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Obtain funds for critical government departments to develop Continuity of Operations Plans	1	3	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	3	2	3	3	3	3	3	70

Train all 1st responders on repetitive flooding areas and structures	2	3	2	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	70
Educate developers, builders and the public on the location of NFIP designated floodplains	2	3	4	6	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	70
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	70
Adopt/enforce wildfire and burning restriction legislation	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Obtain/install an automated wide area rapid notification system.	2	9	0	9	3	3	2	1	2	1	1	1	1	3	3	3	6	2	1	1	3	3	3	3	3	69
Adopt/enforce an NFIP flood plain management plan that includes wetlands and watersheds	2	0	4	6	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	68
Adopt/enforce floodplain legislation to require structures to be elevated above the NFIP BSE	2	3	6	6	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	68
Maintain an inventory of Mark I packs to respond to chemical agents	2	3	0	7	3	2	3	1	2	2	3	2	2	3	3	3	4	4	1	3	3	3	3	3	3	68
Develop Public Health Emergency Preparedness Web-page for Pandemic Events	2	6	0	4	3	3	3	2	1	2	1	1	3	3	3	3	4	4	2	3	3	3	3	3	3	68
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Obtain infectious disease PPE for all personnel responding to a pandemic	2	6	0	4	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Develop a traffic flow and security plan for medical dispensing sites	2	0	0	4	3	2	2	2	2	2	3	2	3	3	3	3	6	6	1	3	3	3	3	3	3	67
Train 1st responders and agencies on CBRNE response	2	6	0	3	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	6	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	65
Develop a storm water management plan for the jurisdiction	2	3	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	65
Train Pandemic event 1st responders on preparedness and response actions	2	3	0	4	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	65
Fund/maintain a trained bomb dog and handler to serve the city	2	6	2	3	3	3	3	1	1	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	65
Acquire and install six inch water mains/hydrants city wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures	1	6	6	6	3	3	2	1	1	2	1	1	2	3	3	2	4	2	3	1	2	2	2	2	3	64

Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	6	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	64
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	6	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	64
Obtain hazmat detecting equipment for 1st responders	1	3	2	7	3	2	3	2	1	1	2	2	2	3	3	3	4	4	2	1	3	3	2	2	3	64
Obtain monitoring equipment for high risk hazmat sites	1	6	2	7	3	3	2	3	1	1	1	1	2	3	3	3	4	2	2	1	3	3	2	2	3	64
Exercise wildfire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Create a GIS Maps of hazmat sites to display ERG established zones	2	0	0	7	3	2	3	2	2	1	1	2	2	3	3	3	2	4	2	2	3	3	3	3	3	61
Obtain fire equipment to combat fires in high rise buildings	2	6		6	3	3	3	3	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	6	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	60
Exercise response to a pandemic event in conjunction with the medical community	2	3	0	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	60

2017
City of Alabaster
Floodplain Management Plan

Alabaster, Alabama



Prepared under the direction of the
City of Alabaster Floodplain Management Planning Committee

With the support of the City of Alabaster

Office of the City Engineer

By:

Lehe Planning LLC
URBAN AND ENVIRONMENTAL PLANNING

SCHOEL
Consulting Engineers

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July 11, 2018
(Revised 1/14/2019)

2017 City of Alabaster Floodplain Management Plan

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Chapter 1 – Introduction

1.1 Background
1.2 Purpose of Plan
1.3 CRS Program

1.1 Background

Named for the white gypsum mined in the area, Alabaster was incorporated in 1953. Just one year later, the adjacent town of Siluria was incorporated, and the two merged into a single city in 1954. Alabaster, a suburb of Birmingham, is located within Shelby County, approximately 15 miles south of Downtown Birmingham, along the U.S. 31/Highway 119/I-65 corridors, near the geographic center of Alabama. Shelby County was established as a territorial county in 1818, the year before Alabama's creation as a state in 1819.

Shelby County lies near the southern extreme of the Appalachian Mountains. Double Oak Mountain divides the county into the Coosa Valley to the east and the Cahaba Valley to the west. The Coosa and Cahaba Rivers are among two of the state's major rivers. The Coosa River flows along on the southeastern border, and the Cahaba River along the north. Most of Shelby County drains southward to the Coosa River.

In general, Shelby County has a humid subtropical climate. Winters are mild, with average January highs in the low to mid 50s range, and lows slightly above freezing. Hot summers include July highs in the low 90s, and lows average near 70 °F. Rainfall is abundant and normally distributed throughout the year. Average annual precipitation is about 55 inches.

As Shelby County's largest city, Alabaster has a July 1, 2016, Census Bureau population estimate of 32,948. Of particular significance is the city's rapid growth rate since 2000. Its 2016 population has increased by 10,329 or 45.7% above its 2000 population of 22,619. Since 2010, the annual growth rate has tapered off somewhat; still, it had a significant population increase of 2,596 or 8.6 percent over the period through July 1, 2016. Shelby County has experienced similar rapid growth trends with a population increase of 66,099 persons between its 2000 population of 144,523 and its July 1, 2016 estimate of 210,622 persons, also a 45.7% gain. Rapid growth, when not properly managed can exacerbate flood risks.

The National Flood Insurance Program (NFIP) maintains Flood Insurance Studies (FIS) for Shelby County and the City of Alabaster with detailed flood data and publishes Flood Insurance Rate Maps (FIRMs) that identify areas prone to flooding. The most recent FIS was published on February 20, 2013. These are the tools that form the basis for the City's participation in the National Flood Insurance Program (NFIP).

According to the FIS, flooding problems throughout Shelby County are widespread as a result of the number and nature of its streams. Alabaster's flooding problems, however, are primarily caused by the overflow of Buck Creek. In particular, the areas of historical flooding of Buck Creek are where it flows under First Avenue West and Sixth Avenue Southwest. Floodplains between First Avenue West and Sixth Avenue Southwest range from about 300 to 900 feet in width. Flood damage potential along Peavine Creek is not as great as Buck Creek. The areas affected by Peavine Creek flooding are mostly undeveloped pastures and woodlands.

The City of Alabaster has adopted and enforces an approved flood hazard prevention ordinance, which is required for participation in the NFIP. Its ordinance regulates building and development of mapped flood zones. Alabaster's participation in in the NFIP entitles homeowners, renters, and businesses to purchase affordable flood insurance. NFIP-backed insurance is available to all properties, not just those located in flood zones.

In addition to the NFIP, the City can also participate in the NFIP's Community Rating System Program ("CRS"). The CRS is an incentive program whereby policy holders within a participating jurisdiction receive reduced flood insurance rates. A community receives credits for its proactive flood hazard mitigation activities that exceed the NFIP minimum participation requirements: the more CRS credits, the higher the CRS Class. Among other activities, one primary mechanism by which Alabaster can receive CRS credits is through the development and implementation of this 2017 City of Alabaster Floodplain Management Plan ("FMP").

1.2 Purpose of Plan

The preparation of this plan has been made possible by a FEMA Flood Mitigation Assistance (FMA) grant awarded to the City of Alabaster on May 10, 2017. This plan is intended to serve as a road map for improving the City's participation in the NFIP and help guide its future entry into the CRS Program. It has been developed in accordance with Activity 510 "Floodplain Management Planning" of the 2017 edition of NFIP Community Rating System Coordinator's Manual. Through a careful and inclusive planning process, this FMP offers the following benefits to the City of Alabaster:

- Identifies existing and future flood-related hazards and their causes;
- Ensures that a comprehensive review of all activities and mitigation measures is conducted so that the most appropriate solutions will be implemented to address the hazard;
- Ensures that the recommended activities meet the goals and objectives of the community, are in coordination with land use and comprehensive planning, do not create conflicts with other activities, and are coordinated so that the costs of implementing individual activities are reduced;

- Ensures that the criteria used in community land use and development programs account for the hazards faced by existing and new development;
- Educates residents and property owners about the hazards, loss reduction measures, and the natural and beneficial functions of floodplains;
- Builds public and political support for activities and projects that prevent new problems, reduce losses, and protect the natural and beneficial functions of floodplains; and
- Builds a constituency that wants to see the plan's recommendations implemented.

Chapters 3 through 6 in this Plan follow a four-phase planning approach -: I) The Planning Process, II) Risk Assessment, III) Mitigation Strategy, and IV) Plan Maintenance – and are further organized to address the ten CRS Planning Steps, as shown on the following table:

Table 1-1. Plan Organization and the CRS Planning Steps

FMP Chapters	CRS Planning Step
Chapter 1 – Introduction	
Chapter 2 – Community Profile	
Chapter 3 – The Planning Process	Step 1: Organize to prepare the plan Step 2: Involve the public Step 3: Coordinate
Chapter 4 – Risk Assessment	Step 4: Assess the hazard Step 5: Assess the problem
Chapter 5 – Mitigation Strategy	Step 6: Set goals Step 7: Review possible activities Step 8: Draft an action plan
Chapter 6 – Plan Maintenance	Step 9: Adopt the plan Step 10: Implement, evaluate, revise

1.3 CRS Program

The CRS Program is a voluntary incentive program that provides reduced flood insurance premiums to policyholders in a participating jurisdiction. The three primary goals of the CRS program are:

1. Reduce flood damage to insurable property;
2. Strengthen and support the insurance aspects of the NFIP; and
3. Encourage a comprehensive approach to floodplain management.

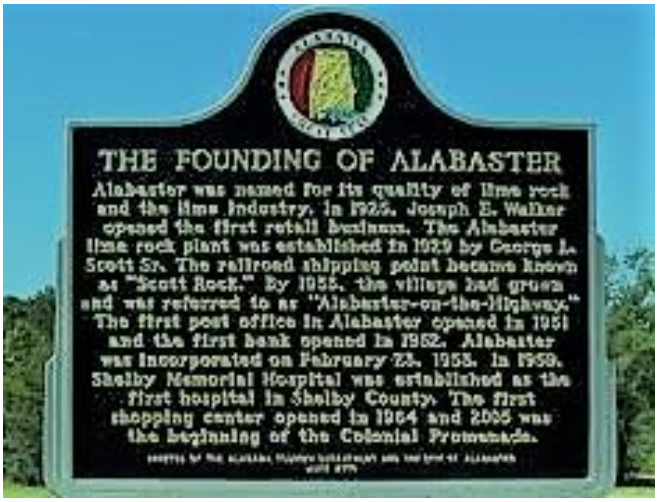
The CRS program credits floodplain management practices that go above and beyond the minimum requirements of regulating construction in designated flood zones. CRS credits are issued to communities who develop ways in which flooding threats can be reduced or minimized to existing construction, elevate new buildings above the minimum levels, protect non-NFIP mapped areas, and help insurance agents and community members with flood insurance issues, among other creditable mitigation activities.

CRS Communities can be included as one of the ten possible CRS Classes, with Class 1 receiving the most credits and providing the largest flood insurance premium reduction of 45% and Class 9 with a 5% reduction. Class 10 means the community does not participate in the CRS or has not earned the minimum required points. The CRS classes are based on completion of 19 activities organized into four categories: 1) Public Information; 2) Mapping and Regulations; 3) Flood Damage reduction; and 4) Warning and Response. The City of Alabaster is not yet a participant in the CRS program, as of the date of this plan.

Chapter 2 – Community Profile

2.1 History and Geographic Setting
2.2 Government
2.3 Physical Features
2.4 Climate
2.5 Demographics
2.6 Economy
2.7 Transportation

2.1 History and Geographic Setting



Alabaster is named for its abundant lime rock, a "white calcium carbonate mineral." The early community was once referred to as "Alabaster on the highway."

Alabaster is located close to the geographic center of Alabama, approximately 25 miles south of Downtown Birmingham, near the intersection of U.S. Highway 31 and State Highway 119. It lies within northwestern Shelby County, which was established in 1818 by the territorial government, the year before Alabama attained statehood in 1819.

Thomas C. Thompson operated the Buck Creek Cotton Mill as early as 1890 in the nearby unincorporated Siluria community. The first school in the area was named for him and opened in 1921. It was a four-room building and is the predecessor to the present Thompson High School.

Joseph E. Walker, who previously managed the commissary for the Siluria Cotton Mill, recognized the potential growth for a community settlement along Highway 31, next to Siluria. In September of 1925, he opened the first retail business to serve the area - J.E Walker's Furniture and General Merchandise. The new store was located on Highway 31, a two-lane highway that was first paved in 1925 and served as the main artery linking Montgomery and Birmingham.

Not many years later, another pioneer, George L. Scott, Sr. built the Alabaster Lime Co. in 1929, with its rail shipping point, "Scott Rock," named for him. Employee housing was built to accommodate employees, and the community continued to grow. In late 1951, a new post office opened to serve the growing area that, until then, was served by the Siluria Post Office. A

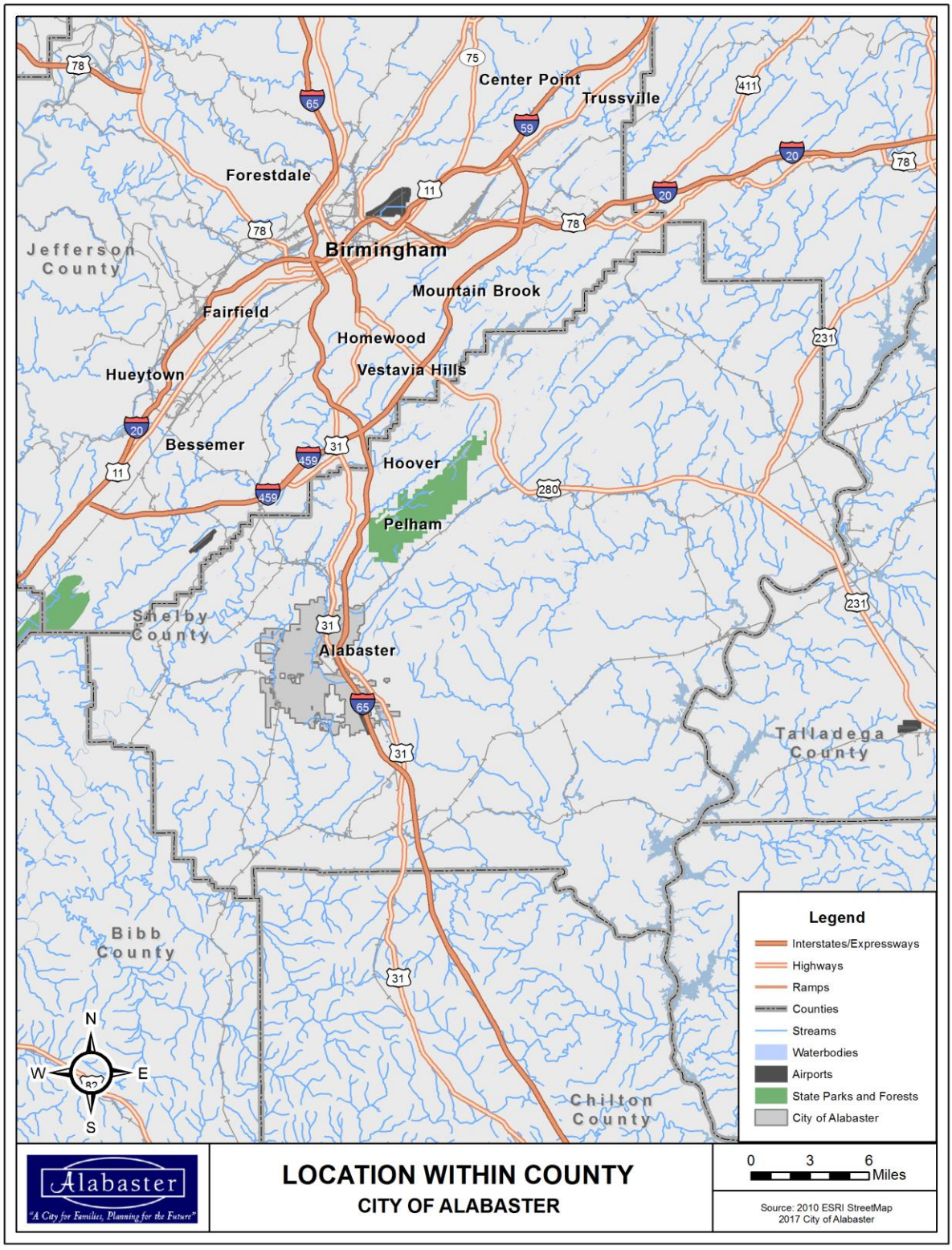
few months later, in January 1952, the community's first bank was opened by George Scott's son George L. Scott, Jr. its first president. He was later elected Alabaster's first mayor following its incorporation on February 23, 1953 and served three consecutive terms. (An earlier incorporation attempt in 1952 had failed). At the time of its incorporation, Alabaster counted 427 residents. Shortly afterwards, Siluria was incorporated in 1954 with a population of 600, and in 1971 the two adjoining cities merged to form present day Alabaster. In 1959, the hospital now known as the Shelby Baptist Health Center opened.

A rapidly-growing suburban city, Alabaster maintains a small city atmosphere close to the large city of Birmingham. As Alabama's 13th largest city, it now has a population exceeding 32,948, according to 2016 Census Bureau estimates.

Map 2-1. Location within State



Map 2-2. Location within County



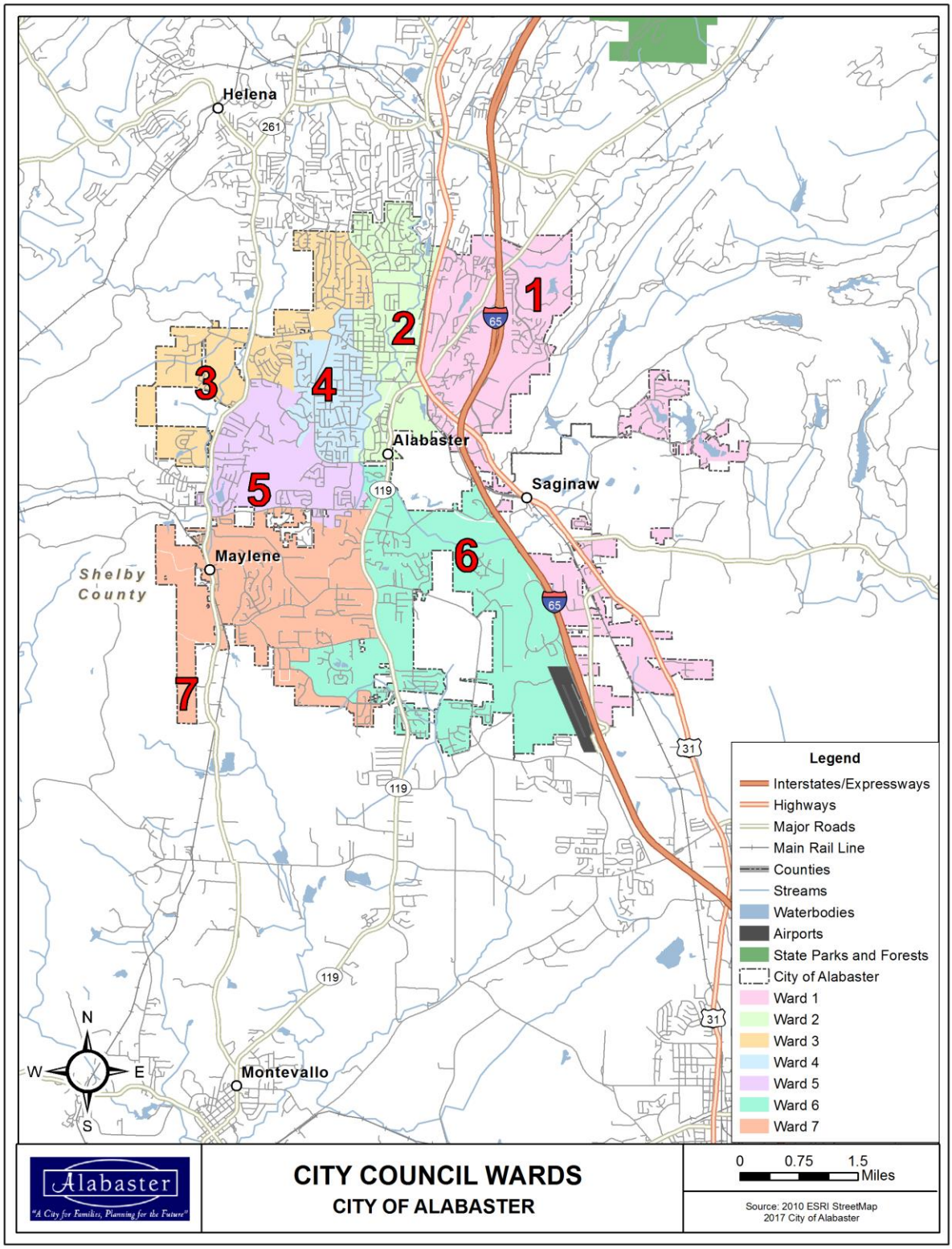
2.2 Government

The City of Alabaster is governed by a mayor-council form of government with a City Manager who oversees the City's day-to-day operations. Each of its seven council representatives are elected by ward, and the Mayor is elected at large. The map below shows the geographic boundaries of the City Council wards. Elections are held every four years, with the last election held in 2016. Following each election, the Council elects one of its members to serve as Council President who presides at meetings and elects a second member to serve as President Pro-Tem to act in the absence of the President. The Alabaster City Council meets regularly on the second and fourth Mondays of each month at 7:00 PM in the Council Chambers at City Hall. The City maintains an on-line presence at http://www.cityofalabaster.com/ where the public can keep abreast of City activities and access many on-line services.



Alabaster's present City Hall was completed in September 2013 at a cost of $3.5 million to replace its previous facility on U.S. 31. The new City Hall, with approximately 20,000 square feet is located in the historic Siluria Mill area at 1953 Municipal Way, It houses the City's administrative offices, the Council Chambers, and the municipal court, as well as Board of Education offices on the second floor.

Map 2-3. City of Alabaster Council Wards



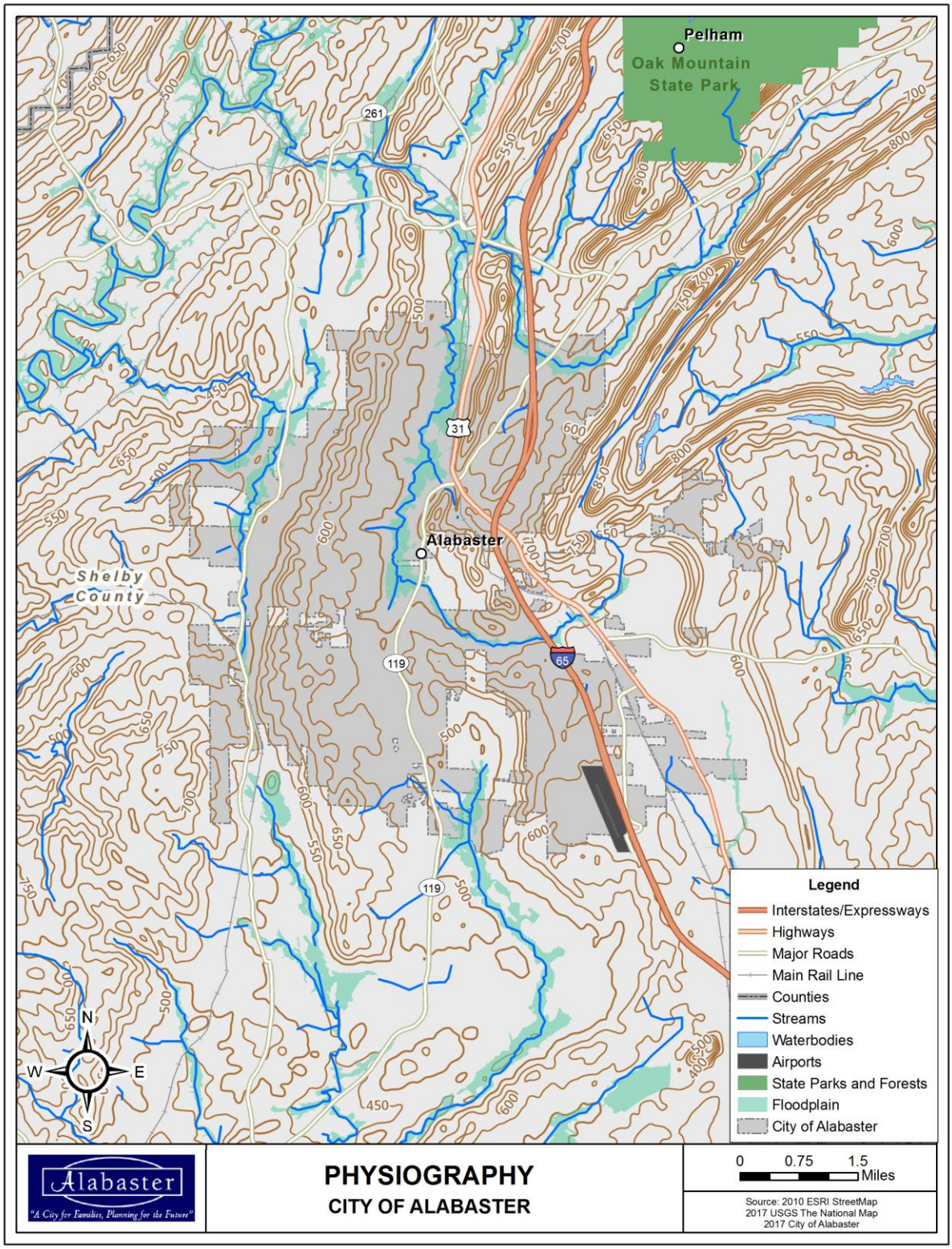
2.3 Physical Features

The City of Alabaster encompasses a total of 20.6 square miles, most of which is land (20.5 square miles). The City lies within the Cahaba Valley physiographic region of Alabama. Alabaster is comprised of two major valleys, the Cahaba and Opossum Valleys, which are divided by Pine Ridge that runs north to south. On opposite sides of these valleys two mountain ridges run parallel from north to south. These are part of a much larger system at the tail end of the Appalachian foothills. These areas are within the Cahaba River and Little Cahaba River watersheds. Main tributaries that drain these valleys include Buck Creek, Dry Creek, Peavine Creek, and Johnson Branch. Buck Creek, which generally follows the north-south CSX rail line west of U.S. 31, is the predominant area of flooding. According to the City's most recent comprehensive plan in 2016, 927 acres lie within the 100-year floodplain, and 536 acres lie within designated wetlands. Forested areas are dominated by loblolly pine and various oak species. Other common species include poplar, flowering dogwood, and sweetbay, among others. The City's Limestone Park is recognized for its unique natural diversity of physical characteristics.

Most of Alabaster includes areas of underlying limestone or carbonate rocks. These areas can interact with underground water that can dissolve the rocks to form underground caves and channels that are subject to collapse. Such areas, known as "karst topography" are at risk of sinkhole formations, although areas of recorded sinkhole activity are further south in Shelby County, outside of the Alabaster city limits.

Map 2-4 "Physiography," which follows, shows some of the major physiographic features in the city, including waterbodies, floodplain, streams, and nearby state parks.

Map 2-4. Physiography



2.4 Climate

Alabaster's climate is humid with mild winters and hot summers. The average annual rainfall is approximately 54 inches. The mean temperature is 45.7 degrees Fahrenheit in the winter and 79.2 degrees Fahrenheit in the summer. Spring and fall temperatures average at 63 degrees Fahrenheit. Table 2-1 shows the weather observations for the City of Alabaster, based on data for the greater Birmingham area.

Table 2-1. Weather Observations

Category	Observation
Average Winter Temperature	45.7
Average Winter Minimum Temperature	35.6
Lowest Temperature (January 21, 1985)	-6
Average Summer Temperature	79.2
Average Summer Maximum Temperature	89.6
Highest Temperature (July 29, 1930)	107
Average Annual Precipitation	53.6 in
Heaviest One-Day Rainfall (December 27, 1942)	7.7 in
Average Season Snowfall	1.9 in

Source: SE Regional Climate Center, 2012 (based on data for Birmingham)

2.5 Demographics

Population Growth and Density

The City of Alabaster is the largest city based in Shelby County, with a 2017 estimated population of 32,567, according to the latest Census Bureau estimates. It has experienced a relatively large increase in population over the decade ending in 2010. In 2010, the population was 29,550, a 30.6% increase over the 2000 level of 22,619. Table 2-2 portrays population data for the City of Alabaster in comparison to Shelby County and the State of Alabama. The city's rate of increase over this fourteen-year period is slightly less than Shelby County as a whole, but far exceeds that of the State of Alabama. The Regional Planning Commission of Greater Birmingham estimates that Alabaster's population will continue to grow at a steady rate to 49,739 in 2040.

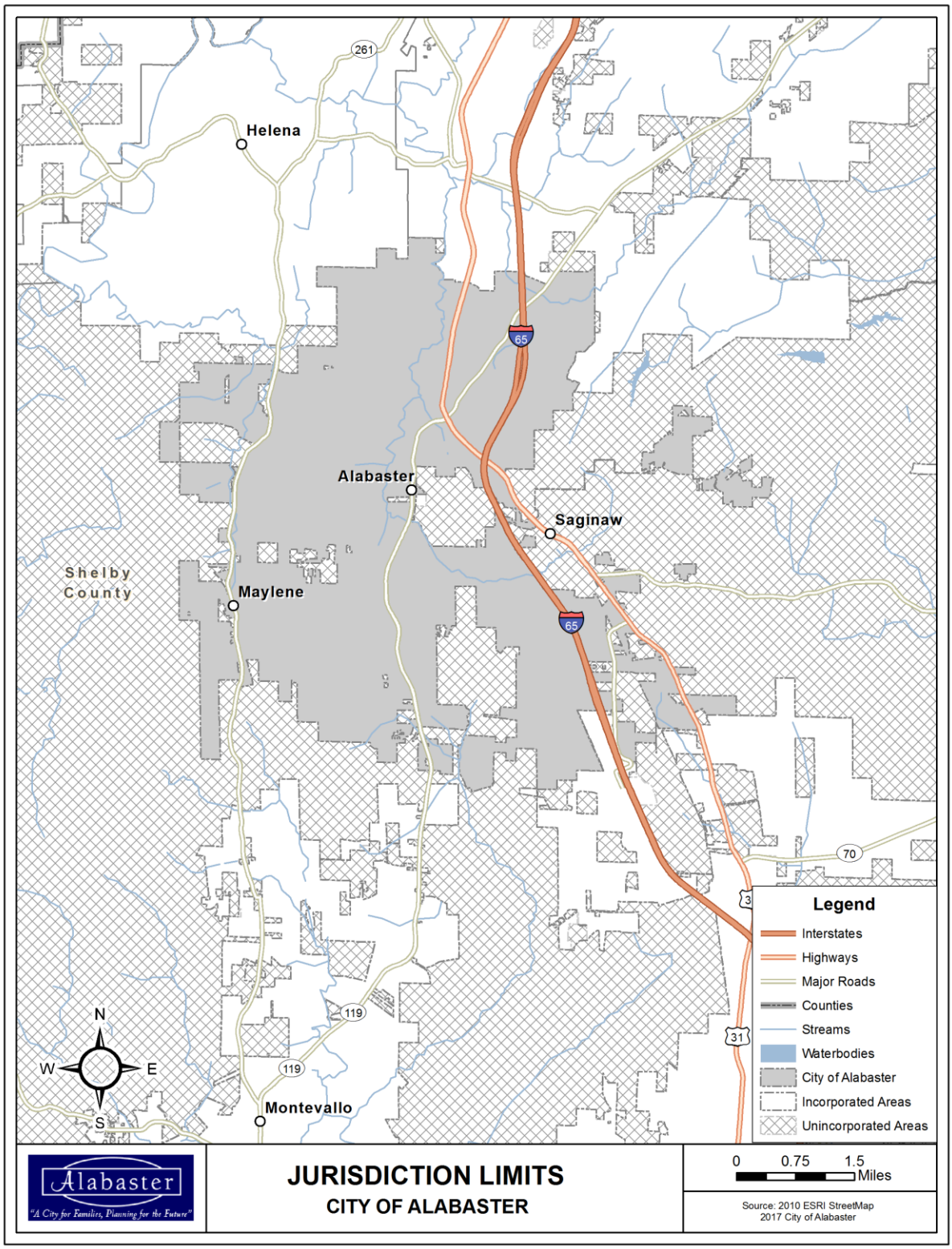
Table 2-2. Population Change, 2000 - 2014

Jurisdiction	2000	2010	Number Change	Percent Change	2014	Number Change	Percent Change
City of Alabaster	22,619	29,550	6,931	30.6%	30,978	1,428	4.8%
Shelby County	143,293	195,085	51,792	36.1%	206,655	11,570	5.9%
State of Alabama	4,447,100	4,779,736	332,636	7.5%	4,849,377	69,641	1.5%

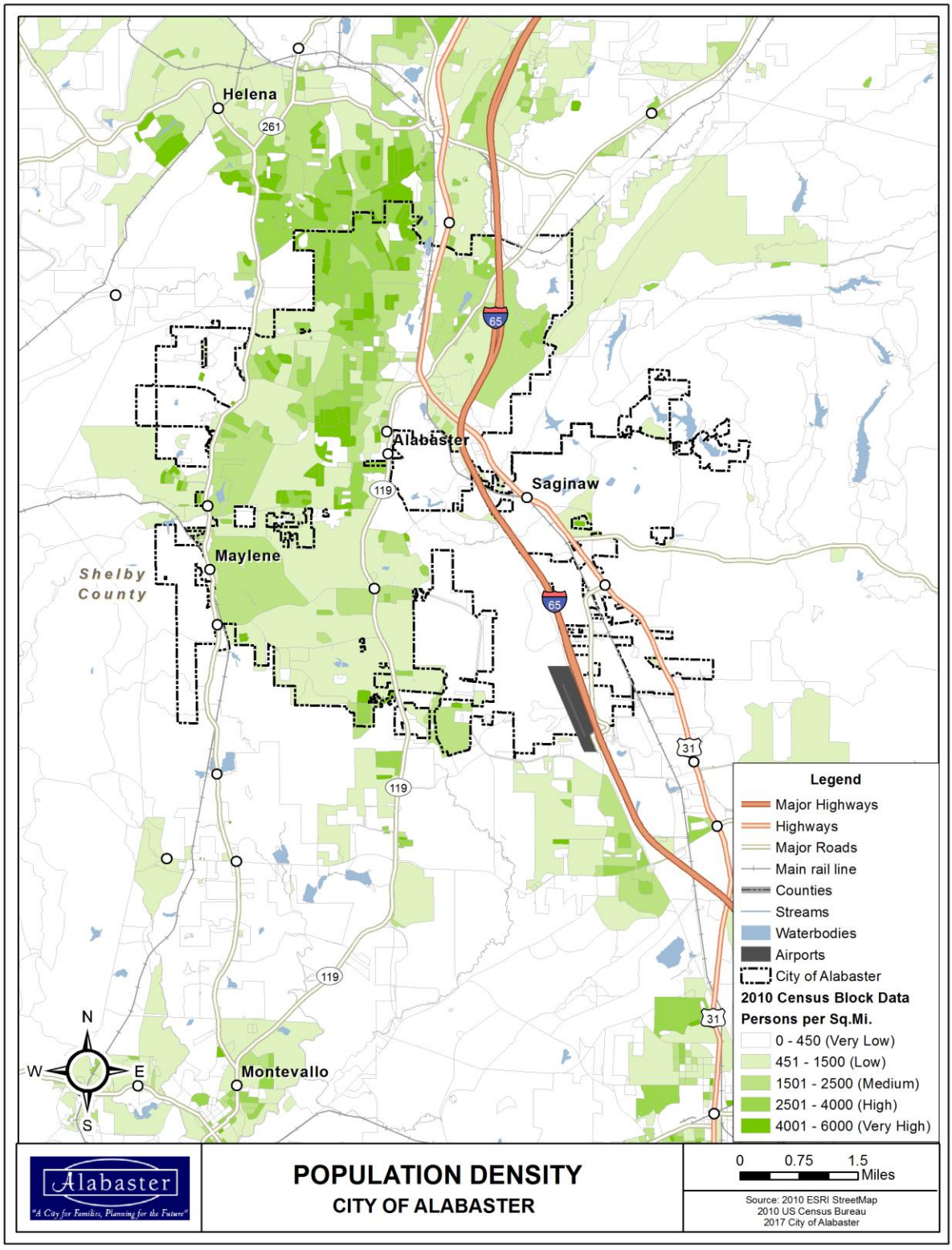
Source: U.S. Census Bureau, 2014

Map 2-4 “Jurisdictional Limits” highlights the study area. Vast unincorporated areas have potential for annexation, as growth expands. Map 2-5 portrays population density for the City of Alabaster (2010 U.S. Census block group) and neighboring jurisdictions.

Map 2-5. Jurisdictional Limits



Map 2-6. Population Density



2.6 Economy

Business and Industry

A heavy concentration of commercial development occurs along the U.S. 31 from the northern city limits to I-65. The portion between 2nd Street and SR 119 functions as the commercial center and is commonly referred to as Downtown Alabaster. The southern U.S. 31 corridor through the Saginaw community is mixed commercial with other land uses. New commercial patterns have been emerging along SR 119 south near Montevallo. Top employers in Alabaster, as reported by the City's Comprehensive Plan are shown in Table 2-3.

Table 2-3. Major Employers, City of Alabaster

1. Shelby Baptist Medical Center – 1,100 employees
2. Walmart Supercenter – 350 employees
3. Shelby Ridge Rehabilitation Center – 200 employees
4. AGC Automotive – 200 employees
5. Chandler Health and Rehabilitation – 200 employees
6. Cardiovascular Associates – 200 employees

Source: Alabaster Forward, Comprehensive Plan Update 2016

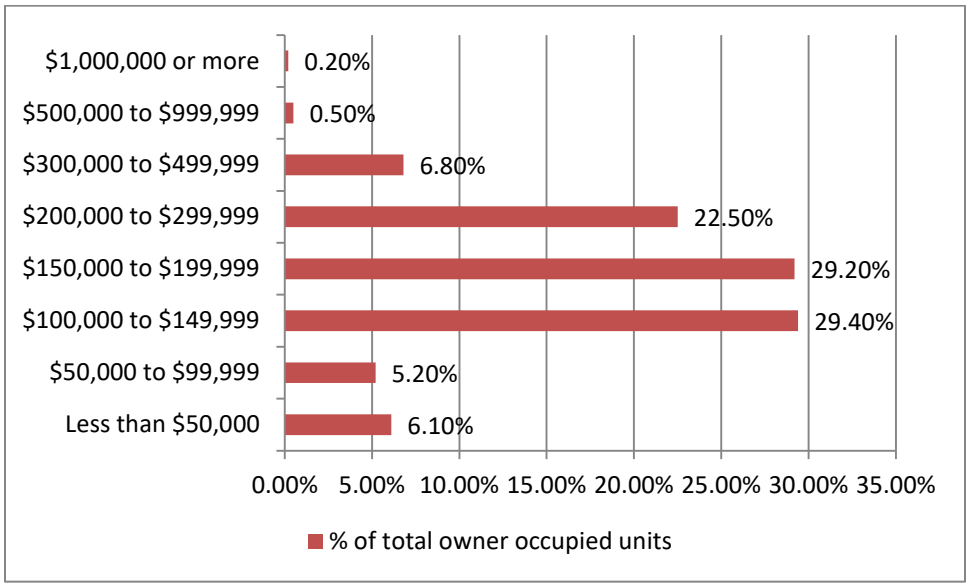
Income and Housing

Median household income for Alabaster was $71,905 in 2014, a 23% increase from $58,379 in 2000. The 2017 Census estimate is even higher at $74,383. The City had 7.8% percent of families living below the poverty line in 2017.

The Census Bureau estimates approximately 9,037 owner occupied housing units in 2013. The majority of owner-occupied housing values fall within the $100,000 to $199,999 range, at 58.6% (see Chart 2-1). The median value for a home in Alabaster was $162,700 in 2013.

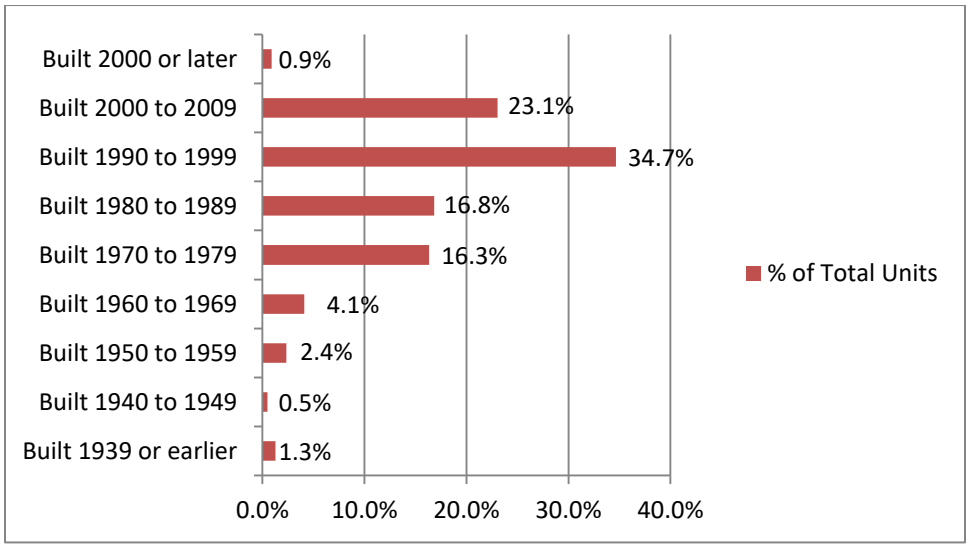
Chart 2-2 "Housing Stock by Age" shows the distribution of housing age as a percent of the total 11,391 of all housing units in 2013. The majority of housing in Alabaster was constructed between 1990 and 1999, comprising nearly 35% of the total housing stock.

Chart 2-1. Housing Units by Value



Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-year Estimates

Chart 2-2. Housing Stock by Age



Source: U.S. Census Bureau, 2009-2013 American Community Survey 5-year Estimates

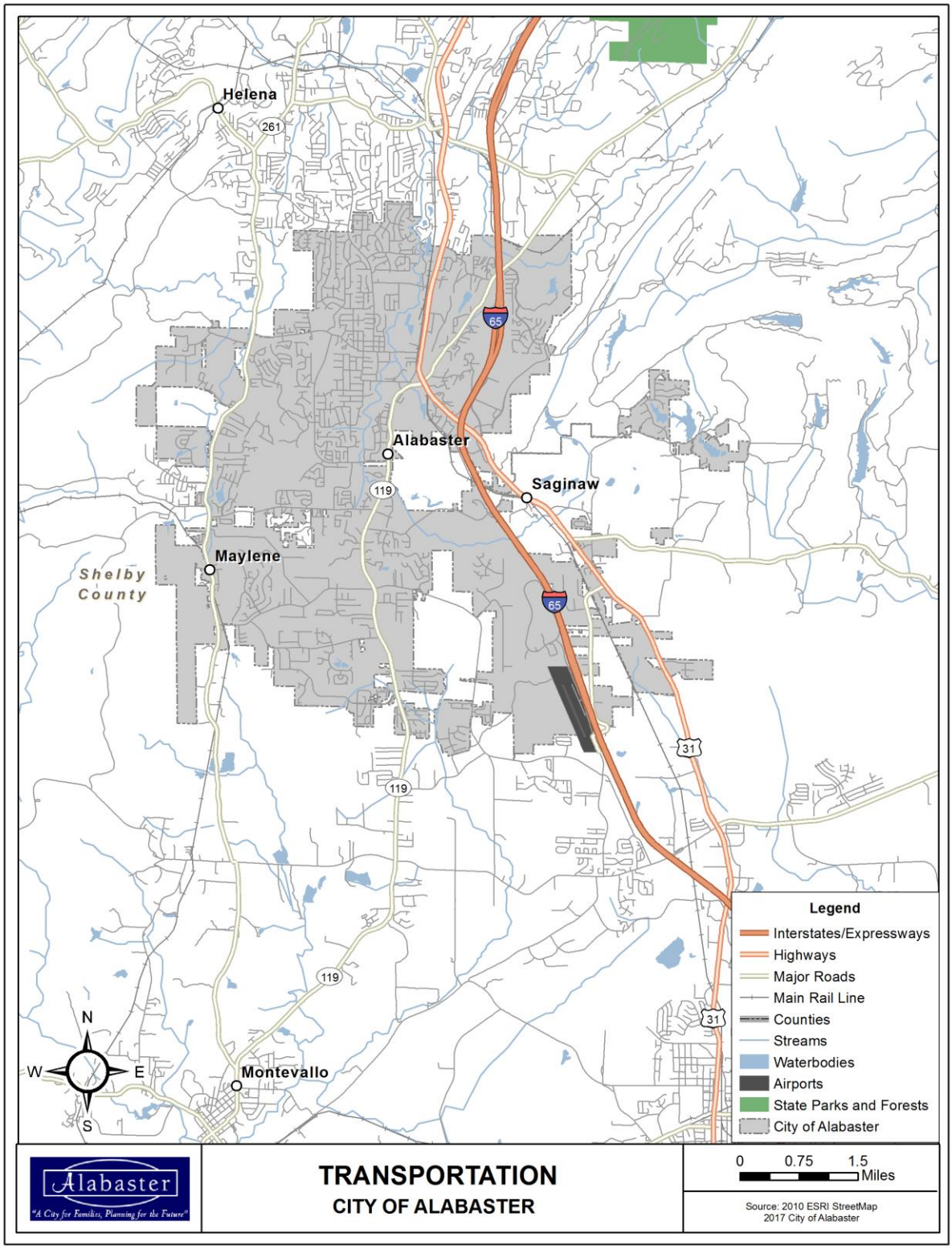
2.7 Transportation

The Alabaster transportation network heavily relies upon private vehicles for residential and commercial traffic. Public transit is available on a very limited basis to the elderly and disabled through public transit offered through ClasTran, a regional

transportation provider. Industrial transport of goods uses major highway systems – I-65, U.S. 31, S.R. 119 and other major state and county routes – and three railway corridors serving two major railroads, CSX and Norfolk Southern. The Buck Creek Trail is the primary walking and bike trail system for recreational use. Although sidewalks are not common, they can be found in the downtown and within some residential subdivisions. The Shelby County Airport is a general aviation facility located immediately south of Alabaster in Calera with parts of the runway within Alabaster city limits. It covers 125 acres and has a single 75' x 5,000' runway, which runs parallel and adjacent to I-65. The Shelby County Commission owns and operates the airport.

Map 2-7 "Transportation," which follows, shows some of the major transportation networks, including major roads, rail lines, and the airport.

Map 2-7. Transportation



Chapter 3 – Planning Process

3.1 Organization
3.2 Public Involvement
3.3 Coordination

3.1 Organization

The 2017 City of Alabaster Floodplain Management Plan (FMP) was developed in accordance with the National Flood Insurance Program's Community Rating System CRS Coordinator's Manual (FEMA, FIA-15/2017), Activity 510 "Floodplain Management Planning." The corresponding FMP chapters for each of the 10 CRS Planning Steps are described in the table below. Supporting documentation, Appendices A – H, accompany the main document and are noted throughout.

Table 3-1. 10-Step Planning Process

FMP Chapters	CRS Planning Step
Chapter 1 – Introduction	
Chapter 2 – Community Profile	
Chapter 3 – The Planning Process	Step 1: Organize to prepare the plan Step 2: Involve the public Step 3: Coordinate
Chapter 4 – Risk Assessment	Step 4: Assess the hazard Step 5: Assess the problem
Chapter 5 – Mitigation Strategy	Step 6: Set goals Step 7: Review possible activities Step 8: Draft an action plan
Chapter 6 – Plan Maintenance	Step 9: Adopt the plan Step 10: Implement, evaluate, revise

Floodplain Management Planning Committee

Prior to beginning the plan drafting process, the Alabaster City Council adopted Resolution 071017-A on July 10, 2017, which created the City of Alabaster Floodplain Management Planning Committee (FMPC). (A copy of this signed resolution is in Appendix A). The Council resolution appoints seven members to oversee the preparation of this plan and its ongoing implementation and maintenance. Among the seven members, the initial appointments include Brett Tucker, the City Engineer and Floodplain Administrator who serves as Chairman, and Sherri Proctor, the Planning and

Zoning Coordinator, who are actively involved in the floodplain management planning and implementation processes.

The FMPC members, from various City departments, have been assigned lead responsibility for plan development and implementation. They have expertise in the following six categories of floodplain management activities:

1) Preventive measures (e.g., land use and development codes and ordinances);
2) Property protection (e.g., building elevation and floodproofing);
3) Natural resources protection;
4) Emergency services;
5) Structural flood control projects; and
6) Public information.

Table 3-2 "Floodplain Management Planning Committee" shows the initial membership that participated in the drafting phase of this plan. Their meeting attendance is documented in Appendix E. In some circumstances, the appointed FMPC member may have designated an alternative member to attend the FMPC meeting.

Table 3-2. City of Alabaster Floodplain Management Committee

MEMBERS

Representative	Position/Department	Role/Expertise
Brett Tucker	City Engineer	Property Protection
Mark Harris	Public Works	Structural Projects
Ben Williams	Parks & Recreation	Natural Resources Protection
Sherri Proctor	Planning & Zoning	Preventive Measures
Patrick Johnson	Information Technology	Public Information
Mike Jones	Police Department	Emergency Services
Mike Waits	Fire Department	Emergency Services

The process began with step 1 of the 10 step CRS planning process, which was conducted through the organization of the FMPC by the City Council. The FMPC met five times throughout the drafting phase of the plan. All meetings were held at City Hall and were open to the public. At each meeting, committee members would review and discuss plan materials presented by the planning team. The materials covered all of the key steps of the floodplain management planning process, as described in Table 3-3 below. Although the FMPC met to review and plan for all chapters of the plan, it was especially important that the key steps of the planning process, Steps 4-8 were sufficiently discussed. The table below shows at which meetings the key steps were covered.

Table 3-3. Key Steps at FMPC Meetings

FMPC Meetings	Chapters Reviewed	CRS Key Planning Steps
1. Tuesday, 8/1/2017	1. Introduction 6. Plan Maintenance	
2. Tuesday, 10/17/2017	2. Community Profile 4. Part I. Risk Assessment	Step 4. Assess the hazard
3. Tuesday, 12/12/2017	4 Part II. Risk Assessment	Step 5. Assess the problem
4. Tuesday, 3/13/2018	5 Part I. Mitigation Strategy	Step 6. Set goals Step 7. Review possible activities
5. Tuesday, 5/15/2018	5 Part II. Mitigation Strategy	Step 8. Draft an action plan

Meeting materials, including agendas, slide presentations, committee exercises, and supplemental information were made available to FMPC members and the general public via the project website. Appendix E includes meeting agendas and sign in sheets.

3.2 Public Involvement

All of the five FMPC meetings were open meetings and well-advertised via the project website at http://alabaster.floodplainmanagementplan.com/.

Community Meetings

During the development of the draft plan, the City held a community meeting for the public to review the draft plan and offer public comments. This public meeting coincided with the National Night Out public event and was held October 3, 2017 from 5:30 to 7:30 PM in the Promenade South parking lot in front of Target on South Colonial Parkway in Alabaster. The City issued a media release and posted a meeting announcement on the plan website. The meeting's purpose was to allow interested citizens, especially those subjected to flooding or living in the floodplain, to provide input on areas that are susceptible to widespread or localized flooding. The project team made available a wide assortment of FEMA brochures and locally-produced maps portraying flood prone areas. The planning team asked citizens to identify potential issues or problem areas on the maps. Community residents were also asked to complete a Community Survey (located in Appendix F) gauging interest and concern with flooding issues. Members of the Floodplain Management Planning Committee (FMPC) were in attendance and on hand to answer questions. Citizen input helps shape the plan and provides invaluable support to the planning process.

A second meeting was held on July 9, 2018 at City Hall. The purpose of this second community meeting was to present the complete draft plan and encourage the public to review the plan and provide feedback prior to Council adoption. Flood maps were placed on display, and FEMA publications related to floodplain management were made available to the public. Representatives from the Floodplain Management Planning Committee (FMPC) answered questions. Attendees were encouraged to submit written comments on the Public Review Comments form (found in Appendix F).

Additional Public Outreach Efforts

In addition to the community meeting and open-forum FMPC meetings, the planning team created a website at http://alabaster.floodplainmanagementplan.com/ detailing the floodplain management planning process, providing up-to-date meeting information, as well as making available for download draft plan chapters, appendices, agendas, slide presentations, and other meeting materials. During the community meetings, attendees were given another opportunity to voice their concerns and encouraged to submit written comments to the FMPC.

3.3 Coordination

Coordination between the Floodplain Management Planning Committee (FMPC), and its Chairman, the City Engineer/Floodplain Administrator, with the planning consultant team was crucial to the successful development of this plan. The FMPC represents membership from diverse City departments and interests.

FMPC members completed two planning exercises. The first exercise allowed members to record their concerns on a city-wide map of all flood hazard areas. This was helpful to the planning consultants' drafting of the risk assessment. Later in the planning process, the members completed the "Alternative Mitigation Measures Exercise" (Appendix G). This exercise provided a means to review and evaluate potential floodplain mitigation measures to be selected for the Floodplain Management Action Plan (Chapter 5). The Floodplain Management Action Plan includes measures that are consistent with the six floodplain management activities recognized by the CRS Program and takes into consideration City funding and technical capabilities, among other considerations. (See Chapter 5 "Mitigation Strategy" for a complete discussion of the development of the Floodplain Management Action Plan).

In addition to coordination with various agencies, the planning team collected and reviewed applicable plans, studies and reports. Review of existing documents, data and technical information was very useful in the drafting of the plan, in that it supported the risk assessment and helped develop the mitigation strategy to further the goals of floodplain management planning. Specifically, in the drafting of Chapters 2 "Community Profile," 4 "Risk Assessment," and 5 "Mitigation Strategy" the planning team reviewed and incorporated information from the following plans and studies:

- 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan,
- FEMA Flood Insurance Study, Shelby County, Alabama and Incorporated Areas, revised February 20, 2013,
- NFIP's Repetitive Loss Inventory,
- Alabaster Forward 2015 Comprehensive City Plan,
- City of Alabaster Subdivision and Development Regulations,
- Zoning Ordinance for the City of Alabaster,
- City of Alabaster Stormwater Management Ordinance,
- City of Alabaster Flood Hazard Ordinance, and
- City of Alabaster Building and Technical Codes.

Other county-wide outreach activities related to floodplain management planning fall under the umbrella of multi-hazard mitigation planning activities conducted by the Shelby County Emergency Management Agency (EMA). The Shelby County EMA oversees the preparation and implementation of the 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan and subsequent updates. The Floodplain Management Planning Committee is fully supportive of county-wide activities conducted by the Shelby County EMA.

Chapter 4 – Risk Assessment

4.1 Overview
4.2 Hazard Profile: Assessing the Hazard
4.3 Vulnerabilities and Hazard Impacts: Assessing the Problem

4.1 Overview

This chapter details the Risk Assessment process for the development of the 2017 City of Alabaster Floodplain Management Plan for the City's current incorporated limits, as well as adjacent unincorporated areas, which may be annexed over time, as the City grows. This assessment process is based upon the requirements of Steps 4 and 5 of the 10-step planning process outlined in the 2017 Community Rating System Coordinator's Manual.

Section 4.2 covers the first part of the risk assessment required by Step 4: Assess the Hazard. It presents a hazard profile, which includes the sources, frequency, extent, and causes of flooding and associated hazards. Step 5 of the risk assessment process – Assess the Problem - is presented in Section 4.3. It examines vulnerabilities of the population, structures, public infrastructure and critical facilities to flooding and related natural hazards, the economic impacts of flooding on the community, and the impacts on natural and beneficial floodplain functions.

4.2 Hazard Profile: Assessing the Hazard

In non-coastal locations, riverine flooding occurs when runoff from rainfall, snowmelt, or storm surge exceeds the capacity of the stream or river and overflows into the adjacent floodplain. Flooding can lead to injury or death due to drowning caused by swift currents of the flood waters. In addition, flooding can cause property damage as a result of inundation by sediment-laden water.

The severity of a flood is primarily dependent upon two factors: 1) rainfall intensity and 2) duration. A heavy rain over a short time span, such as a thunderstorm, can result in flash flooding. Flash flooding is typically defined as a rapid water level rise in a stream or creek beginning within six hours of the rainfall event. Most of the areas within the City of Alabaster that have experienced past flooding are a result of flash flooding. Only those areas outside the city limits along the Cahaba River have a watershed response time greater than six hours. Extended periods of steady to heavy rainfall can also lead to flooding. This type of event is more commonly identified with a tropical storm moving inland from the Gulf of Mexico, but can also be associated with a slow moving or stalled front.

4.2.1 Special Flood Hazard Area

The Special Flood Hazard Area (SFHA) shown on the Flood Insurance Rate Map (FIRM) is the FEMA-designated area of land covered by the floodwaters of the base flood. The base flood is defined by FEMA as the flood having a one percent chance of

being equaled or exceeded in any given year. The base flood is also sometimes referred to as the "100-year flood." The SFHAs, as shown on the FEMA Flood Insurance Rate Maps (FIRMs), are depicted on Maps 4-1, 4-2, 4-3 and 4-4.

The City of Alabaster's major water feature is Buck Creek and includes several tributaries and smaller streams that are susceptible to flooding. The FEMA Flood Insurance Study (FIS) for Shelby County identifies the following streams where a SFHA is defined within the City:

- Buck Creek,
- Peavine Creek,
- Spring Creek,
- Camp Branch,
- Beaverdam Creek, and
- Dry Creek.

Buck Creek is the largest waterbody in size and drainage area within the City. The watershed is a mixture of residential, commercial, industrial, agriculture, mining, and undeveloped areas. The floodplain is relatively narrow upstream of Highway 119. Below this point the valley topography is flatter and the floodplain widens. As Buck Creek flows north through the City it closely parallels US Highway 31. Much of the City's businesses are located along the US-31 corridor which results in numerous commercial properties within the floodplain. The western floodplain is a mix of undeveloped and residential properties. Several of the streams discussed below (Peavine Creek, Beaverdam Creek, and Dry Creek) are direct tributaries or drain to the Buck Creek.

Peavine Creek flows from east to west across the northeastern quarter of the City. The floodplain is slightly narrower than Buck Creek. The floodplain is primarily undeveloped forest. Both Peavine Creek and Buck Creek has a detailed study, base flood elevations, and floodway.

Beaverdam Creek and Dry Creek, located in the northeast part of the Alabaster, drain into Buck Creek from the south. Both streams are mapped as a Zone "A." The current landuse is a mix of residential, undeveloped forest, and pasture.

Spring Creek is located near the southern limits of the City, west of Highway 119, and is mapped as a Zone "A.". Much of the land near and adjacent to this stream is residential, but few residential structures are within the floodplain. This area has been the focus of recent development with several residential phases still in under construction.

Several streams, included some listed above, are adjacent to the city limits, or small isolated areas of the City are located within the Special Flood Hazard Areas. These include Camp Branch and Shoal Creek. Shoal Creek is located away from the city center in the rural areas south of the city limits; however, Camp Branch borders the

Alabaster South Business Park to the east. Shoal Creek is mapped as a Zone "A" while Camp Branch has a detailed study, base flood elevations, and floodway.

The SFHA covers approximately 1,082 acres or roughly 6.8% of the City (Maps 4-1 through 4-4). SFHAs mapped as Zone "A," based on approximate methods, make up 295 acres or 27.3% of the total SFHA within the City. A large Zone "A" area is located along Beaverdam Creek in west Alabaster.

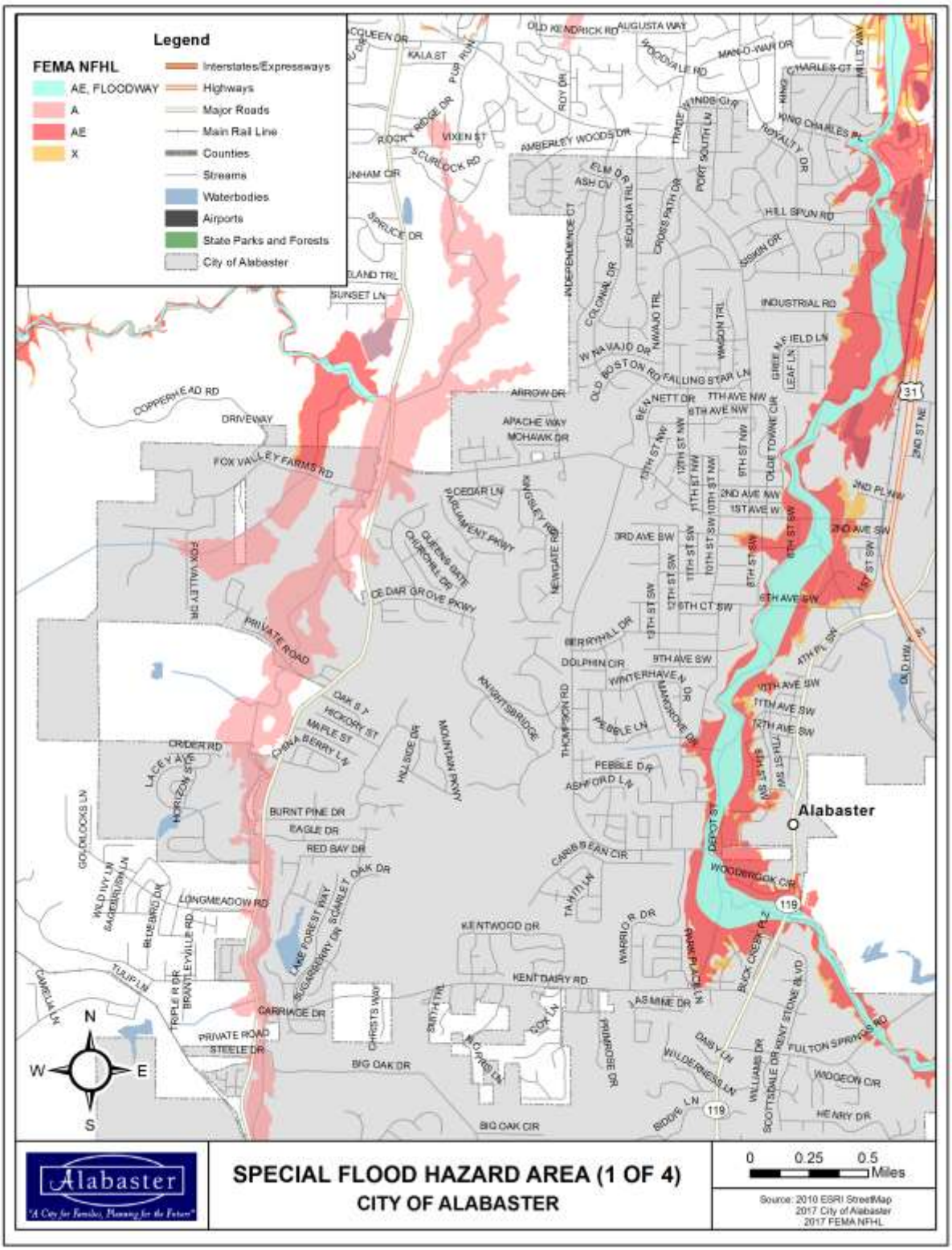
All of the streams previously discussed have detailed studies as part of the Shelby County Flood Insurance Study (FIS) with the exception of Dry Creek, Beaverdam Creek (within the City of Alabaster), and Spring Creek (within the City of Alabaster). Revised or new detailed studies were recently completed for Buck Creek and Peavine Creek and included in the Shelby County FIS, dated February 20, 2013.

Table 4-1. Known Flood Hazards

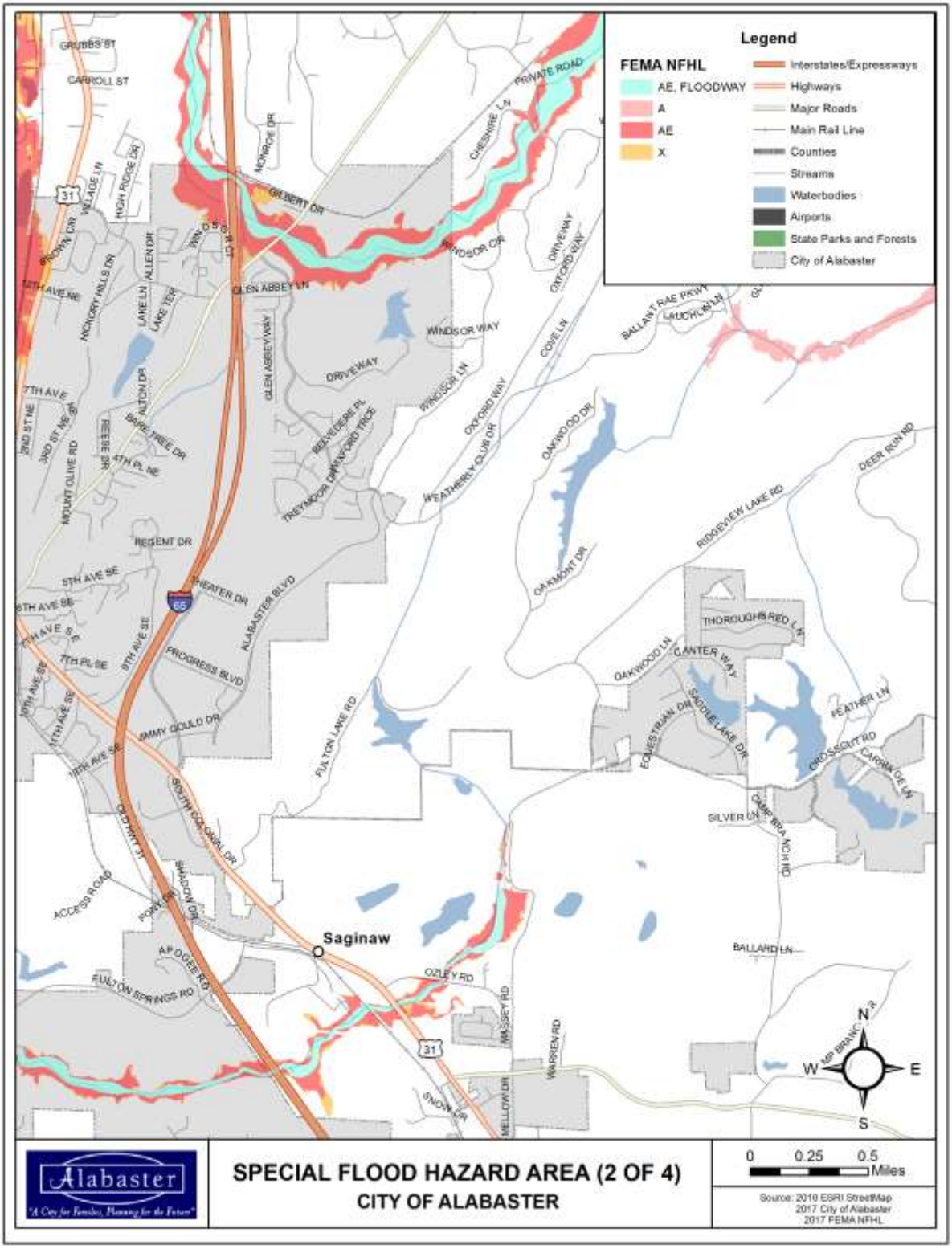
Source of Water	Depth of Flooding, ft	Average Velocity, ft/s	Approximate Warning Time, hrs
Buck Creek	8	5.3	1
Peavine Creek	5	1.9	1-2
Spring Creek[1]	n/a[1]	n/a[1]	n/a[1]
Camp Branch	3	1.2	<1
Beaverdam Creek[1]	n/a[1]	n/a[1]	n/a[1]
Dry Creek[1]	n/a[1]	n/a[1]	n/a[1]

[1] – Not a studied stream. No detailed information available.

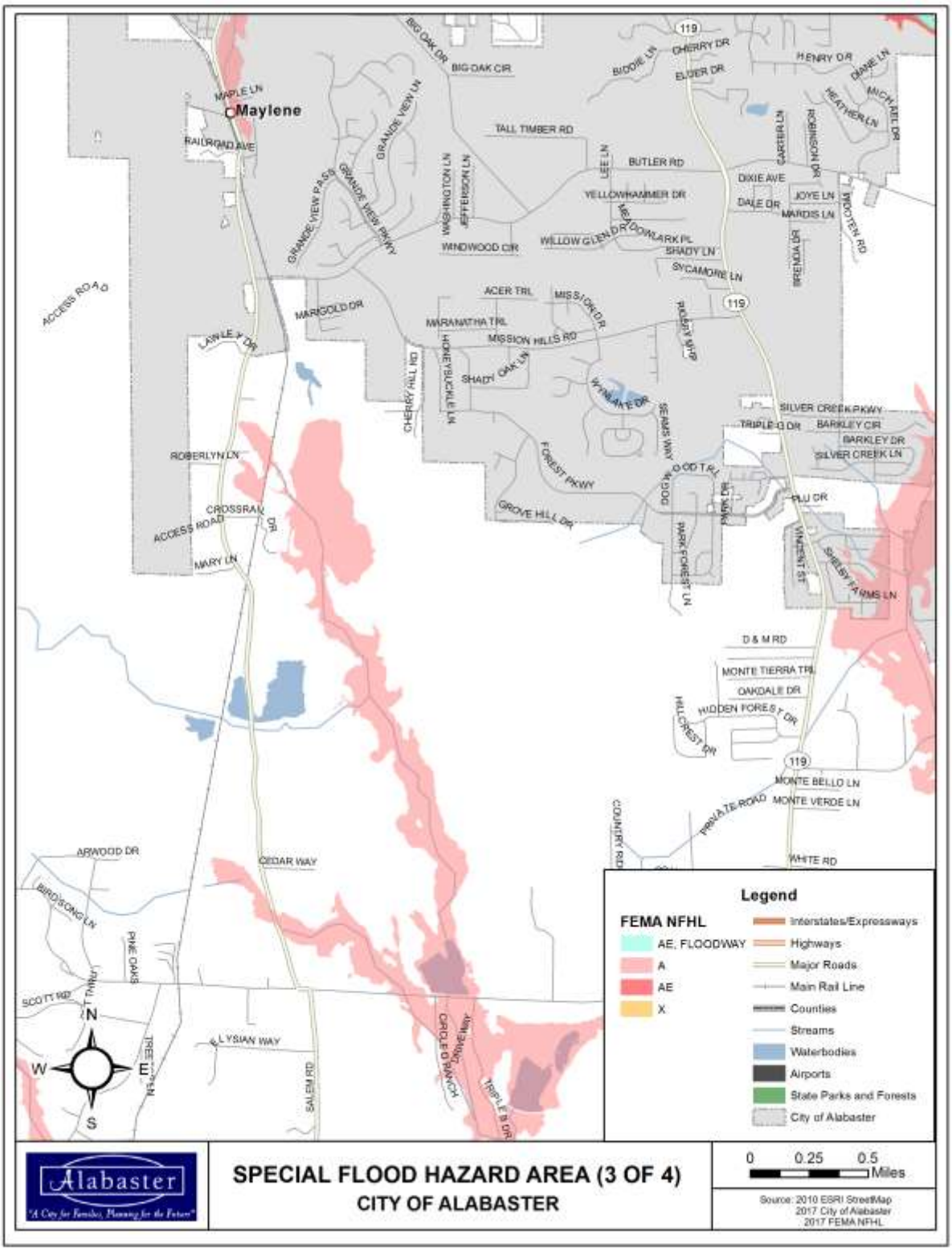
Map 4-1. Special Flood Hazard Area, 1 of 4



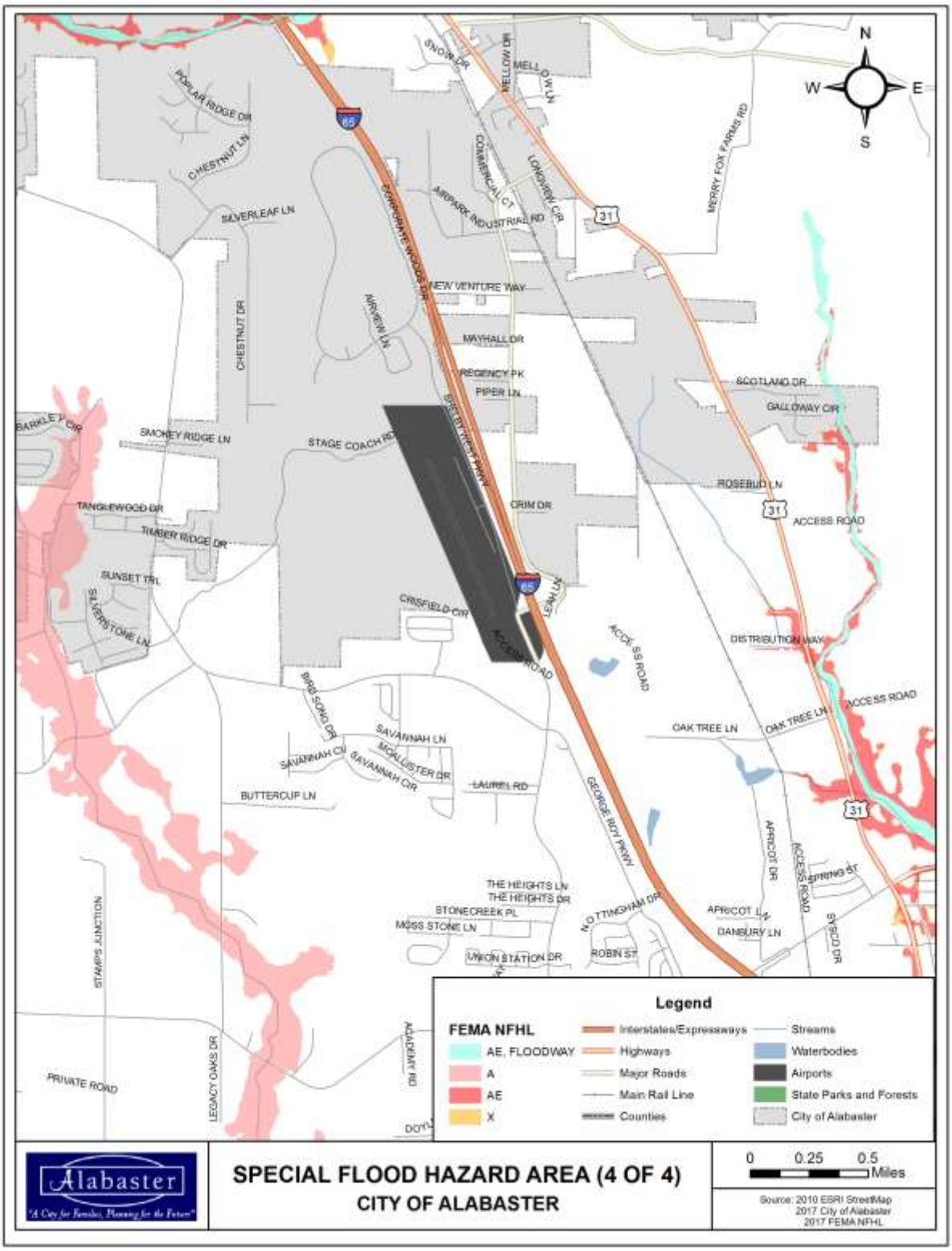
Map 4-2. Special Flood Hazard Area, 2 of 4



Map 4-3. Special Flood Hazard Area, 3 of 4



Map 4-4. Special Flood Hazard Area, 4 of 4

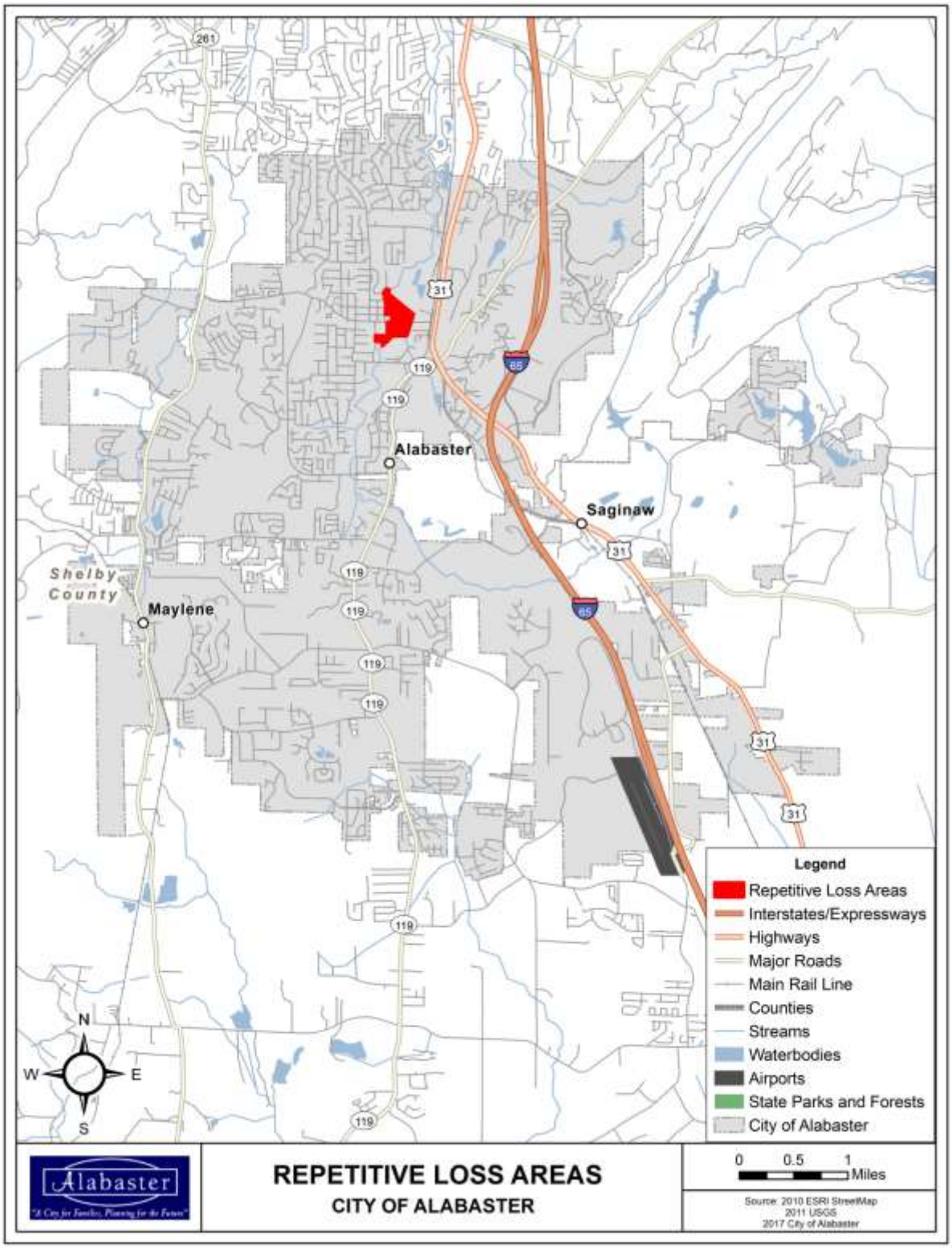


4.2.2 Repetitive Loss

The City of Alabaster has six repetitive loss properties, based on recent data provided by the State of Alabama Office of Water Resources. Repetitive loss properties are defined as those properties for which two or more flood insurance claims of more than $1,000 have been paid by the NFIP within any 10-year period. Properties designated as repetitive loss areas are generally located along Buck Creek near 1st Avenue West. Several of these properties have experienced multiple flood losses within the last 10 years.

The City's repetitive loss areas are shown on Map 4-5.

Map 4-5. Repetitive Loss Areas



4.2.3 Other Areas of Flooding

Other than the SFHA, a few additional areas of flooding have been identified within the City. These additional areas of flooding were noted during the FMPC meetings and through the public meetings conducted during the planning process. Members of the FMPC and the public were asked to identify flood hazard areas, as part of a plan exercise. These additional areas subject to flooding are as follows: 1) Meadowlark Place and Highway 119; 2) 12th Street and 2nd Avenue Southwest; 3) Fox Valley Farms Road and Highway 17; and 4) 7th Avenue Southwest, west of Buck Creek. These areas experience flooding due to local drainage issues. Flooding typically results in roads becoming inundated and potentially impassible for a period during and after the rain event. Future revisions to this plan should note any additional areas (not currently within the SFHA), which experience flooding due to local drainage issues, riverine flooding, or other causes.

4.2.4 Flood-Related Special Hazards

Less-frequent flood hazards within the City include flooding from dams, levees, and land subsidence. This section includes an inventory of these potential flood hazards should they fail or, in the case of land subsidence, occur.

Dam Failures

The U.S. Army Corps of Engineers National Inventory of Dams (NID) lists 2 dams within the City (Table 4-2). Both dams listed are privately held and used primarily for recreation. One of the dams listed by the NID, Rutherford Lake Dam, appears to have been significantly lowered and is no longer at the design pool elevation. Three additional dams located outside of the City were also assessed due to portions of the City located downstream of the dam. Map 4-6 shows the locations of the dams listed in the NID within the City of Alabaster and surrounding areas.

Each dam was assessed to determine the potential flood hazard risk in case of failure. Factors considered in determining the risk include the height and storage of the dam and development downstream of the impoundment in the potential flow path. Three dams were identified as a high flood hazard risk, Rutherford Dam, Lake Osborn Dam, and Lake Thacker Dam. Although Rutherford Lake is currently not at the full pool elevation, the risk assessment assumed full pool storage and height since the dam is still in place. Significant residential development lies immediately downstream of Rutherford Dam. Both Lake Osborn and Lake Thacker lie on tributaries to Big Creek north of County Road 339/Crosscut Road. These lakes are immediately upstream of numerous residential properties which could be at risk in the event of dam failure leading to a high risk rating.

Fulton Lake Dam is the largest impoundment both in dam height and storage included in this assessment. Fulton Lake lies outside the City in the headwaters to Buck Creek. There is little to no development within the floodplain and surrounding area immediately downstream of the dam for several miles. However, the quantity of water was deemed sufficient to potentially cause hazardous flooding along Buck Creek and

classify the dam as a moderate risk. In addition, there is an isolated farm with residence immediately downstream of the dam.

Dobbin Brothers Dam is a recreational impoundment on a tributary to Peavine Creek. This dam is classified as a low risk due to the limited development downstream of the dam and the available floodplain storage within Peavine Creek.

Dams outside the city limits of Alabaster, including Fulton Lake Dam, Lake Thacker Dam, and Lake Osborn Dam were also included in this evaluation. These dams are located upstream of the City of Alabaster and have been included due to their potential flow path through the developed areas in the City of Alabaster. Table 4-3 summarizes the flood hazard risk for each dam listed in the NID and located within the City of Alabaster and adjacent areas.

Table 4-2. National Inventory of Dams

Name	Owner Entity	Owner	Height (ft)	Storage (ac-ft)	Purpose
Fulton Lake Dam[1]	Private	C.H.Fulton	31	248	Recreation
Dobbin Brothers Dam	Private	Dobbins Bros.Coast Co.	27	92	Recreation
Rutherford Dam	Private	Mrs. Willie Rutherford	18	89	Recreation
Lake Osborn Dam[1]	Private	Dustin & Christopher Osborn	18	238	Recreation
Lake Thacker[1]	Private	Robert & Jamie Thacker	24	458	Recreation

[1] – Not within the City of Alabaster.

Map 4-6. Dam Hazard

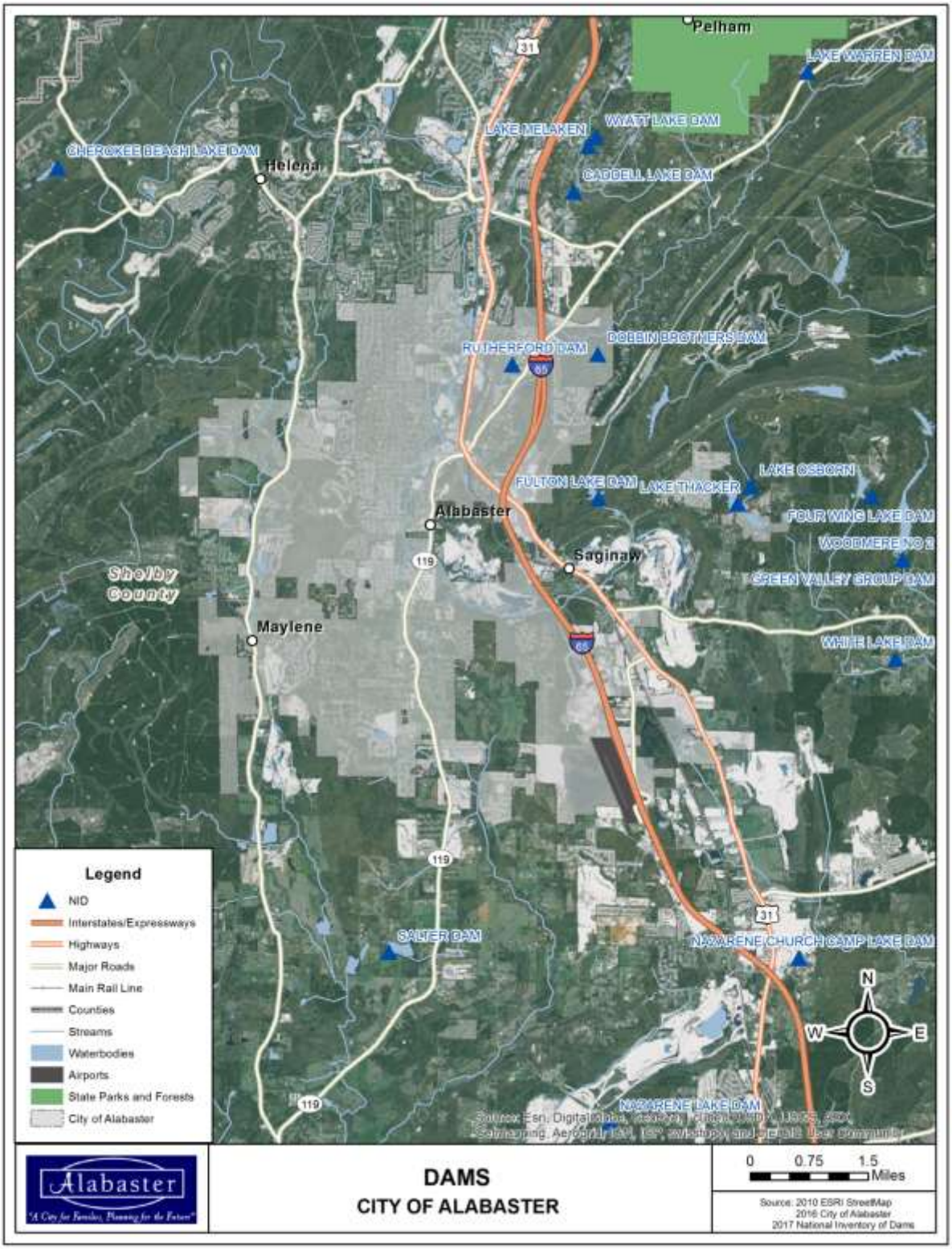


Table 4-3. Dam Failure Flood Hazard Risk Assessment

Name	Flood Hazard Risk[1]
Fulton Lake Dam[2]	Moderate
Dobbin Brothers Dam	Low
Rutherford Dam	High[3]
Lake Osborn Dam[2]	High
Lake Thacker[2]	High

[1] – Flood Hazard Risk is based on the severity of flooding due to dam failure and probability of risk to life
[2] – Not within the City of Alabaster
[3] – Lake appears to have been drained. Risk based on past full pool storage and height

Levees

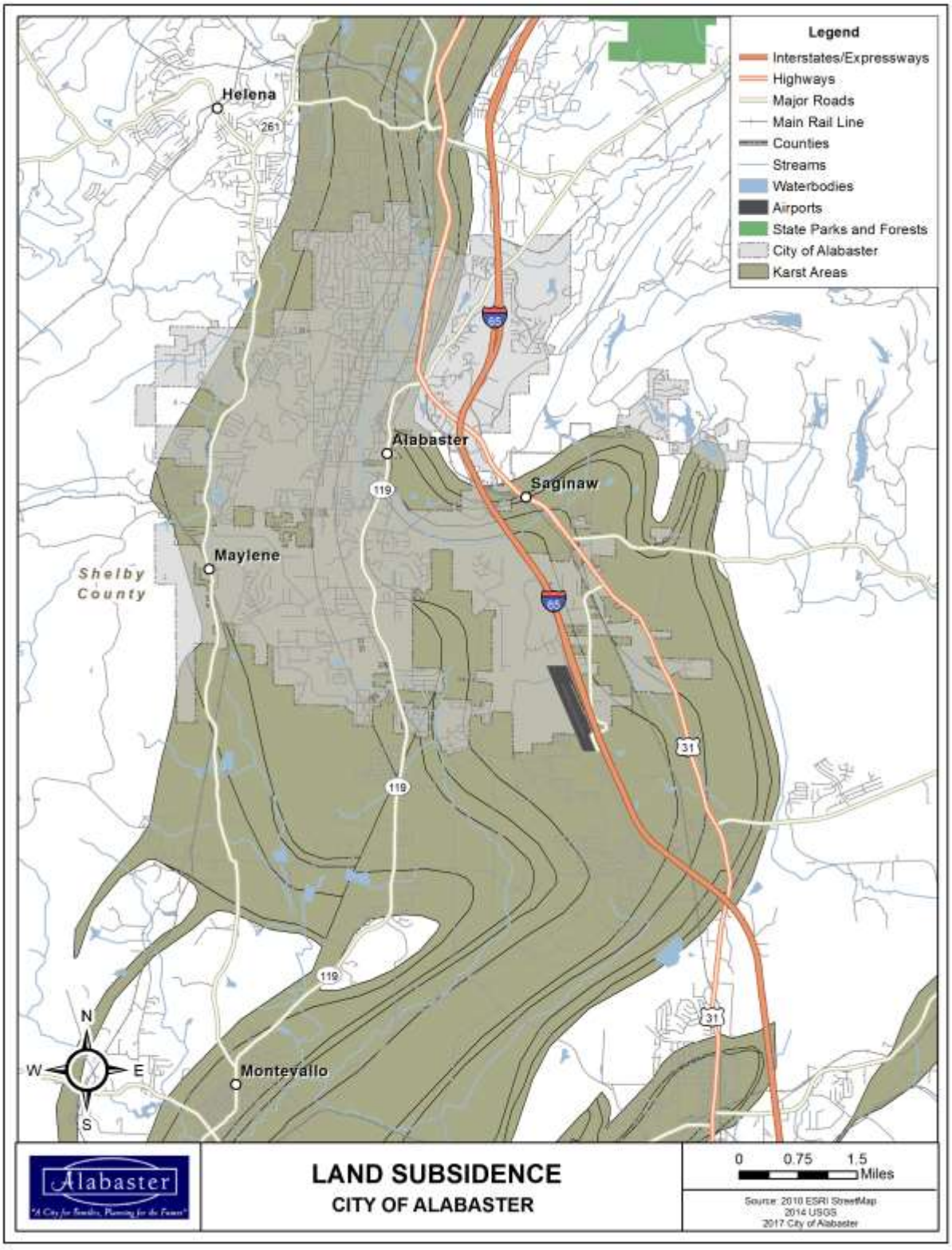
Levees are man-made structures that help contain or control the flow of water during a flood. It is important to note that levees reduce the risk of flooding; however, they do not eliminate the risk. A search of the U.S. Army Corps of Engineers National Levee database resulted in no known levees within or adjacent to the City. A further review indicated no known levees.

Land Subsidence (Sinkholes)

The final hazard discussed in this section is land subsidence. Land subsidence occurs when large amounts of groundwater have been withdrawn from certain types of rocks. The rock compacts because the water contributes to structural integrity and when withdrawn, collapses in on itself. Land subsidence is predominantly found within areas subject to karst topography. Karst topography is a region where the terrain has been dissolved by the physical and chemical weathering of the bedrock. These areas are composed of carbonate rocks, such as dolomite and limestone, or have high concentrations of evaporates, such as salt and gypsum. Karst is characterized by surface and subsurface features ranging from sinkholes, caves, springs, and complex underground drainage systems. A 2014 report from the USGS titled Karst in the United States: A Digital Map Compilation and Database by David Weary and Daniel Doctor, includes a GIS dataset of karst and potential karst areas in the contiguous United States. By mapping this dataset (Map 4-7), it appears that the mapped karst areas are located throughout most of the City. Based on this information, it can be inferred that since karst areas are within a large portion of the City, there is a risk associated with land subsidence. The 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan noted the following regarding land subsidence:

"Shelby County has recorded 12 instances of sinkholes in 53 years, an average of an event every 4.5 years. The future probability of an event is moderate and the vulnerability is low. As population and structure density increases the vulnerability will increase"

Map 4-7. Land Subsidence Hazard



4.2.5 Past Floods

The City of Alabaster has experienced many significant flood events in the past. Recent events are listed in Table 4-4. In addition to the flood events listed in Table 4-4, Appendix B includes summary tables of past flash flooding events, flooding events, and hurricane and tropical storm events from the National Climatic Data Center. The Alabaster area has been included in several Presidential Disaster Declarations. A table listing the flood hazard-related Presidential Disaster Declarations can be found in Appendix B, as well.

Table 4-4. Major Flood Events in the City of Alabaster, 2004-Present

Date	Type	Description
September 16, 2004	Hurricane Ivan	Approximately 6.0" of rainfall from September 15 – 17
July 10, 2005	Hurricane Dennis	Approximately 4.5" of rainfall. Roads and homes flooded and sustained minor damage
May 10, 2006	Flash Flooding	Flash flooding was reported on Highway 17, in the Maylene Community
August 21, 2006	Flash Flooding	Flooding on CR-17, near the Intersection of CR-44, was flooded and temporarily closed.
November 10, 2009	Hurricane Ida	Approximately 3.5" of rainfall
September 4, 2011	Tropical Storm Lee	Approximately 4.6" of rainfall from September 4 - 6
July 18, 2012	Flash Flooding	More than 5 inches of rainfall in a little more than two hours during the morning storm event. Flooding along Buck Creek and Thompson Road
April 7, 2014	Flash Flooding	Approximately 4.8" of rainfall. Flooding reported on Fox Valley Farm Road along Dry Creek. Flooding also on Thompson Road and Dolphin Circle
December 24-26, 2015	Flooding	Approximately 3.5" of rainfall over a 72-hr period.
August 19, 2016	Flash Flooding	Two children who fell into a culvert in the area of Shalimar Circle and Pebble Lane

Source: NWS Birmingham, News Media

4.2.6 Assessment of Future Flooding Locations and Problems

When assessing the flood hazard, it is imperative not only to study historic events and present day studies, but also to consider future factors that may affect the flooding magnitude and frequency. Three items that were considered and addressed in this plan and further discussed below, are: 1) development within the watersheds, 2) development within the floodplain, and 3) climate change.

Development within the Watershed

Due to the continued urban growth within the City of Alabaster and surrounding area, it is expected that flooding may increase in magnitude and frequency in the future. Post-construction stormwater management practices and controls attempt to mitigate hydrologic changes due to development and help offset the increased flow and volume of runoff. Even with properly implemented stormwater management practices, increased development within a watershed may result in adverse hydrologic changes and increased flooding. None of the watersheds can be considered fully developed. Cribbs Mill Creek and its tributaries have moderate to low development potential due to the absence of developable land. Buck Creek Peavine Creek, Beaverdam Creek, Spring Creek, and Camp Branch all have significant tracts that are undeveloped and have potential for development or re-development. With the continued growth of the Birmingham Metropolitan Area, development within the City of Alabaster and associated watersheds is anticipated. A summary of the development potential for each watershed is indicated in Table 4-5. This summary is based on the planning team's professional knowledge of local conditions and growth trends.

Table 4-5. Watershed Development Potential

Watershed	Size (Square Miles)	Development Potential
Buck Creek	18.7	Moderate
Peavine Creek	12.2	Moderate
Spring Creek	4.7	Moderate
Camp Branch	1.7	Low
Beaverdam Creek	8.1	High
Dry Creek	1.8	Low

Development within the Floodplain

Similar to development potential for a watershed, an assessment of potential changes specifically within the floodplain was made for each waterbody. Development within a floodplain contributes to a loss of floodplain storage, increased velocities, and increased flows. This can result in downstream flood elevation increases. Given the amenity streams provide, the potential to develop within the floodplain is high. Much of the Buck Creek floodplain along Highway 119 and US Highway 31 has already been developed. Residential development is expected to continue within and adjacent to the

floodplains for Spring Creek, Beaverdam Creek, and Dry Creek, within the City of Alabaster. Although the Peavine Creek floodplain remains largely undeveloped, it is expected that this area will be the focus of future development due to proximity to adjacent residential subdivisions. Table 4-6 summarizes the floodplain development potential for each waterbody within the City of Alabaster.

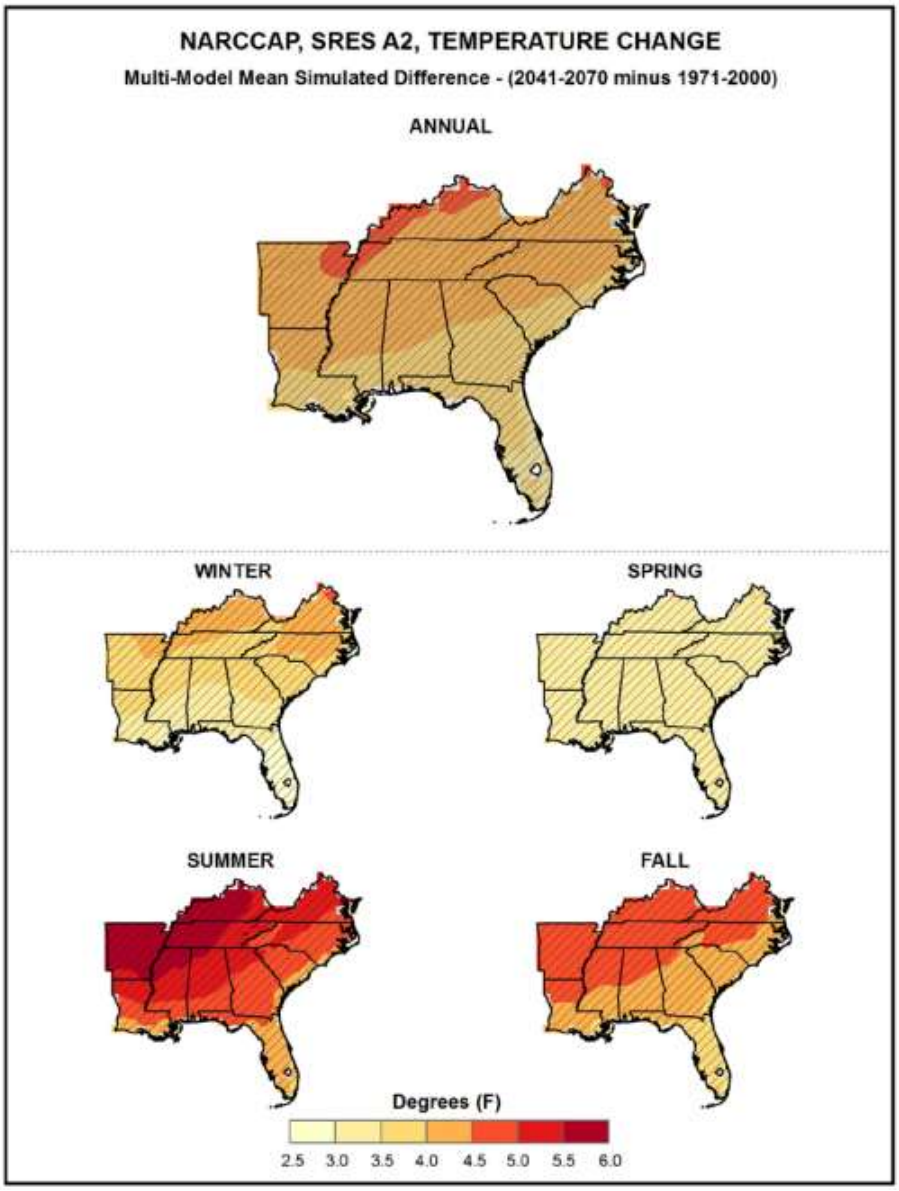
Table 4-6. Floodplain Development Potential

Watershed	Development Potential
Buck Creek	High
Peavine Creek	Moderate
Spring Creek	Moderate
Camp Branch	Low
Beaverdam Creek	High
Dry Creek	Moderate

4.2.7 Climate Change

Based on climate change projections in the Technical Report NESDIS 142-2, 2, by NOAA, average temperatures within Central Alabama are expected to increase by about 4°F to 4.5°F, based on means from 11 NARCCAP regional climate simulations for the high (A2) emissions scenario (Map 4-8).

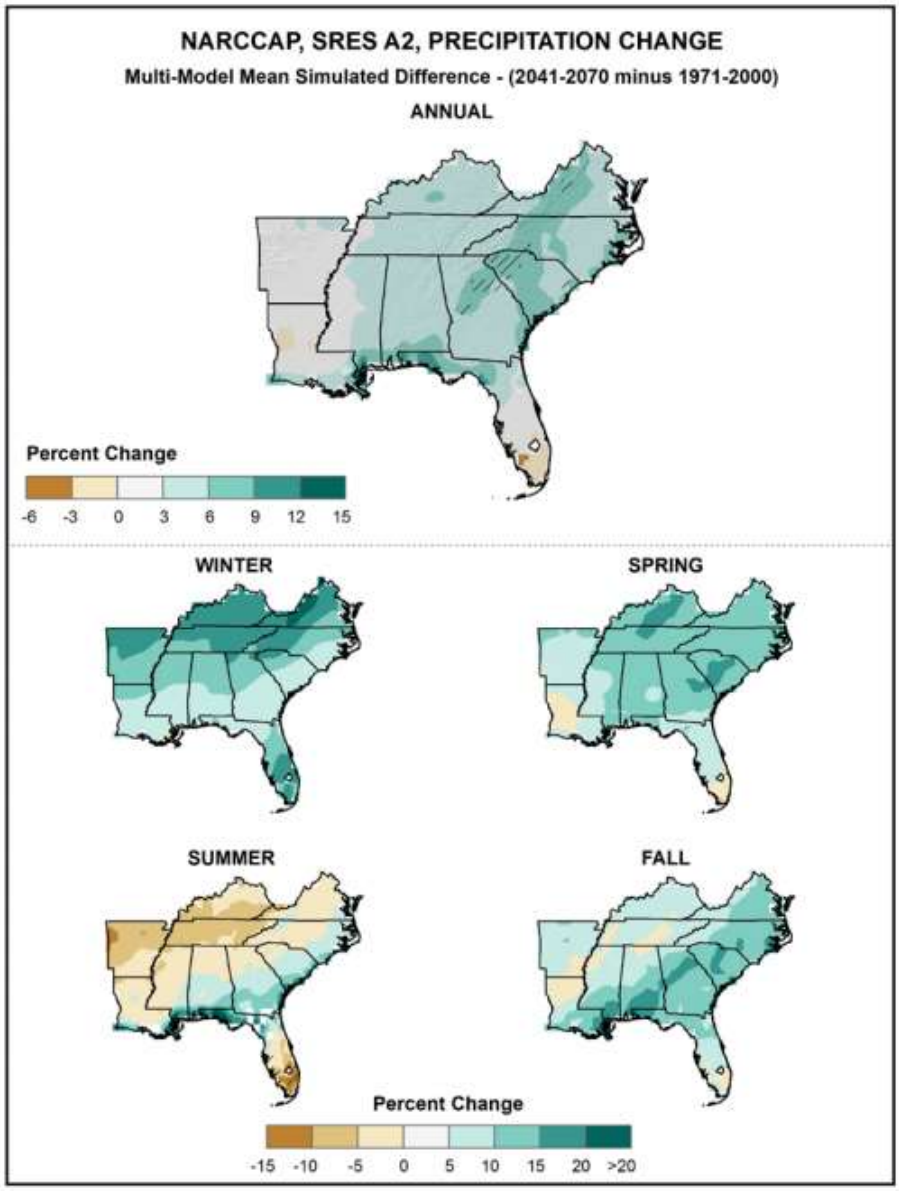
Map 4-8. Projected Temperature Change



Source: NOAA Technical Report NESDIS 142-2, 2013

The NOAA Technical Report also concludes that within the Southeast region, very heavy precipitation events (exceeding 1 inch) have increased over recent decades and further increases are projected. Although annual precipitation is projected to increase 3 to 6%, the seasonal precipitation in Central Alabama is projected to decrease up to 5% during the summer months (Map 4-9).

Map 4-9. Projected Future Changes in Precipitation Relative to the Recent Past



Source: NOAA Technical Report NESDIS 142-2, 2013

4.2.8 Other Natural Hazards

In addition to flooding, many other natural hazards affect the City of Alabaster. The 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan identifies the additional hazards, listed in Table 4-7.

Table 4-7. Other Natural Hazards

Hazards	Associated Hazards
Tornadoes	High Winds Severe Storms Lightning Hail
Severe Storms	Thunderstorms Hail Lightning High Winds Tornadoes Floods Landslides Wildfires
Winter Storms / Freezes	Snow Storms Ice Storms Extreme Cold
Wildfires	
Hurricanes	Tropical Storms Tropical Depressions Severe Storms High Winds Floods Tornadoes
Droughts / Heat Waves	Extreme Heat Wildfires Sinkholes
Landslides	Mudslides
Earthquakes	Landslides

Tornadoes

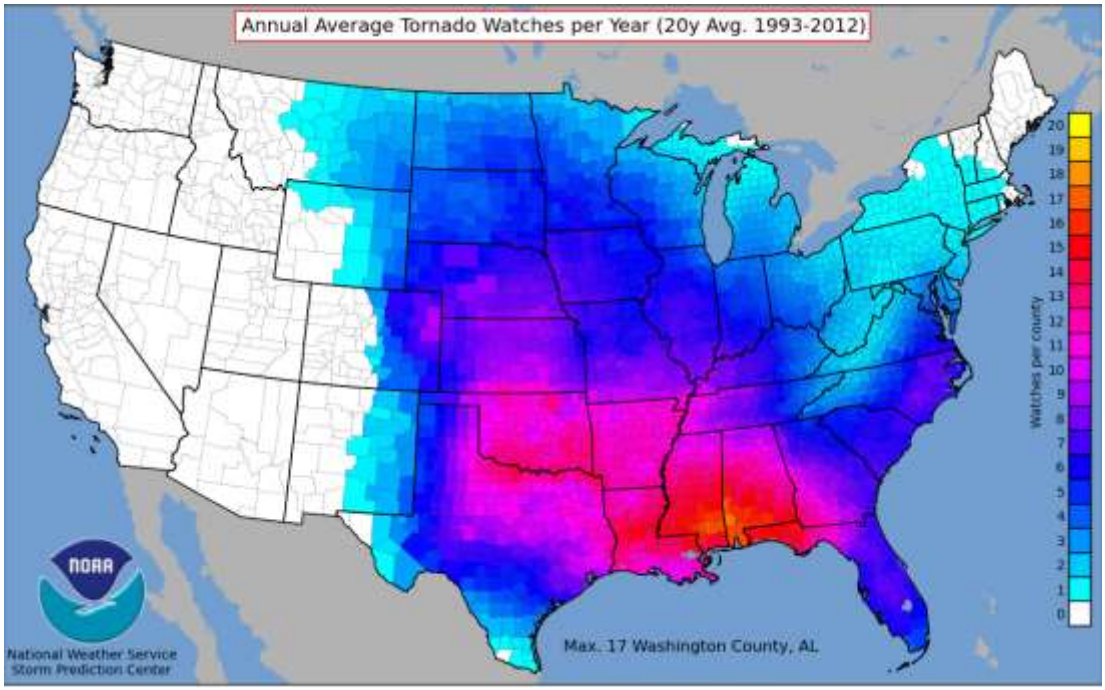
Tornadoes have frequently occurred within Shelby County, resulting in lost lives, destroyed homes, and utility interruptions. Based on an analysis of the National Weather Service severe weather data, Shelby County averages at least two tornadoes per year. Over the last 20 years, 21 tornado events have been reported in Shelby County. As shown on Map 4-10, Shelby County is placed under a Tornado Watch on average 12 times per year.

On March 25th, 2010, a 100 yard-wide EF-1 tornado moved through Shelby and Chilton counties, causing damage to at least 20 structures along with dozens of trees

snapped and uprooted. The path of the tornado was concentrated in the City of Alabaster. A more recent tornado touched down in Alabaster on April 15, 2011, at the Evangel Church on Thompson Road. The church had some minor roof damage as a result of the tornado. The tornado moved northeastward along 8th Street SW and 6th Street SW where it uprooted several trees, some of which landed on homes. According to the National Weather Service, the tornado was rated an EF-0, with maximum winds of 70 mph. The tornado lifted near Highway 31 at the Alabaster City Hall.

Shelby County's location makes it more susceptible to tornadoes compared to southern counties in Alabama. However, within Shelby County, the locations of tornadoes are largely random. All areas and jurisdictions in Shelby County are equally at risk.

Map 4-10. Annual Average Tornado Watches per Year



Source: National Weather Service Storm Prediction Center, 2015

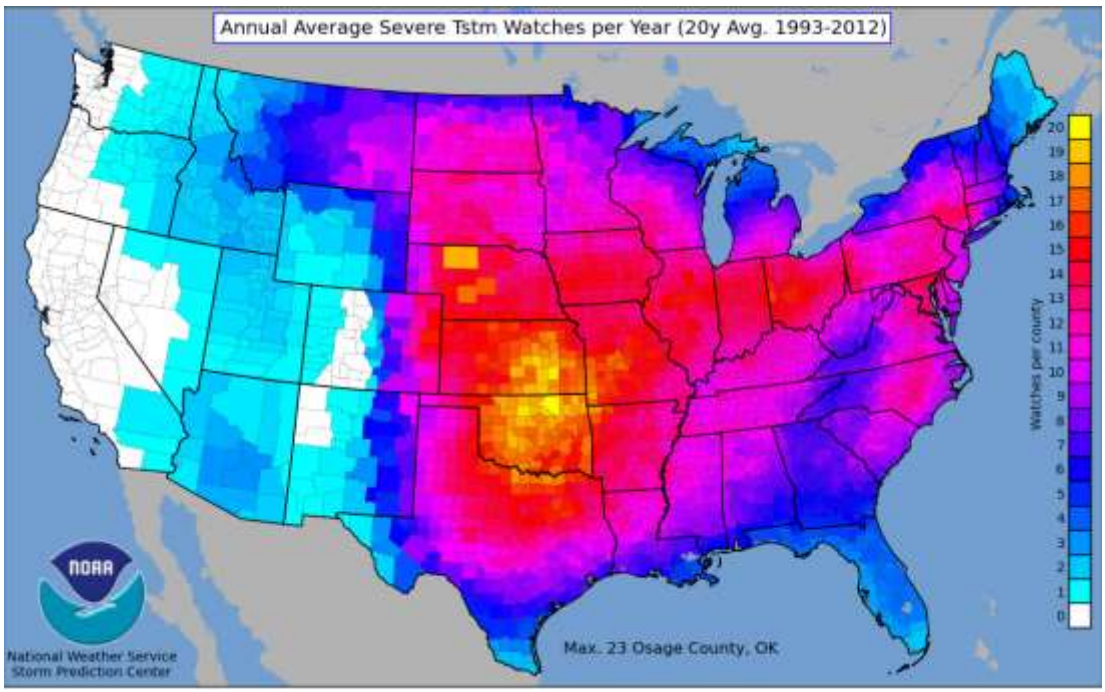
Severe Storms

Severe storms produce heavy rain, wind gusts, thunder, lightning, and hail. Shelby County can expect to see many severe storms each year, particularly in the spring, summer, and late fall. All areas of Shelby County have equal exposure to severe storms. According to the National Climatic Data Center, 243 severe storms occurred in Shelby County between 1997 and 2016 with an estimated $3.72 million in total damages and 3 reported injuries. As shown on Map 4-11, Shelby County is placed under a Severe Thunderstorm Watch on average 9 times per year.

Unlike flooding and tornadoes, severe storms lack geographic centers and boundaries, and therefore cannot be substantively mapped. As noted in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan:

"The most favorable conditions for thunderstorm development occur between June and August. July is the peak month for thunderstorms in Shelby County. All jurisdictions in Shelby County have experienced severe thunderstorms accompanied by high winds."

Map 4-11. Annual Average Severe Thunderstorm Watches per Year



Source: National Weather Service Storm Prediction Center, 2015

Winter Storms

The risks associated with winter storms and freezes include deaths, power outages, crop damage, and road hazards. The average snowfall for Shelby County is 0.7 inches per year. Typical winter temperatures are above freezing, but temperatures below freezing do sometimes occur. Since 1997, there have been 14 recorded winter storm events (winter storm, heavy snow, ice storm, and winter weather) and 1 extreme cold event in Shelby County.

Shelby County can expect almost one winter storm event per year. Typical winter storms pose only a mild risk, but the infrequent, severe winter storms/freezes (e.g., blizzard of 1993, winter storm of 2014) can cause major transportation disruptions, lengthy power outages, substantial property damages, frostbite, and fatalities.

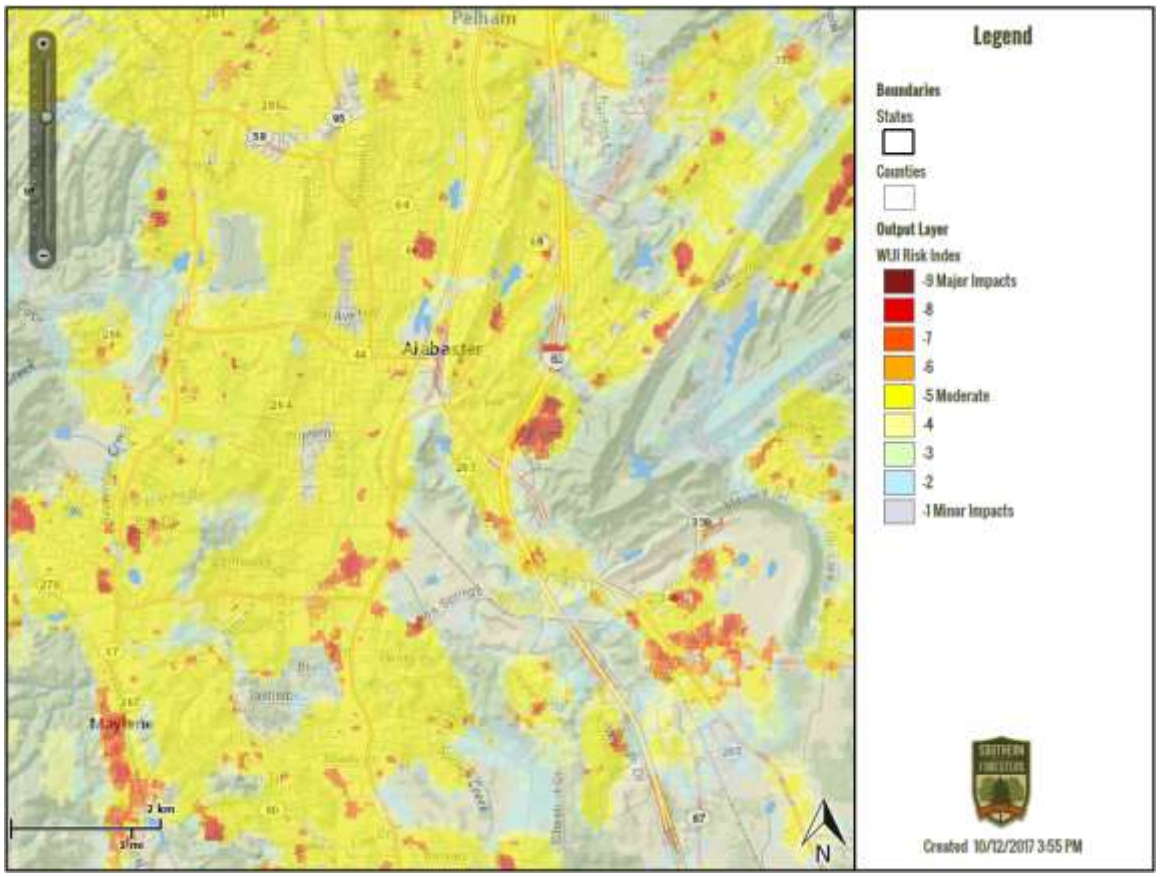
Wildfires

The two primary categories of wildfires in Shelby County are wildland fires and interface fires. Wildland fires feed on natural vegetation. Interface fires feed on both

vegetation and human development. Interface fires are so named because they occur at the interface of nature and human developments.

Alabaster is most susceptible to urban interface fires. The Wildland Urban Interface (WUI) Risk Index is a rating of the potential impact of a wildfire on people and their homes. The WUI Risk Index is based on housing density and proximity to rural areas. Map 4-12 below depicts the WUI Risk Index for Alabaster and the surrounding communities. Most of the City is classified as Moderate Impacts in accordance to the WUI Risk Index. Several, small, isolated pockets of increased impacts and higher risk are located throughout the City of Alabaster, primarily outside of the city center.

Map 4-12. Alabaster Wildland Urban Interface Risk Index



Source: Southern Group of State Foresters Wildfire Risk Assessment Portal, 2017

The Alabama Forestry Commission maintains a record of wildfire information. A total of 163 wildfires impacting 1,628 acres have occurred within Shelby County during the period of 2012-2016. On average, this equals 32 wildfires per year.

Hurricanes

Alabaster is located approximately 200 miles inland of the Gulf of Mexico; however, it is still vulnerable to hurricanes and tropical storms. Table B-3 located in Appendix B lists 2 tropical storm events that have affected Shelby County and the City of

Alabaster in the last 20 years (1997-2016). The 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan also noted the following regarding those two events:

"July 10, 2005 - Hurricane Dennis made landfall as a Category 3 hurricane. Most of the damage was a result of strong winds associated with Dennis' passing rain bands. Trees were knocked down, debris was scattered on roads and power outages were common throughout Shelby County."

"August 30, 2005 - Hurricane Katrina produced local effects that were widespread across Shelby County. Numerous trees and power lines were downed; minor to major structural damage occurred and power outages were widespread. Many locations remained without power for a week or more."

The extent of hurricane and tropical storm damage in Shelby County depends primarily on wind speeds, tornado formation, and flooding. Defining the probability of future events is difficult and past records are no guarantee of the likelihood a future hurricane or tropical storm affects Shelby County. Due to the proximity to the Gulf Coast, Shelby County can expect the remnants of infrequent hurricanes emanating from the Gulf of Mexico and occasional direct impacts due to tropical storms and depressions.

Droughts/Heat Waves

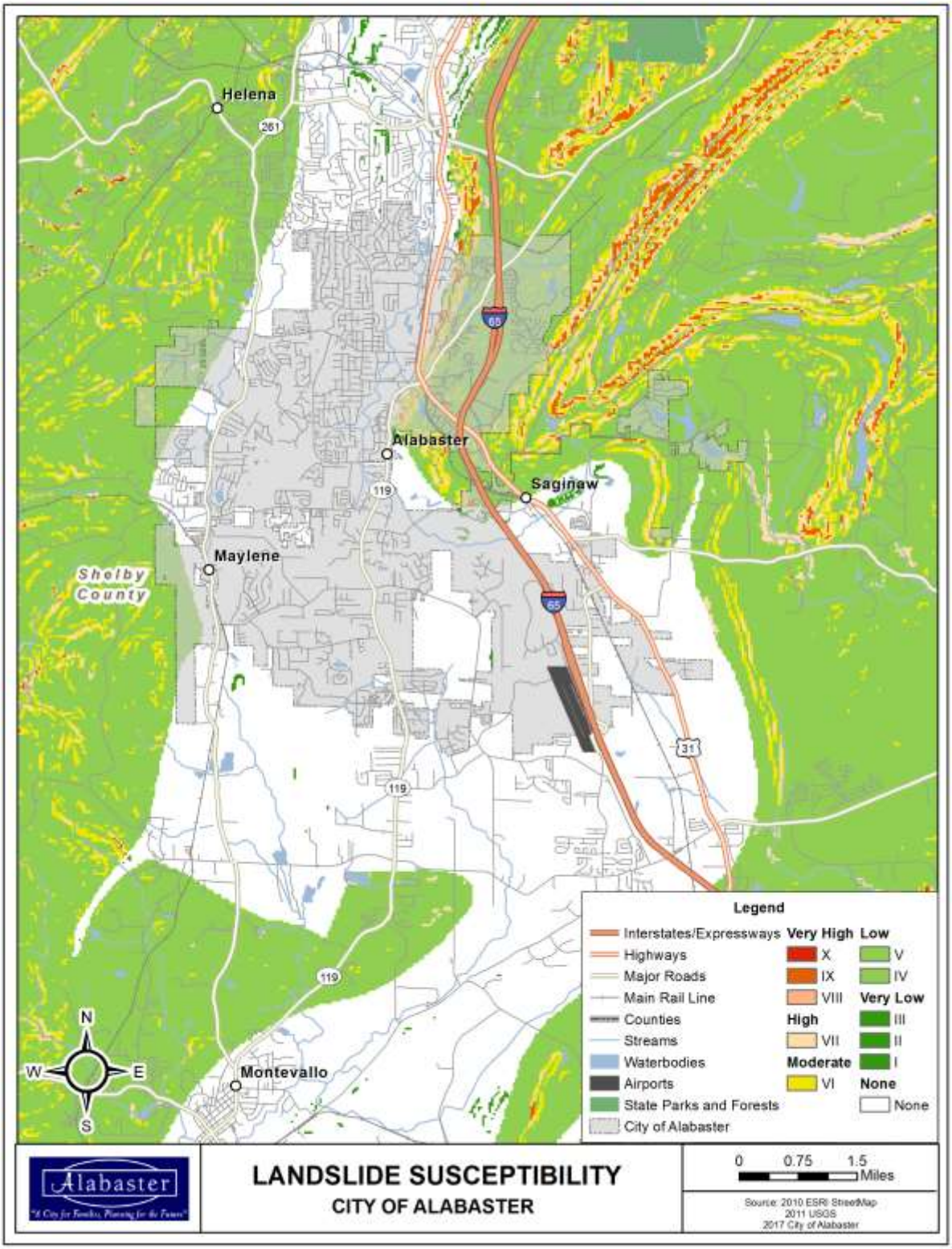
Shelby County experiences occasional droughts, which affect all jurisdictions with equal frequency. Droughts can cause widespread crop and pasture losses, wildfires, and severe shortages of water resources. According to the National Climatic Data Center Storm Event Database, Shelby County has experienced a drought event in six of the last twenty years (1997-2016). The most recent drought spanned from August through December 2016, resulting in the Governor to issue a Drought Emergency Declaration. Based on historical data, Shelby County can expect, on average, one drought event per two years.

Landslides

The impact from a landslide can include loss of life, damage to buildings, lost productivity, disruption in utilities and transportation systems, and reduced property values. According to the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan, landslides have not been a significant risk in Shelby County. Map 4-13, developed using landslide susceptibility data from the USGS seems to confirm this with much of the City of Alabaster shown as having no susceptibility to landslides. The only areas with High to Very High susceptibility are found on Double Mountain and Locust Ridge east of the city limits. The 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan also noted the following:

"The probability of future occurrences of landslides in Shelby County is moderate and the vulnerability is low."

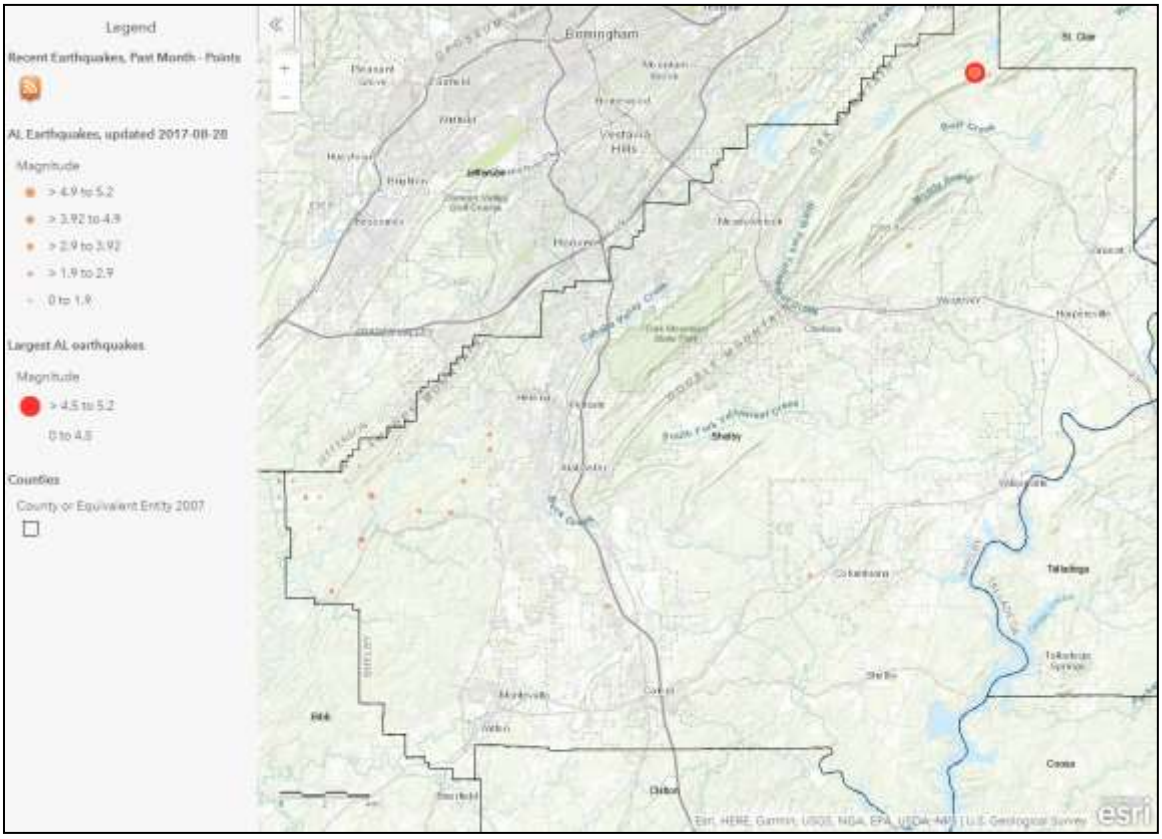
Map 4-13. 2011 Landslide Susceptibility Map



Earthquakes

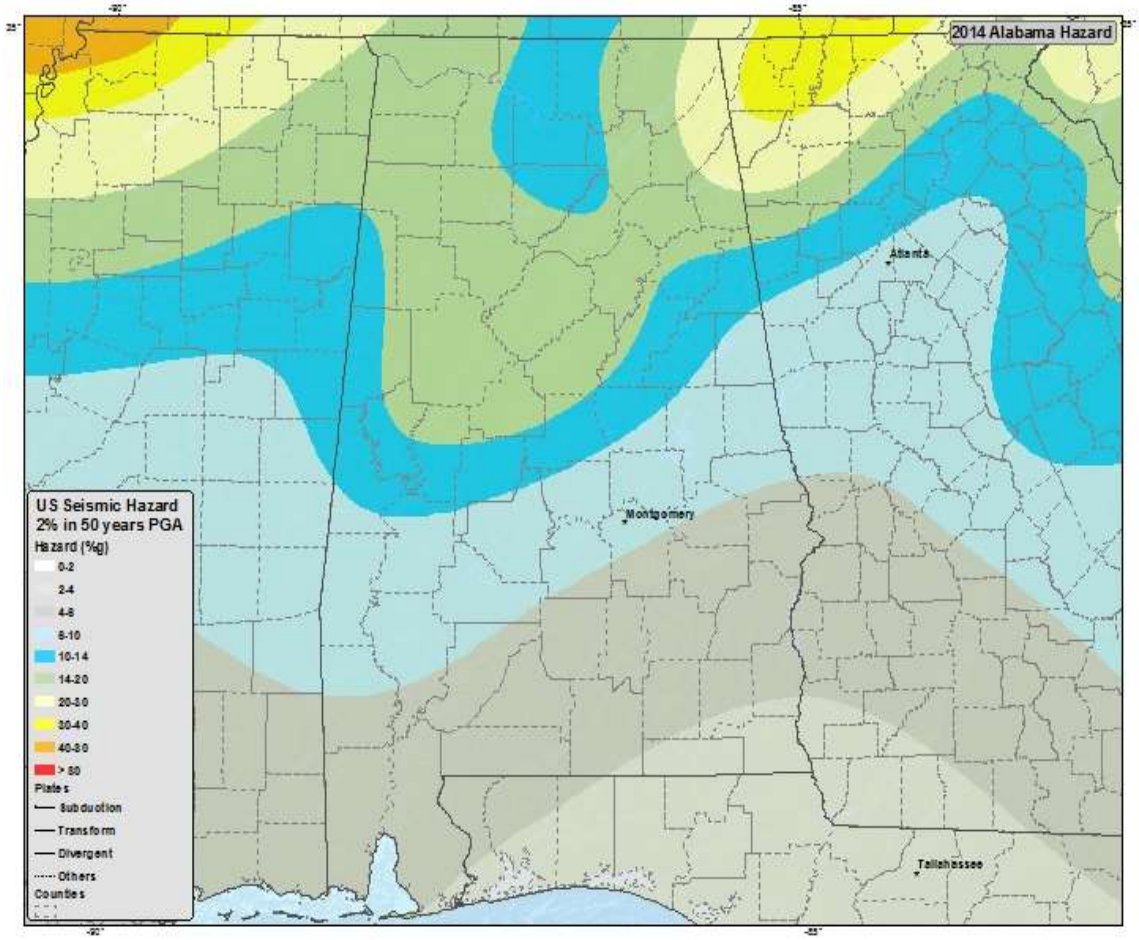
Earthquakes are a rare occurrence in Shelby County. The Geological Survey of Alabama maintains a database of earthquakes that occur within the State. The database has record of 18 earthquakes within Shelby County. Fifteen of the total eighteen earthquakes occurred in 2004 ranging in magnitude from 1.6 to 3.6. As shown on Map 4-14 below, the majority of the recorded earthquakes have an epicenter located west of the City of Alabaster. The largest recorded earthquake within Shelby County was magnitude 5.2 earthquake that occurred on October 18, 1916 with the epicenter located in North Shelby County near Vandiver.

Map 4-14. Historical Alabama Earthquake from 1886 to 2017 Map



The USGS publishes national seismic hazard maps which show likelihood of exceeding a level of earthquake shaking in a given time period. The shaking intensity is measured in peak ground acceleration (PGA) which is acceleration (shaking) of the ground expressed as a percentage of gravity (%g), or as a percentage of 9.8 meters per second squared. Map data from the USGS Earthquake Hazards Program 2014 seismic hazard map (Map 4-15) shows the City of Alabaster has a 2% chance of exceeding shaking above 14%g in the next 50 years.

Map 4-15. 2014 Alabama Seismic Hazard Map



Source: USGS, 2014

4.3 Vulnerabilities and Hazard Impacts: Assessing the Problem

Understanding the vulnerabilities and impacts of existing and future structures, critical facilities, and infrastructure to flooding and related hazards, provides a basis for establishing priorities for mitigation. The vulnerability assessment presented by this section is critical to planning and implementing responsive flood hazard mitigation measures.

FEMA's risk assessment software HAZUS-MH (version 4.0) was used to estimate flood losses for the study region, and the results have been integrated into this plan. HAZUS-MH provides an analytic, decision support tool to help communities make informed decisions regarding land use within their flood prone areas. A "Level 1 Analysis" of the 100-year flood event was modeled within HAZUS-MH. It utilizes the most recent datasets for the State of Alabama that is included in the software package. The HAZUS dataset includes 2010 Census data, such as demographic characteristics of the Alabaster study region from the 2010 Census, square footage for different building occupancy types, and numbers and locations of bridges, in addition to other data from a variety of sources.

4.3.1 Summary of Vulnerability and Impacts

This risk assessment examines the City of Alabaster's flood hazard vulnerabilities and impacts to the public health, safety and welfare, including impacts on populations, structures, critical facilities, the local economy, and other resources. A brief summary of historic and future impacts of flooding and related hazards can be found in Tables 4-9 and 4-10. These tables are an abridged version, based upon the comparable Tables 6.6 and 6.7 found in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan. Table C-1 located in Appendix C of this document includes all other natural hazards identified in this plan.

For the purposes of summarizing the impacts and quantifying the risk associated with the various hazards, the Shelby County Hazard Mitigation Committee designed a Qualitative Methodology hazard rating that relies on historical and anecdotal data, community input, and professional judgement regarding historic and projected future hazard event. The qualitative assessment is built around varying degrees and weights of risk values as assigned by the consensus of Shelby County's Hazard Mitigation Steering Committee.

Table 4-8 Hazards Qualitative Rating Table

Category	0	1	2	3	4	5
Fatalities and Injuries	0 Fatalities or Injuries	< 3 Fatalities or Injuries	4 to 14 Fatalities or Injuries	15 to 49 Fatalities or Injuries	50 to 99 Fatalities or Injuries	>100 Fatalities or Injuries
Economic Loss	No Loss	Less than $500K cost	From $500K to $2.9Mil cost	From $3Mil to $7.9Mil cost	From $8Mil to $19.9Mil cost	More than $20Mil cost
Area Impacted	Local No Evacuation	Local minimal evacuation	Local some evacuation	1 mile some evacuation	1 mile high evacuation	>3 mile and evacuation
Probability of Occurrence	Once Every 100+ Years	Once every 36 to 99 years	Once every 10 to 35 years	Once every 4 to 9 years	Once every 1 to 3 years	More than once a year
Repetitive Loss	< 3	3 to 10	11 to 24	25 to 49	50 to 99	> 100

The Shelby County Hazard Mitigation Committee developed the historic and future hazard profile vulnerability assessment summary tables (Tables 4-9 and 4-10) using the descriptions and scoring system from the above hazards risk table (Table 4-8) by assigning a value (1 through 5) for each category. In addition, fatalities and injuries were assigned a weighting factor of 3 and economic loss was assigned a weighting factor of 2. **Table 4-9** "Summary of Historic Flood-Related Hazards and Community Impacts" below provides a assessment of the present risk due to flooding and flood related hazards. A brief summary of future impacts of flooding and related hazards can be found in **Table 4-10** "Summary of Future Flood-Related Hazards and Community Impacts".

Table 4-9. Summary of Historic Flood-Related Hazards and Community Impacts

Flood-Related Hazard	Hazard Status	Hazard Profile Vulnerability Index						
	Risk/Threat	Fatality and Injury	Economic Loss	Extent of Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
Flooding	Moderate/High	6	8	2	4	3	23	**3**
Land Subsidence	Moderate/Minimal	0	2	0	4	1	5	**10**

Table 4-10. Summary of Future Flood-Related Hazards and Community Impacts

Flood-Related Hazard	Hazard Status	Hazard Profile Vulnerability Index						
	Risk/Threat	Fatality and Injury	Economic Loss	Extent of Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
Flooding	Moderate/High	9	8	3	4	5	29	**2**
Land Subsidence	Moderate/Minimal	0	2	1	4	1	8	**11**

Note that dam and levee failures were not considered in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan vulnerability assessment.

4.3.2 Description of Impacts

Life Safety

Vulnerability to flood hazards includes the impacts to the social structure, such as, injury and death, and the psychological effects on the populous. Flood impacts to life safety can be a direct impact to life safety due to injury or death, but can also have impacts on public safety by limiting access to personal or emergency vehicles when transportation corridors are closed. Proper warning and evacuation procedures should be planned and implemented to reduce the risks to residents and visitors.

Within the risk assessment study region of the City of Alabaster and its environs, HAZUS-MH reports a total population of 39,975 people (2010 Census Bureau Data). Although HAZUS-MH does not provide estimates on injury or death, the software estimates that 831 households will be displaced due to a 100-year flood event. Displacement includes households evacuated from within or very near to the inundated area. Of those displaced, 2,184 people (out of a total population of 39,975) will seek temporary shelter in public shelters.

Public Health

Impacts due to flooding create hazards to public health during and after a flood event. Hazardous and toxic substances can be released into the flood waters where the public may come in contact with these substances. These substances include household, commercial and industrial chemicals, sanitary sewer overflows and pets or

wildlife that may die during the event. Utilities, such as power, gas and water, may also be shut down during and after an event. This could cause potential health hazards to the elderly with poor mobility or members of the public with special health care needs. Mold is another public health hazard after a flood event, when inundated structures sustain water damage and remain damp from flood waters.

Critical Facilities

Critical facilities are defined as those that are essential to the health and welfare of the community and are critical subsequent to hazard events. Examples include medical care facilities (hospitals and other care facilities), police and fire facilities, emergency management facilities, schools, and emergency shelters.

The 2017 City of Alabaster Floodplain Management Plan includes an inventory of critical facilities in the City of Alabaster, based on classification. The inventory included in this plan has been condensed to show only those critical facilities within the City of Alabaster and is based on **Table 1.1: City of Alabaster Critical Facilities** in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan. This information can be found in **Table 4-11** through **4-17** and Maps 4-15 through 4-21.

Table 4-11. Government Facilities in the City of Alabaster

Facility Name	Street Address	Hours Open	Days Open	Floors	Above Base Flood Elevation?	People Capacity
Alabaster City Hall	201 1st St N.	8	5	2	Y	90
Alabaster Post Office	50 Kentstone Blvd	8	5	1	Y	850
Maylene Post Office	10011 Hwy 17	8	5	1	Y	96

Map 4-15. Government Facilities in the City of Alabaster

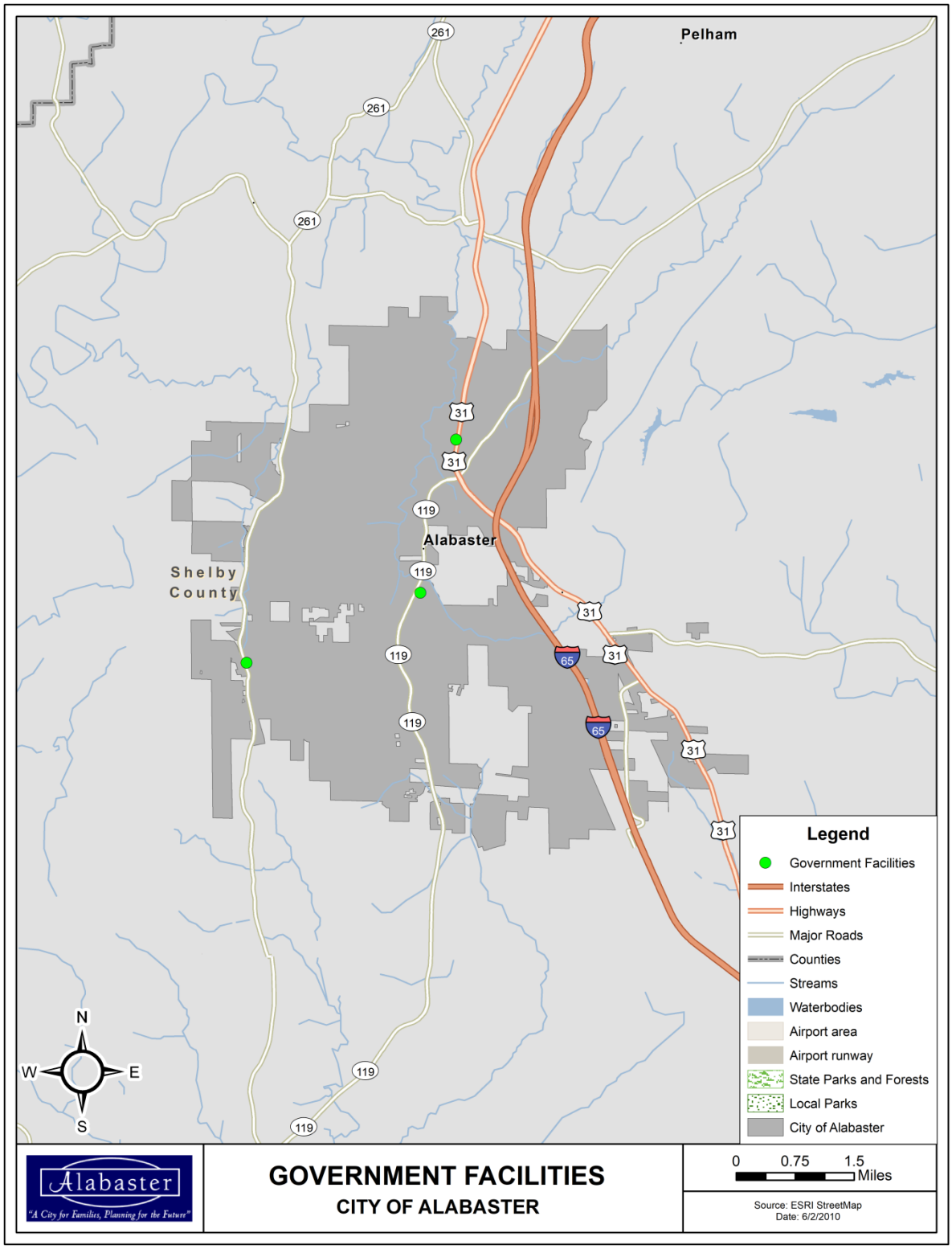


Table 4-12. Public Safety Facilities in the City of Alabaster

Facility Name	Street Address	Hours Open	Days Open	Floors	Above Base Flood Elevation?	People Capacity
Alabaster Police Department	201 1st St N.	24	7	1	Y	25
Alabaster Fire Station 1	850 1st Ave W	24	7	1	Y	54
Alabaster Fire Station 2	1950 Butler Rd	24	7	1	Y	55
Alabaster Fire Station 3	910 1st St. N	8	5	2	Y	1300

Map 4-16. Public Safety Facilities in the City of Alabaster

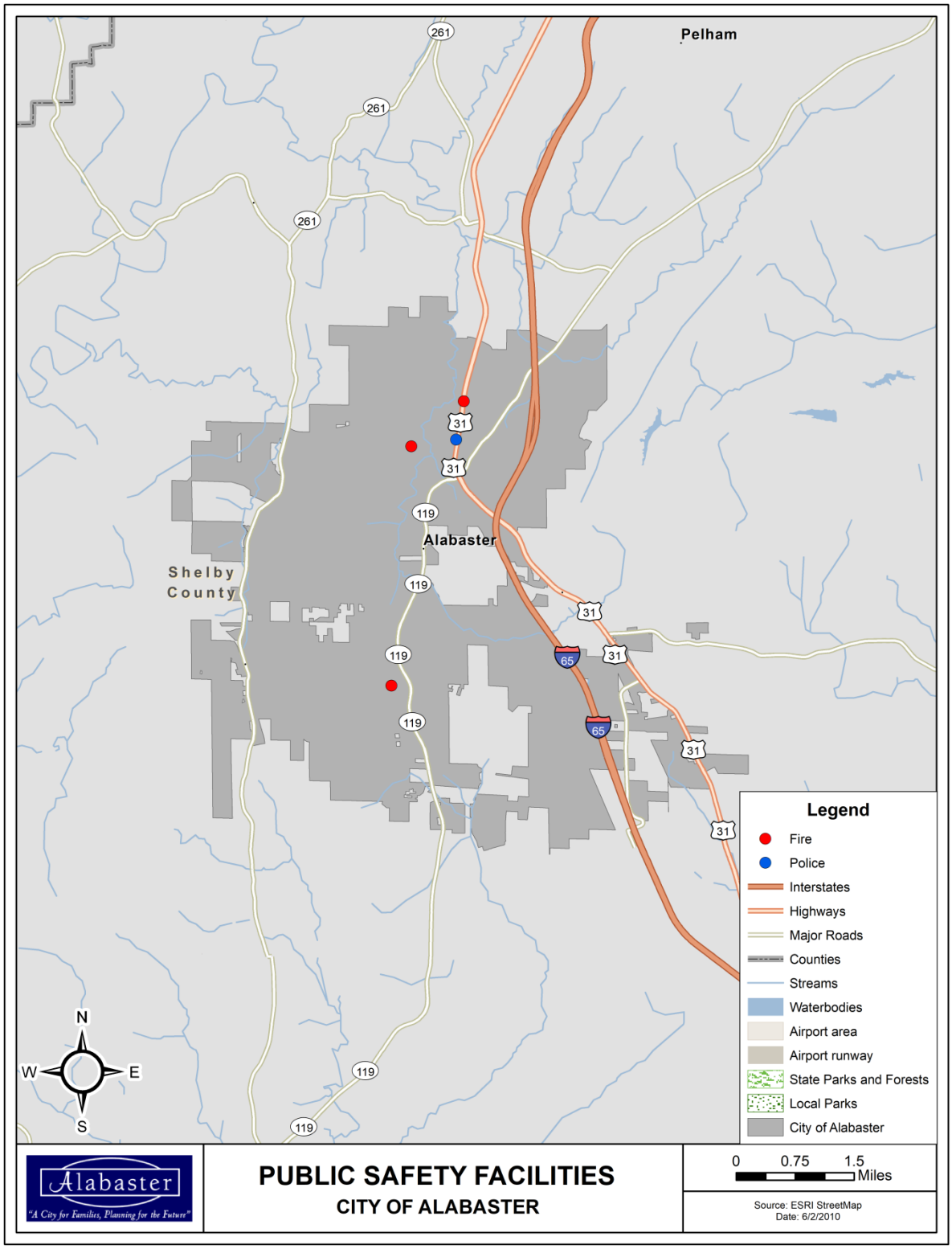


Table 4-13. Schools in the City of Alabaster

Facility Name	Street Address	Hours Open	Days Open	Floors	Above Base Flood Elevation?	People Capacity
Noah's Park Child Care	61 Weatherly Club Dr.	6	6	1	Y	60
Liberty Missionary Bapt Church Day Care	306 5th Ave. Southeast	6	6	1	Y	50
Kingwood Assembly Of God Day Care	100 Harvest Way	6	6	1	Y	300
Evangel Presbyterian Church Day Care	423 Thompson Road	8	1	1	Y	300
Child Care Network, Inc	1624 Kent Dairy Rd	6	6	1	Y	60
Bullfrogs And Butterflies Day Care	8033 Hwy 119	6	6	1	Y	30
Alabaster Head Start Center	1425 Montevallo Hwy	6	6	1	Y	60
Westwood Bapt Edu Ministry Day Care	1155 Alabaster Blvd.	6	6	1	Y	200
Young Impression Child Care Center	1321 7th St. Sw	6	6	1	Y	20
Creekview Elementary	8568 Hwy 17	7	4	1	Y	975
Meadow View Elementary	2800 Smokey Road	7	4	2	Y	1012
Thompson Intermediate	10119 Highway 119	7	4	1	Y	960
Thompson Sixth Grade Center	10111 Highway 119	7	4	1	Y	500
Thompson Middle	1509 Kent Dairy Road	7	4	1	Y	1402
Thompson High	100 Warrior Dr	7	4	2	Y	1566
Kingwood Christian School	1351 Royalty Drive	6	6	2	Y	375
Evangel Classical Christian School	423 Thompson Road	6	6	1	Y	250

Map 4-17. Schools in the City of Alabaster

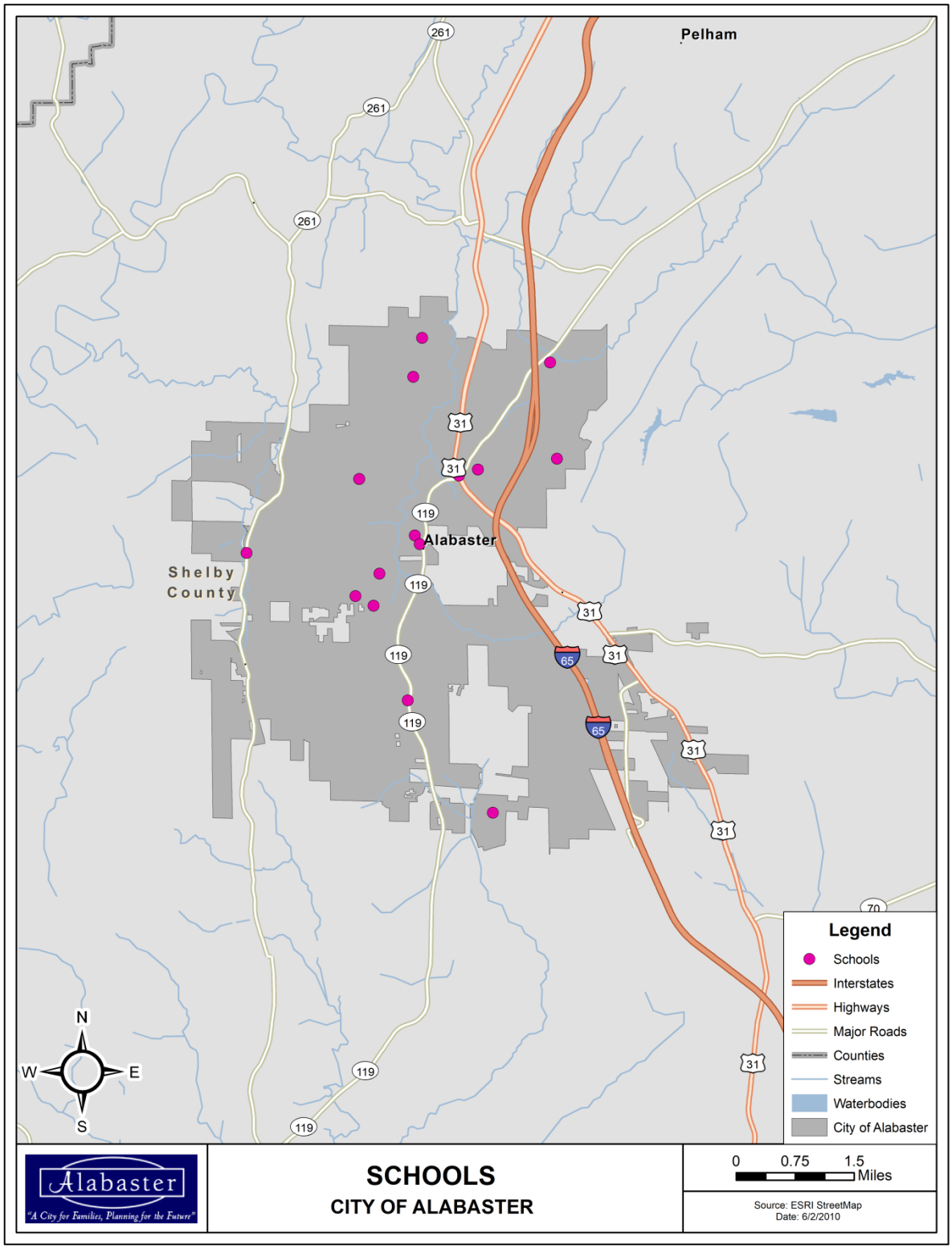


Table 4-14. Medical and Elderly Care Facilities in the City of Alabaster

Facility Name	Street Address	Hours Open	Days Open	Floors	Above Base Flood Elevation?	People Capacity
Brookwood Medical Center Shelby Baptist	1000 1st St. N.	24	7	4	Y	1500
Intergraded Health Center	850 9th St NW	24	7	2	Y	500
Physiotherapy Association	304 1st St N	8	5	1	Y	60
Shelby Cancer Center	1024 1St St N	24	7	2	Y	96
Alabama Family Dental	1120 1st St N	8	5	2	Y	400
Hillside Medical Plaza	224 1st St S	8	5	2	Y	243
Alabama Opthomology	613 1st S	8	5	1	Y	125
Alabaster Family Medical Center	395 1st St S	8	5	1	Y	45
Chandler Health & Rehab Ctr	850 9th St NW	24	7	1	Y	660
Shelby Medical Plaza	1004 1st N	8	5	2	Y	500
Physicians Medical Tower 1	1022 1st St N	8	6	4	Y	1250
Shelby Baptist Ext Care Nursing Home	1000 1st St N	24	7	4	Y	200
Shelby Baptist Surgery Center	1010 1st St N	8	6	4	Y	765
American Family Care	120 Parkway Colonial Promenade	8	6	1	Y	70
Brackin Medical Building	626 2nd St NE	8	6	1	Y	50
Shelby Medical Building	644 2nd St NE	8	6	2	Y	500
Thomas Dudney DDS Bldg	122 7th Ave NE	8	5	2	Y	84
Shelby Ridge Nursing Home	881 3rd St NE	24	7	2	Y	3000
Laurelton Rehab & Nursing Home	850 9 St NW	24	7	2	Y	200
Clayton Therapy & Rehab	420 1st St N	6	6	1	Y	50

Map 4-18. Medical and Elderly Care Facilities in the City of Alabaster

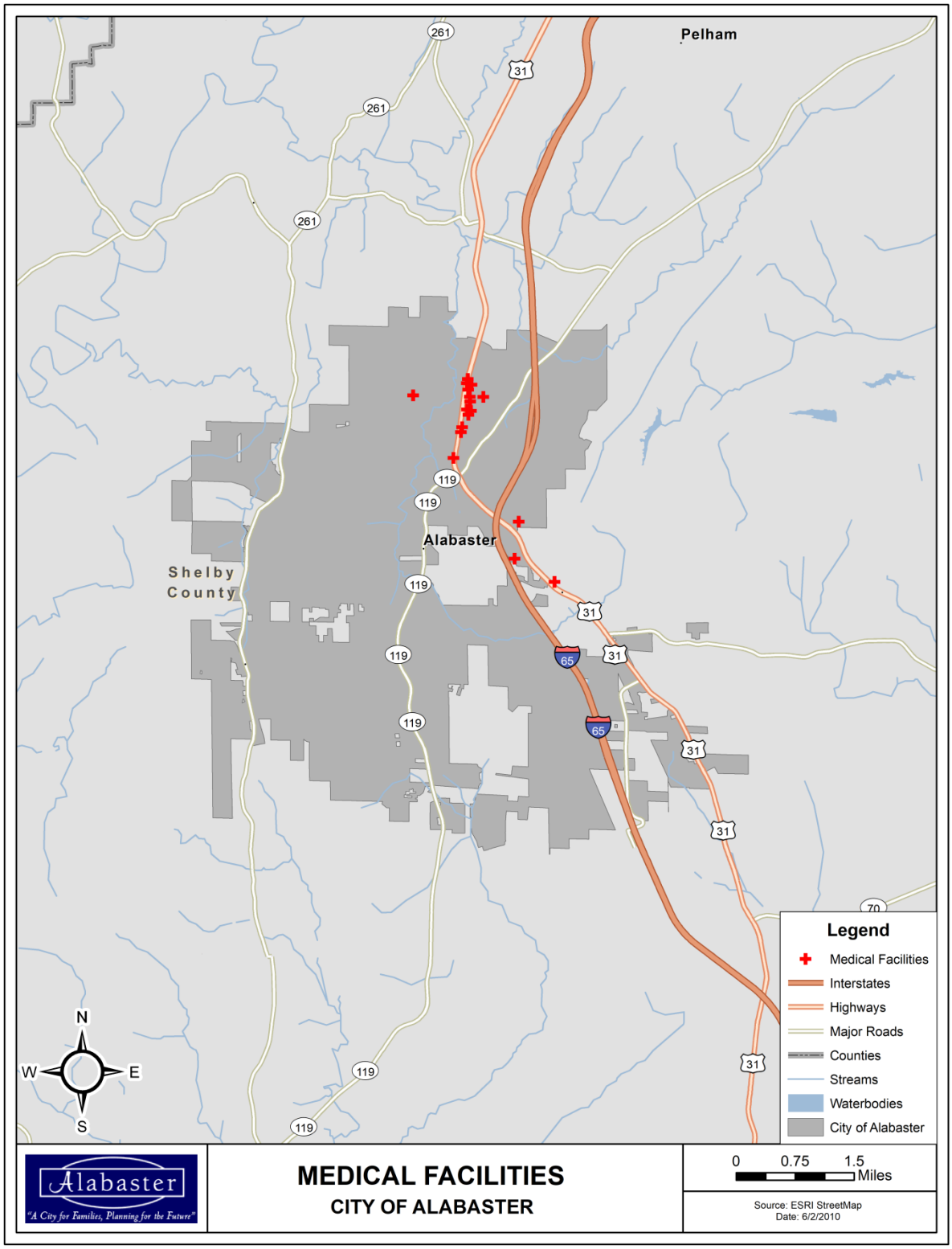
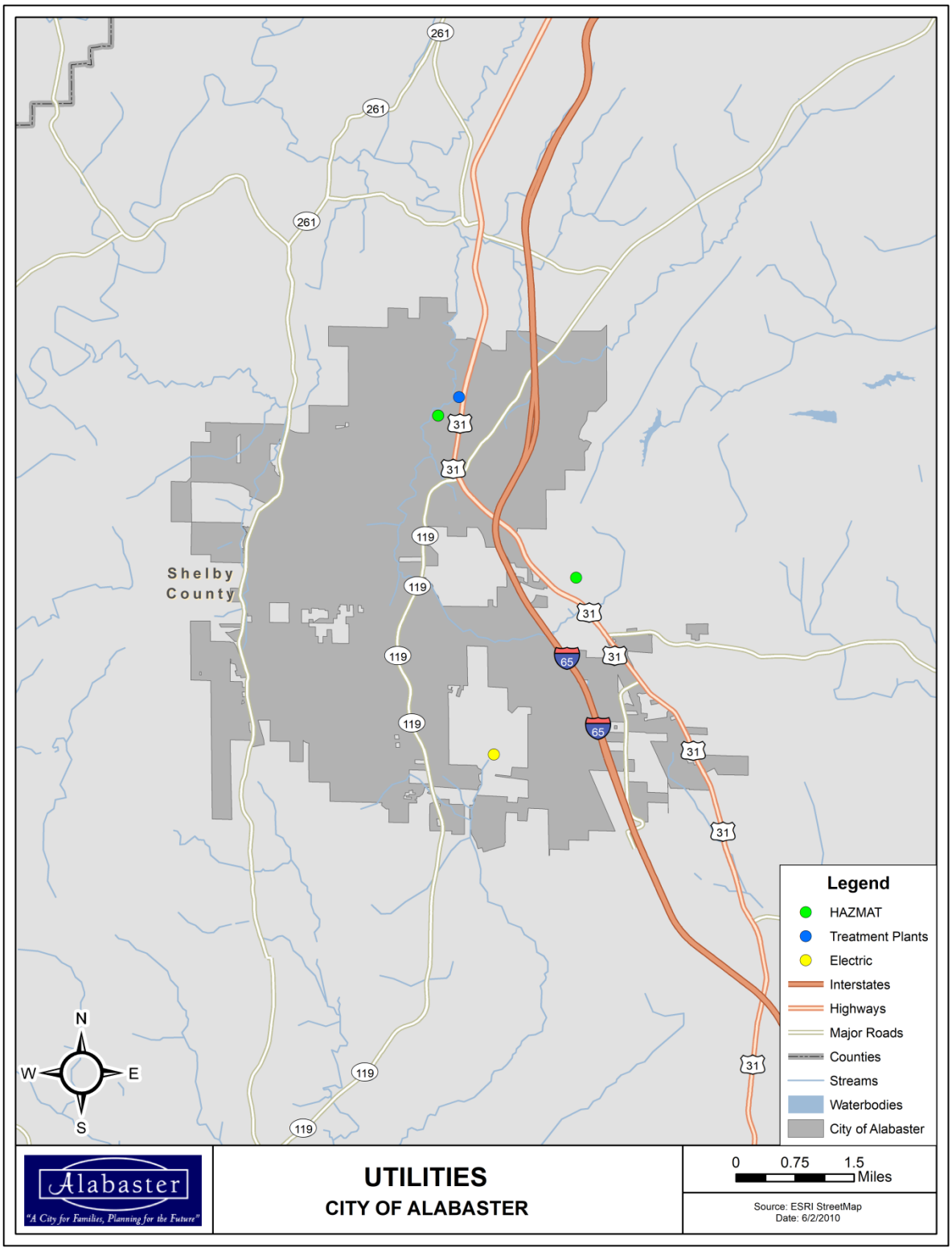


Table 4-15. Utilities for the City of Alabaster

Name	Address	Facility Type
Alabama Power General Services Complex	I-65 Exit 234 Gsc #2	Electric
Chemical Lime Co. Alabaster Plant	404 1st Ave. N.	HAZMAT
Avanti Polar Lipids Inc.	700 Industrial Park Dr.	HAZMAT
Avanti Polar Lipids Inc.	700 Industrial Park Dr.	HAZMAT
Dravo Lime Inc. - Longview Ops.	599 Hwy. 31 S.	HAZMAT
Alabaster Waste Water Treatment Plant	121 8th Avenue Northwest	Water-Wastewater
Alabaster Well #1 and Filter Plant	8th St NW	Water-Wastewater
Alabaster Well #2	Ball Park Road	Water-Wastewater
Alabaster Well #3	10th Street South West,	Water-Wastewater
Water Tank 300,000 Gal Booster Station	Hickory Hill	Water-Wastewater
2-300,000 Gal Tank	County Road 44	Water-Wastewater
100,000 Gal Tank	Navajo Trail	Water-Wastewater
Booster Station	Hwy 264	Water-Wastewater
3,000,000 Gal Tank	Kent Dairy Road	Water-Wastewater
500,000 Gal Tank	Hwy 31 South	Water-Wastewater
500,000 Gal Tank and Booster Station	County Rd 12	Water-Wastewater
500,000 Gal Tank	Hwy 31 South	Water-Wastewater
500,000 Gal Tank	Hwy 31 South	Water-Wastewater
1,500,000 Gal Tank	Forest Park	Water-Wastewater
Booster Station	Hwy 264	Water-Wastewater
300,000 Gal Tank	3rd Street North	Water-Wastewater
500,000 Gal Tank	Hwy 31 South	Water-Wastewater

Map 4-19. Utilities for the City of Alabaster



Note: Some utilities not shown on map due to sensitivity of making location available to the general public.

Table 4-16. Communication Facilities for the City of Alabaster

Name	Address	Zip Code
WQCR 1500	Co Rd 26	35007
AT&T Switching Station	1012 1st Street North	35007

Map 4-20. Communication Facilities for the City of Alabaster

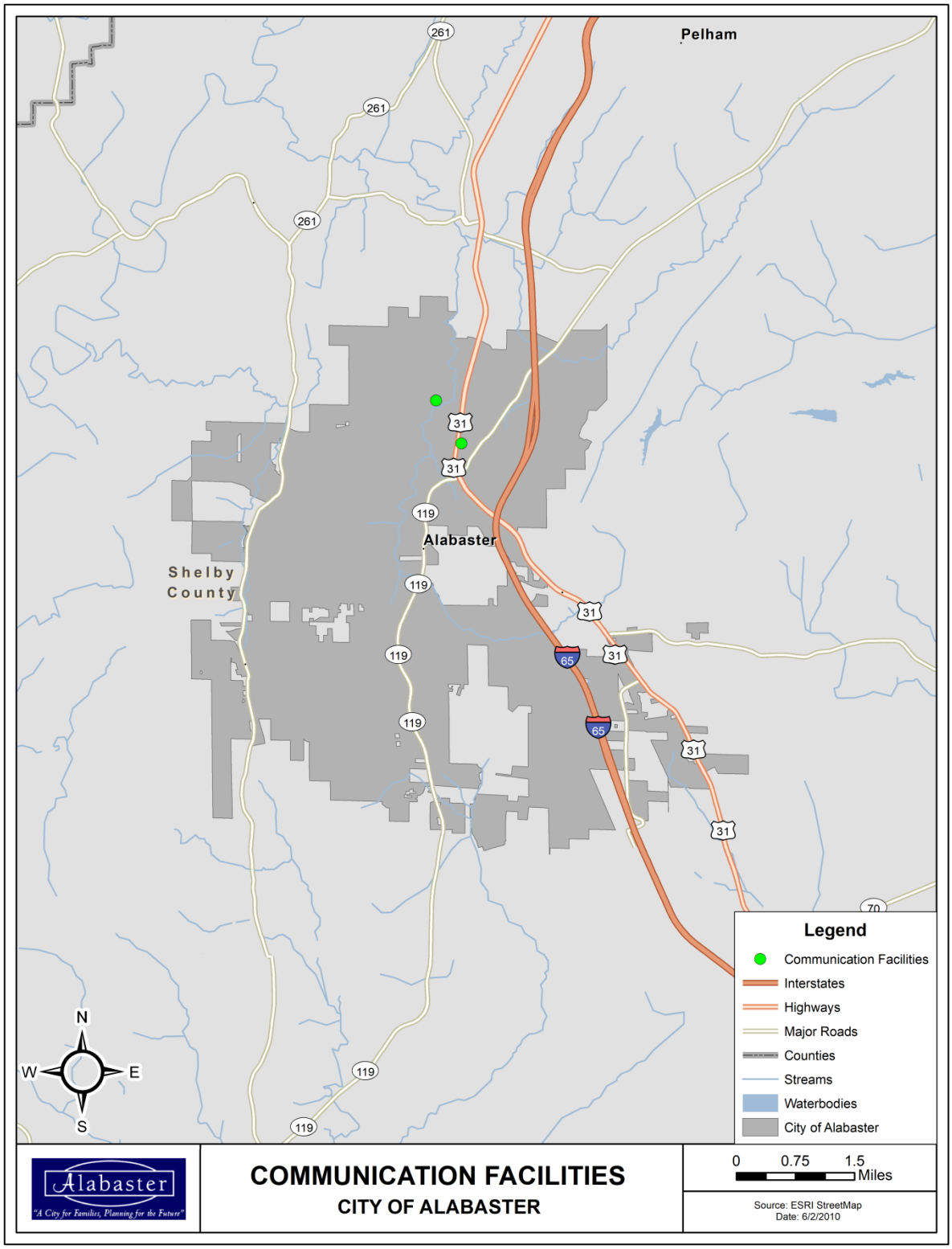
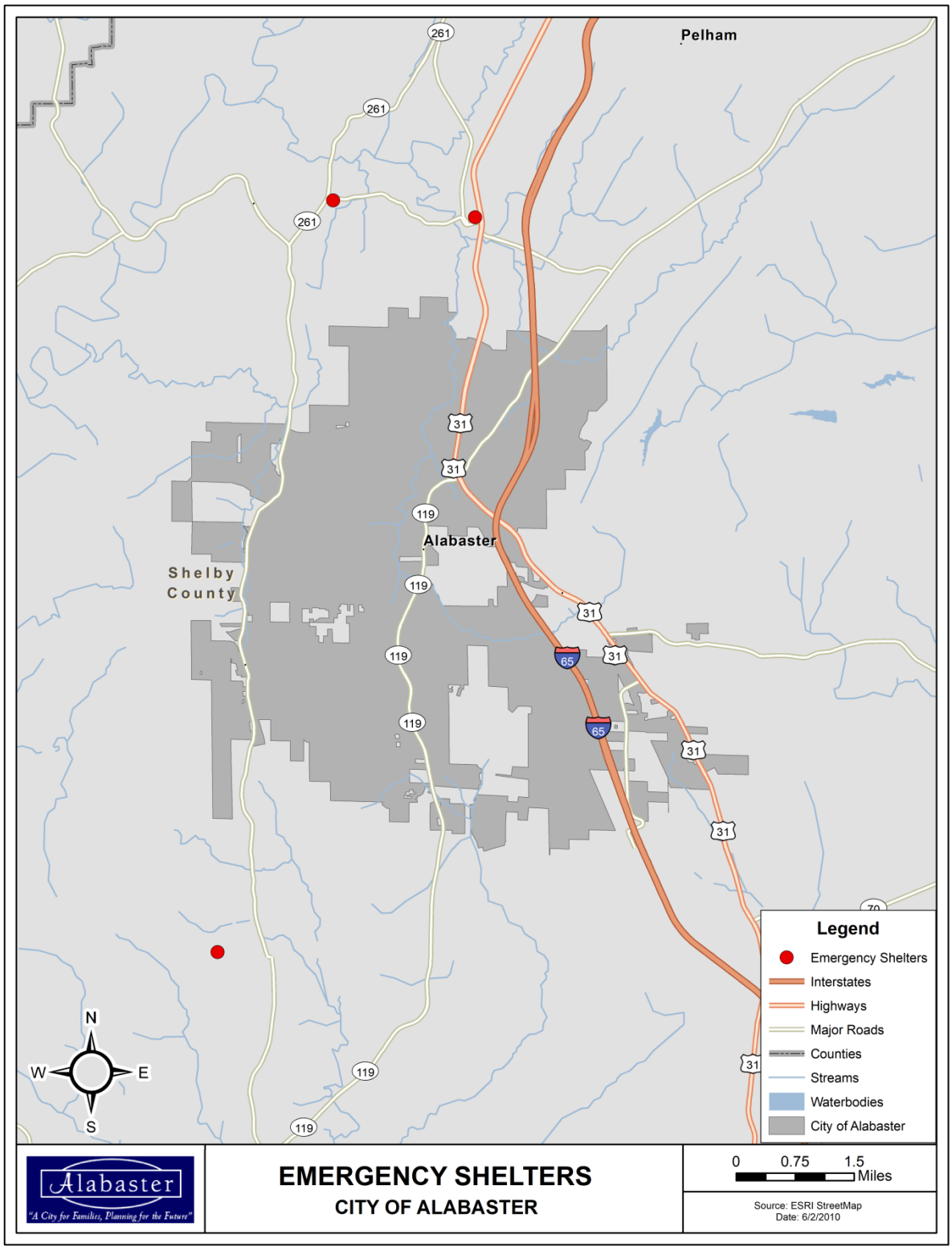


Table 4-17. Emergency Shelters in the City of Alabaster

Name	Address	Zip Code
Pelham Police Department	32 Philip Davis Street	35124
West Shelby County Community Shelter	4175 Hwy 22	35115
Helena First Baptist Church	815 Hwy 52	35080
Behind City Hall	107 Mildred Street	35051
Intersection of Hwy 62 and Gorman Park Rd	5384 Hwy 62	35078
Behind West Shelby VFD	4175 Hwy 22	35115
Westover Town Hall	3312 Westover Rd	35147

Map 4-21. Emergency Shelters in the City of Alabaster



As previously stated, critical or essential facilities are crucial following a flood event to provide assistance and needed services to the public. It is important that these facilities are able to operate fully before, during, and after a flood hazard event. **Table 4-18** contains an inventory of primary critical facilities and the expected damage from a 100-year flood event generated from the HAZUS model.

Table 4-18. Expected Damage to Essential Facilities from a 100-Year Flood Event

Classification	Total	At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	1	0	0	0
Hospitals	1	0	0	0
Police Stations	1	0	0	0
Schools	7	2	0	2

In addition to the above damage estimates, the HAZUS model indicates that all available hospital beds remain available following the modeled 100-year return period flood event.

It is important to note that HAZUS-generated structure counts, such as those in the above table, and values are approximate; however, the estimates from HAZUS are useful for prioritizing mitigation measures by place, since the relative values of existing and future populations, building inventories and values, and rates of exposure are considered reasonable for these purposes.

Local Economy

Flood damage to homes and property, city infrastructure and local business create vulnerabilities to the local economy. Businesses without utilities may not be able to function; creating loss in income for the owner and community. Damaged buildings and infrastructure will require costly repair or replacement claims to property owners, insurance companies and municipal governments. Impacts due to transportation during flood events can also cause vulnerabilities to the local economy. Transportation routes can be closed for short periods of time while flood waters are present and for longer periods of time if the roads have sustained damaged from the flooding.

The HAZUS model defines the economic losses as building-related losses only. The building-related losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated cost to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of damage sustained during a flood. Business interruption losses also include the temporary living expenses for the people displaced from their homes because of the flood. This section focuses on the business interruption losses.

HAZUS estimates the total economic loss for the 100-year flood event scenario is $98.83 million, which represents 8.27% of the total replacement value of the scenario buildings. Of this total, $670,000 or 1% of losses are categorized as business interruption losses. **Table 4-19** below provides a summary of the economic losses associated with the building damage, both direct building losses and building interruption losses.

Table 4-19. Building-Related Economic Loss Estimates (millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
Building Loss						
	Building	29.95	8.42	3.39	0.84	42.60
	Content	17.40	23.34	7.85	5.26	53.84
	Inventory	0.00	0.52	1.18	0.02	1.72
	Subtotal	**47.35**	**32.28**	**12.42**	**6.12**	**98.16**
Business Interruption						
	Income	0.00	0.17	0.00	0.02	0.19
	Relocation	0.09	0.03	0.00	0.01	0.13
	Rental Income	0.02	0.02	0.00	0.00	0.04
	Wage	0.00	0.15	0.00	0.16	0.31
	Subtotal	**0.11**	**0.37**	**0.00**	**0.19**	**0.67**
All	**Total**	**47.46**	**32.65**	**12.42**	**6.31**	**98.83**

Buildings

Many public and private buildings within the flood prone areas are subject to inundation during flood events. Older building infrastructure is especially vulnerable to damage in flood prone areas because they may have been constructed before flood ordinances required specific building construction criteria to prevent flood damage.

Within the risk assessment study area, there are an estimated 15,585 buildings with a total replacement value (excluding contents) of $4.5 billion (2010 dollars). Over 93% of the buildings are categorized as residential housing with a replacement value of $3.9 billion (85.60% of the total building value).

HAZUS estimates that approximately $1.19 billion or 26.6% of the aggregate total building replacement value is at risk during the 100-year return period flood scenario. The relative distribution of the value with respect to the overall occupancies generated by HAZUS for the modeled scenario is listed below in **Table 4-20**.

Table 4-20. Building Exposure by Occupancy Type for the 100-year Flood Scenario

Occupancy	Exposure ($1000)	Percent of Total
Residential	906,656	75.9%
Commercial	222,142	18.6%
Industrial	37,892	3.2%
Agricultural	4,211	0.4%
Religion	13,146	1.1%
Government	3,381	0.3%
Education	7,279	0.6%
Total	**1,194,707**	**100.0%**

As shown in **Table 4-19**, building losses are the primary component in the total economic loss. The total building losses are $98.16 million. The residential occupancies make up 47.4% of the total building loss value, while commercial occupancies make up only 32.3% of the total building loss value.

HAZUS estimates that about 318 buildings will be at least moderately damaged during the 100-year return period flood event. This is over 62% of the total number of buildings in the scenario. In addition, HAZUS estimates 4 buildings will be completely destroyed. **Table 4-21** below summarizes the expected damage by general occupancy for the buildings in the region. **Table 4-22** below summarizes the expected damage by general building type.

Table 4-21. Expected Building Damage by Occupancy

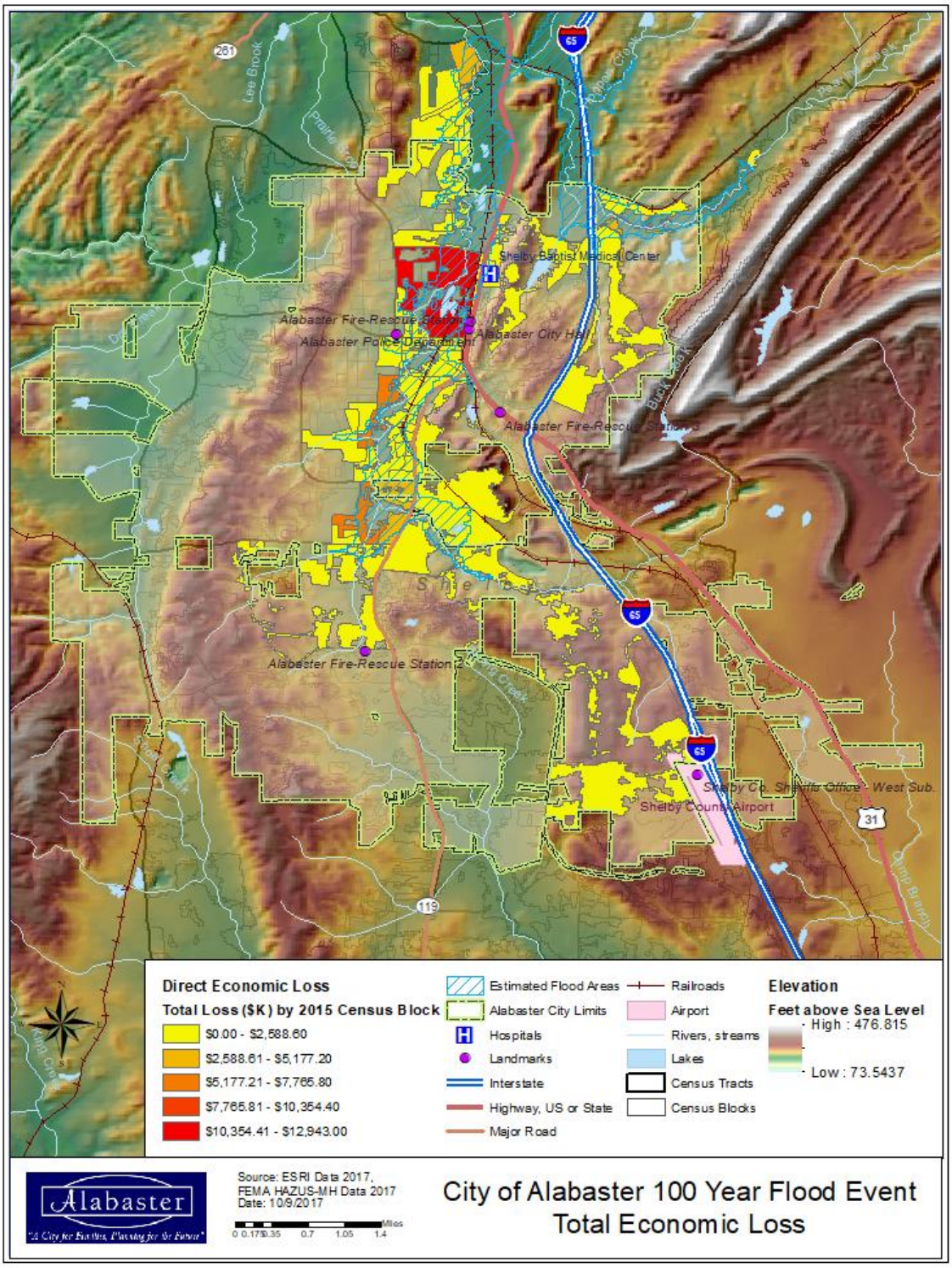
	1-10		11-20		21-30		31-40		41-50		Substantially	
Occupancy	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	134	29.65	167	36.95	74	16.37	57	12.61	16	3.54	4	0.88
Total	**134**		**167**		**74**		**57**		**16**		**4**	

Table 4-22. Expected Building Damage by Building Type

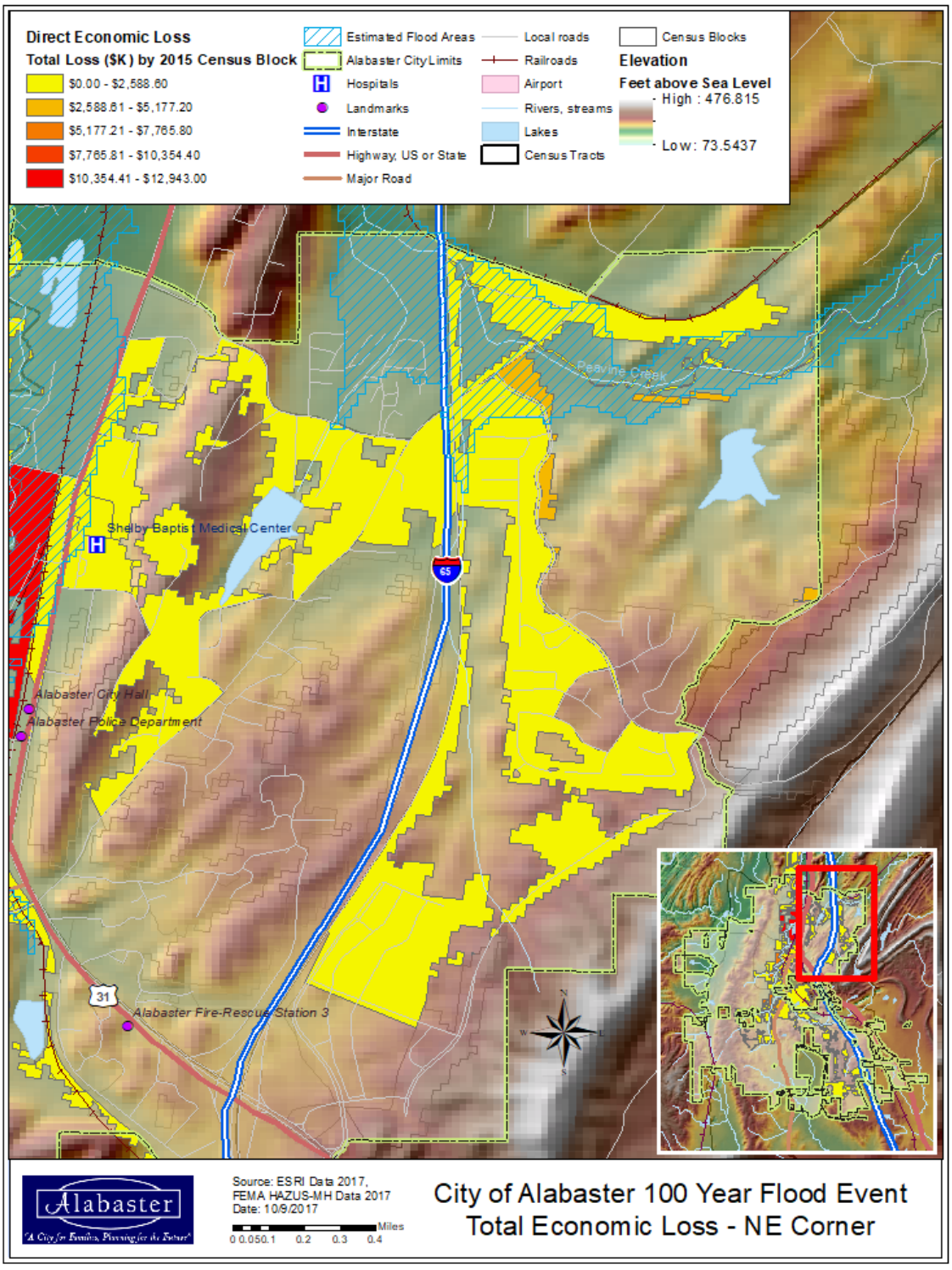
	1-10		11-20		21-30		31-40		41-50		Substantially	
Building Type	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**
Concrete	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Manufactured Housing	0	0.00	0	0.00	1	25	0	0.00	0	0.00	3	75
Masonry	3	43	4	57	0	0.00	0	0.00	0	0.00	0	0.00
Steel	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Wood	132	30	163	37	73	17	57	13	16	4	1	0.00

Graphical representations of the HAZUS results (economic loss) for the modeled 100-year flood event scenario and 500-year flood event scenario are shown in Maps 4-22 through 4-29, which follow.

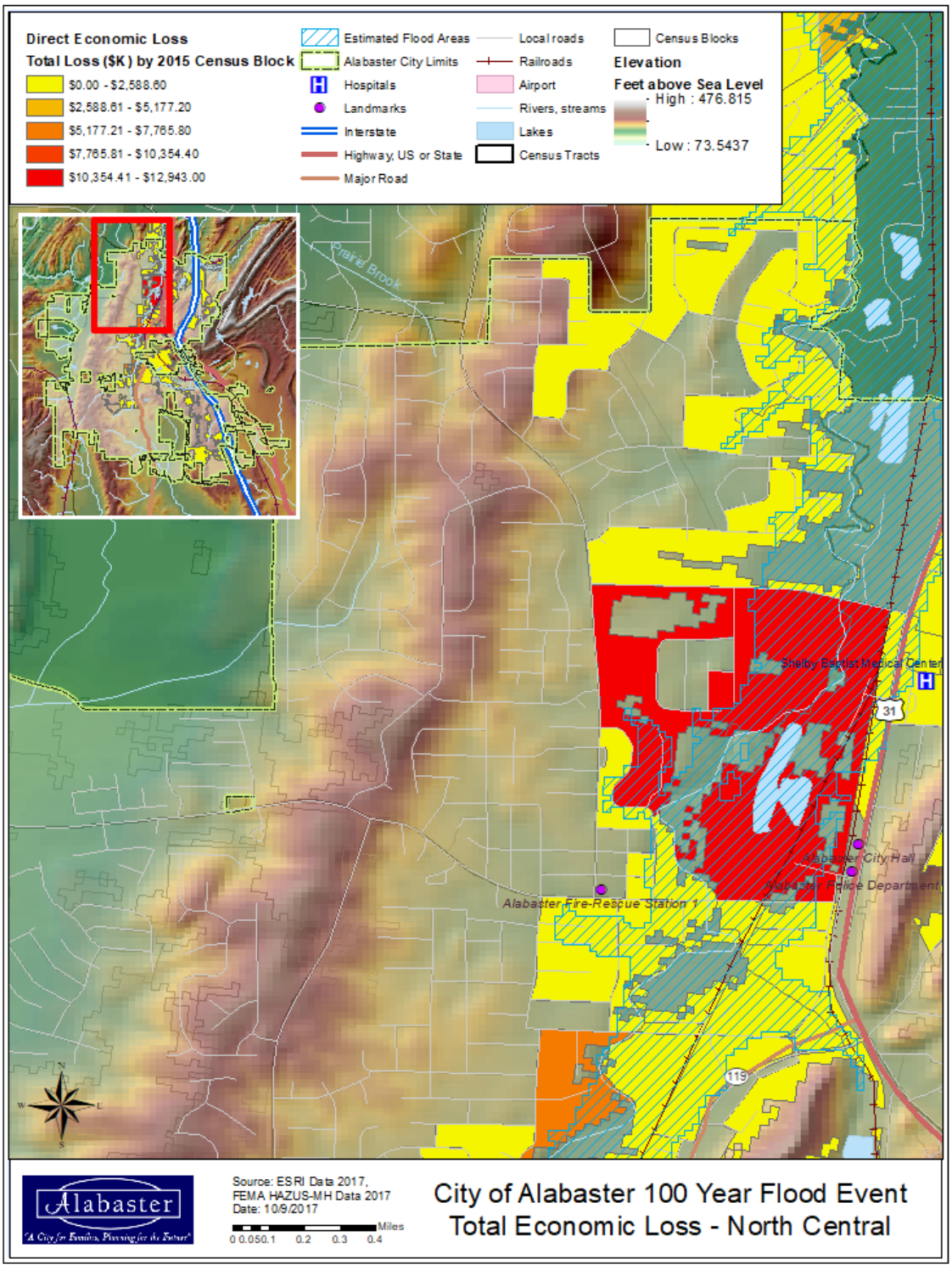
Map 4-22. Total Economic Loss from the 100-Year Flood Event 1 of 7



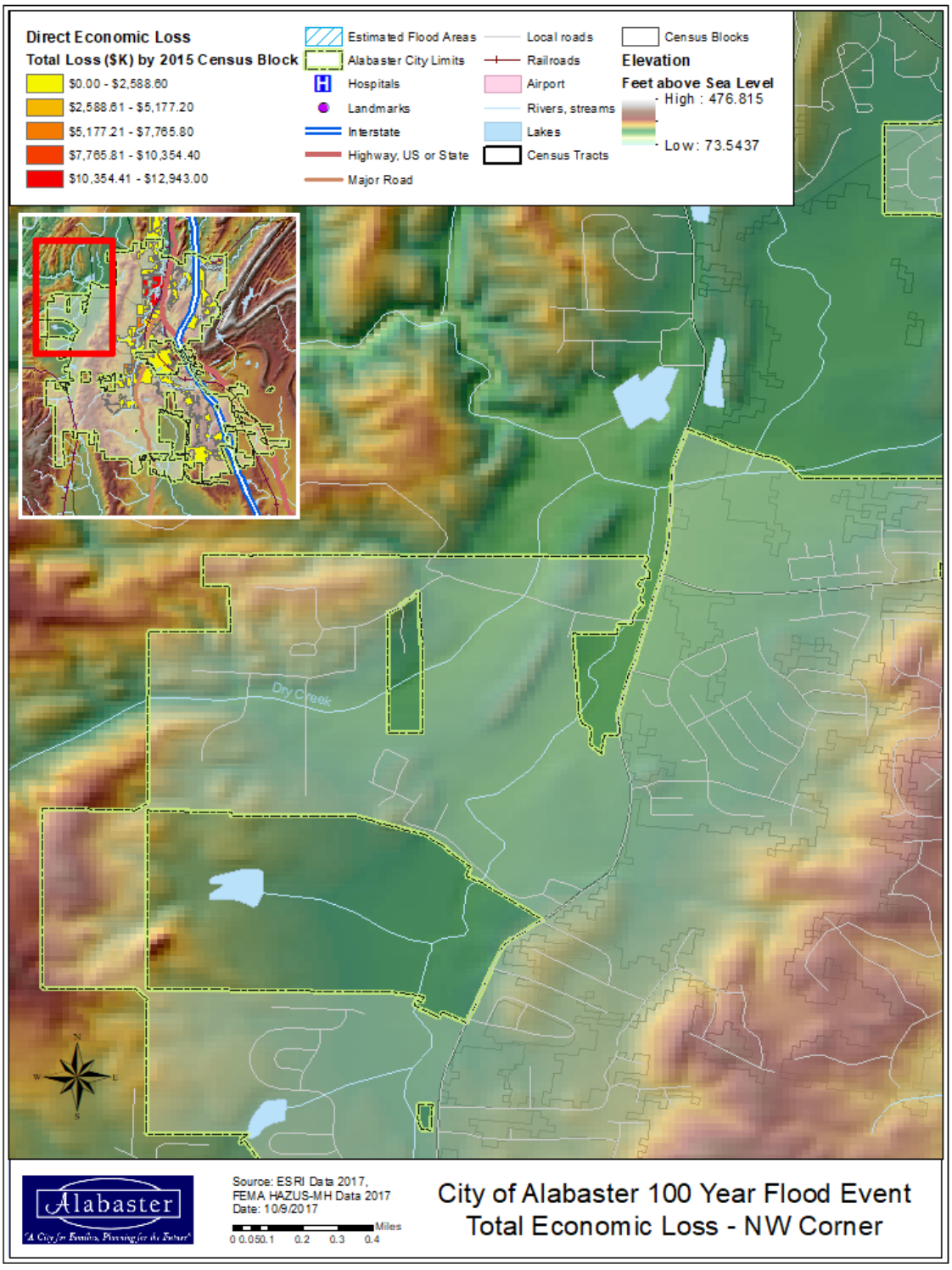
Map 4-23. Total Economic Loss from the 100-Year Flood Event 2 of 7



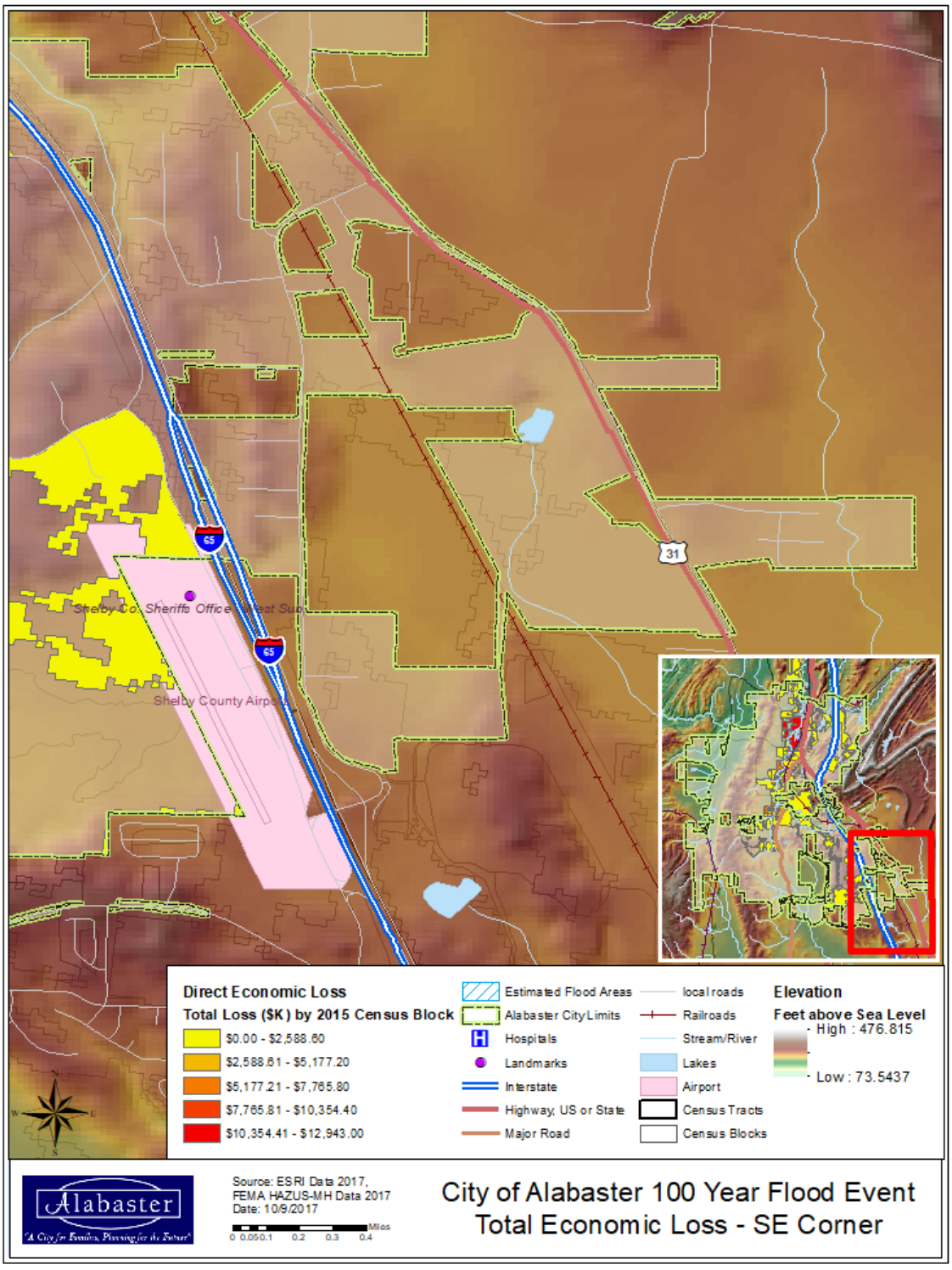
Map 4-24. Total Economic Loss from the 100-Year Flood Event 3 of 7



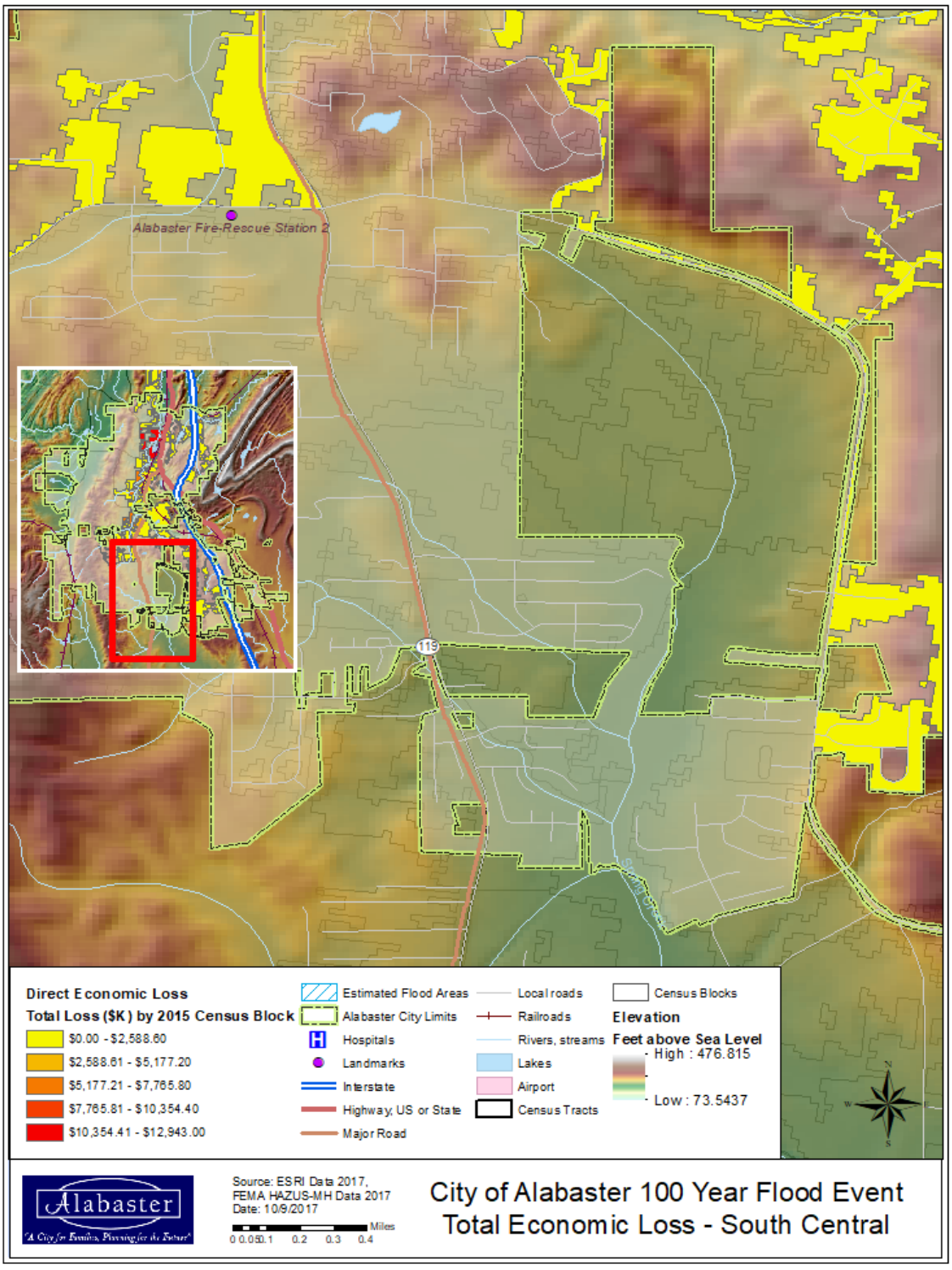
Map 4-25. Total Economic Loss from the 100-Year Flood Event 4 of 7



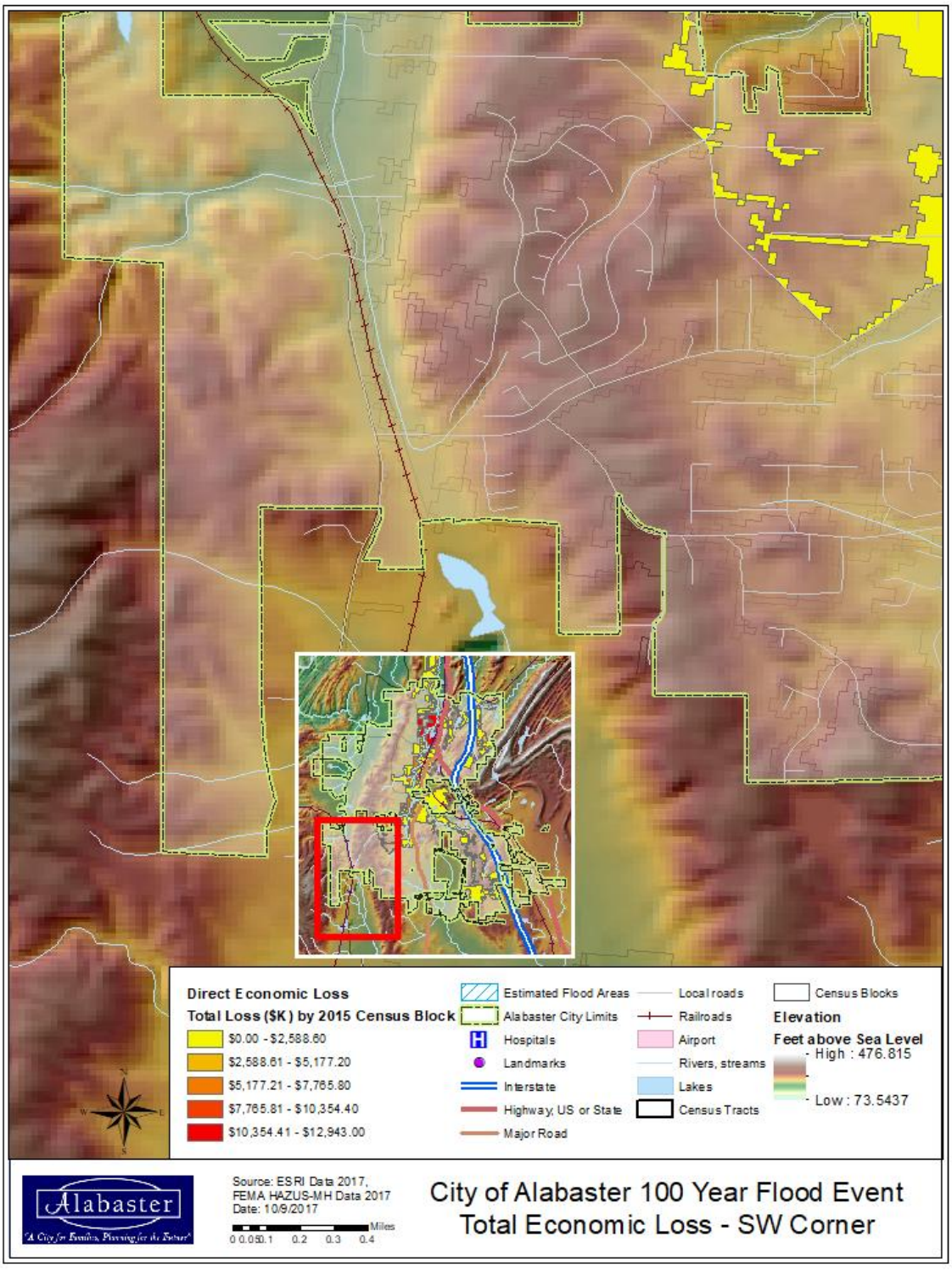
Map 4-26. Total Economic Loss from the 100-Year Flood Event 5 of 7



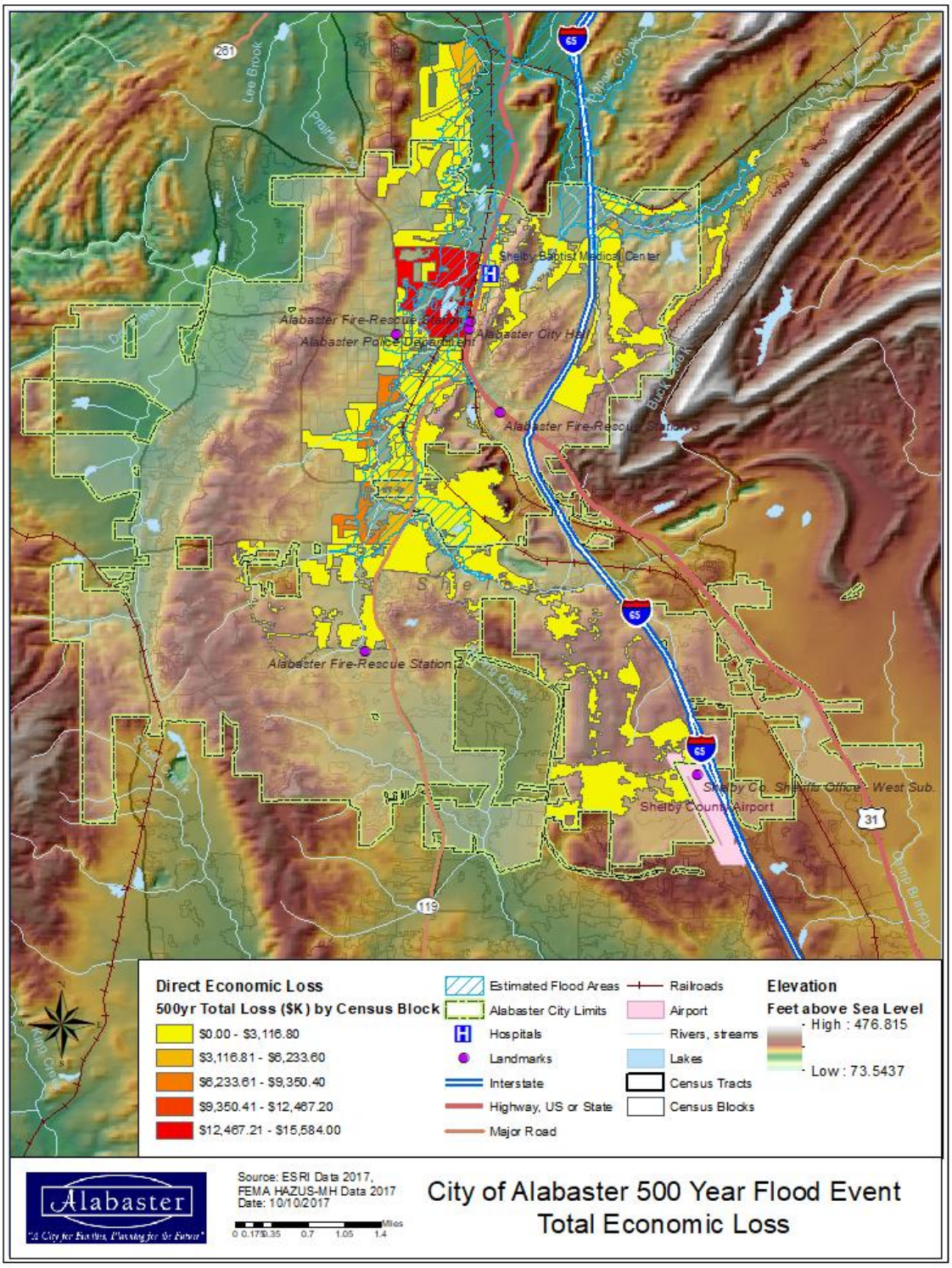
Map 4-27. Total Economic Loss from the 100-Year Flood Event 6 of 7



Map 4-28. Total Economic Loss from the 100-Year Flood Event 7 of 7



Map 4-29. Total Economic Loss from the 500-Year Flood Event, 1 of 1



4.3.3 Historical Damage

Based on National Flood Insurance Program (NFIP) data obtained from the Alabama Office of Water Resources, the City of Alabaster has 181 flood insurance policies held by residential and non-residential properties with a total insurance in force value of $50,813,500, as of December 31, 2016. The closed amount of paid losses to date is $558,506 from a total of 40 claims. **Table 4-23** summarizes the policies and claims by building type, and **Table 4-24** summarizes the policies and claims by insurance zone.

Table 4-23. Flood Insurance Claims by Occupancy as of 12/31/2016

Building Type	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	$ of Closed Paid Losses	Adjustment Expense
Single Family	139	$62,422	$29,698,000	33	$396,090.60	$20,093.91
2-4 Family	3	$1,065	$875,000	0	$0.00	$0.00
All Other Residential	12	$13,907	$5,394,300	0	$0.00	$0.00
Non Residential	27	$58,777	$14,846,200	7	$162,415.68	$11,179.82
Total	181	$136,171	$50,813,500	40	$558,505.00	$31,272.00

Source: FEMA NFIP/Alabama Office of Water Resources

Table 4-24. Flood Insurance Claims by Insurance Zone as of 12/31/2016, City of Alabaster

Insurance Zone	Policies in Force	Premium	Insurance in Force	Number of Closed Paid Losses	$ of Closed Paid Losses	Adjustment Expense
A01-30 & AE Zones	43	$50,025	$12,122,900	13	$245,699.10	$11,239.91
A Zones	5	$7,662	$805,000	6	$47,270.51	$2,080.00
AO Zones	0	$0.00	$0.00	0	$0.00	$0.00
AH Zones	0	$0.00	$0.00	0	$0.00	$0.00
AR Zones	0	$0.00	$0.00	0	$0.00	$0.00
A99 Zones	0	$0.00	$0.00	0	$0.00	$0.00
V01-30 & VE Zones	0	$0.00	$0.00	0	$0.00	$0.00
V Zones	0	$0.00	$0.00	0	$0.00	$0.00
D Zones	0	$0.00	$0.00	0	$0.00	$0.00
B, C & X Zones						
Standard	100	$67,460	$29,205,600	15	$215,521.54	$16,153.82
Preferred	33	$11,024	$8,680,000	0	$0.00	$0.00
Total	181	$136,171	$50,813,500	34	$508,490.00	$29,472

Source: FEMA NFIP/Alabama Office of Water Resources

As shown in **Table 4-24** above, the majority of the flood insurance claims come from properties within mapped A01-30 & AE Zones. It is interesting to note that a significant number of claims come from B, C, & X Zones that are areas designated as those of less frequent flood occurrence.

Repetitive loss properties account for almost 95% of the total paid claims to date. According to the information from the National Flood Insurance Program (NFIP) provided by the Alabama Office of Water Resources, all of the current repetitive loss buildings were constructed prior to the adoption of the initial FIRM (Flood Insurance Rate Map) for the community. The number of losses and claims are summarized in **Table 4-25** below.

Table 4-25. Community Repetitive Losses

	Special Flood Hazard Areas			
	AE, A1-30, AO, AH, A	VE, V1-30, V	B, C, X	Total
RL Buildings (Total)	4	0	2	6
RL Buildings (Insured)	2	0	2	4
RL Losses (Total)	16	0	11	27
RL Losses (Insured)	9	0	11	20
RL Payments (Total)	$297,594.86	$0.00	$182,950.27	$480,545.13
Buildings	$261,076.58	$0.00	$181,949.85	$443,026.43
Contents	$36,518.28	$0.00	$1,000.42	$37,518.70
RL Payments (Insured)	$211,258.94	$0.00	$182,950.27	$394,209.21
Buildings	$176,958.16	$0.00	$181,949.85	$358,908.01
Contents	$34,300.78	$0.00	$1,000.42	$35,301.20

Source: FEMA NFIP/Alabama Office of Water Resources

4.3.4 Areas in the Floodplain that Provide Natural Functions

The Special Flood Hazard Area (SFHA) covers 1,082 acres within the City of Alabaster. Much of the floodplain has been previously developed; however, portions remain undeveloped. Using the USGS National Land Cover Database 2011 and the FEMA National Flood Hazard Layer, an estimated 269.7 acres (25%) of the Special Flood Hazard Area (SFHA) remain undeveloped and provide natural and beneficial functions. These areas can be more effective at controlling or attenuating flooding as well as less expensive over the long term than traditional manmade flood control structures. Alteration of these areas within the floodplain can have an adverse impact on the magnitude and extent of flooding. Natural and beneficial functions of floodplains include the following:

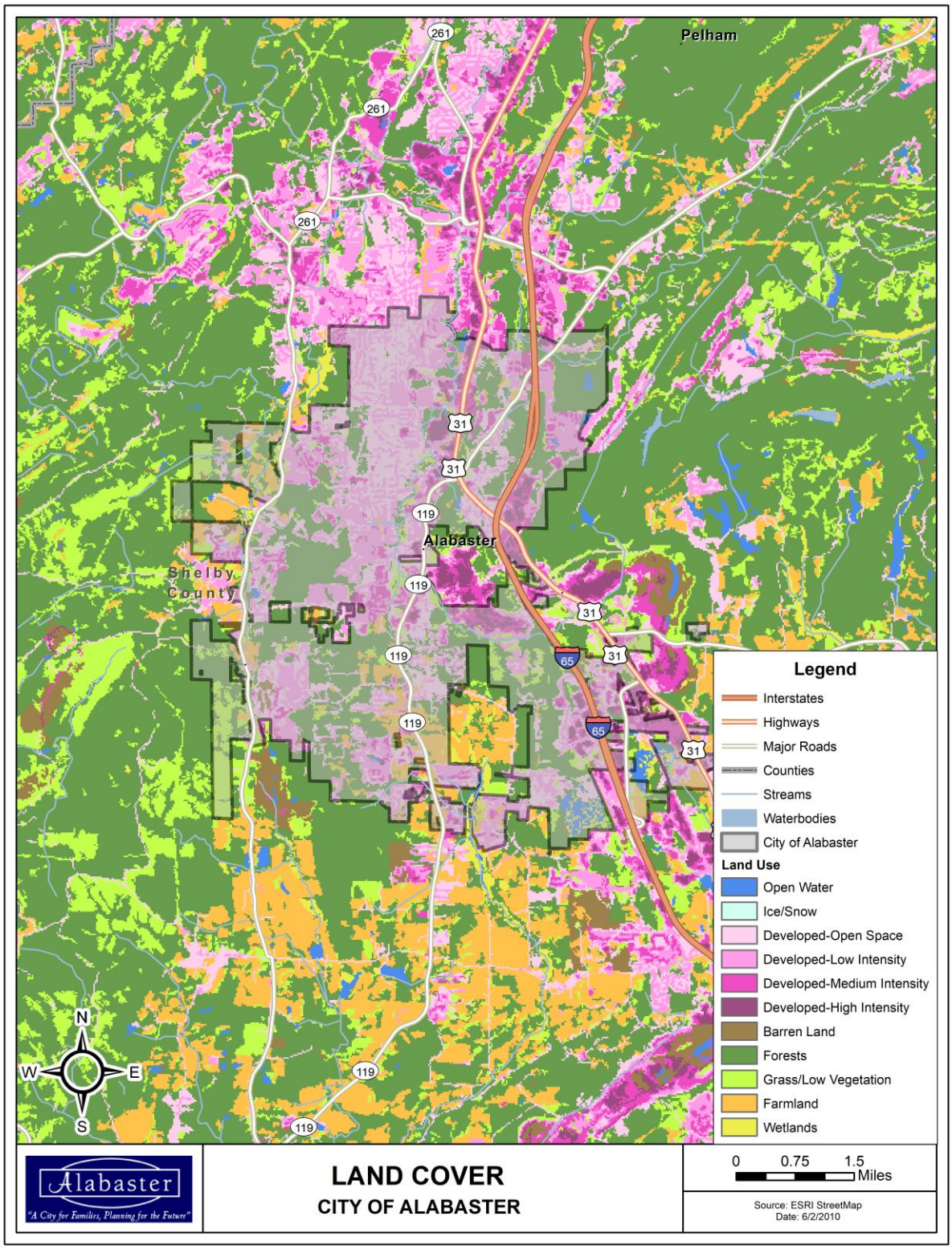
- **Water Resources**
  - *Natural Flood and Erosion Control*
    - Provide flood storage and conveyance
    - Reduce flood velocities
    - Reduce peak flows
    - Reduce sedimentation

- *Water Quality Maintenance*
  - Filter nutrients and impurities from runoff
  - Process organic wastes
  - Moderate temperature fluctuations
- *Groundwater Recharge*
  - Promote infiltration and aquifer recharge
  - Reduce frequency and duration of low surface flows

- **Biological Resources**
  - *Biological Productivity*
    - Promote vegetative growth through rich alluvial soils
    - Maintain biodiversity
    - Maintain integrity of ecosystems
  - *Fish and Wildlife Habitats*
    - Provide breeding and feeding grounds
    - Create and enhance waterfowl habitat
    - Protect habitats for rare and endangered species

Source: A Unified National Program for Floodplain Management, FEMA-248 (1994)

Map 4-40. Land Cover within the Floodplain



4.3.5 Future Development and Population Trends

The HAZUS model provided estimated losses to critical facilities and building-related losses from the 100-year return period flood event, based on current population and inventory values. Future development and population trends may alter the City's vulnerability due to flooding and types of impacts to expect.

Future Development

A review of the Alabaster Forward: City of Alabaster Comprehensive Plan Update, March 14, 2016 identified areas of future development. In addition, the plan specifically addresses development within the floodway and floodplain.

The Alabaster Forward: City of Alabaster Comprehensive Plan Update provides details to anticipated growth areas, a future land use plan, and priority redevelopment areas. The City of Alabaster Comprehensive Plan identifies the following areas as neighborhood commercial target areas with growth potential:

- CR 17 at 1st Avenue West
- CR 66 (Industrial Road) at CR 95 (9th Street SW)
- CR 11 (Simmsville Road) in the northeast city limits
- CR 12 (Butler Road) near CR 80 (Mission Hills Road)

In addition to the commercial corridors listed above, the plan identifies several priority redevelopment areas. Priority redevelopment areas are defined as key areas that need attention to slow or remediate decay. Priority redevelopment areas identified in the plan are shown below:

- U.S. 31 Medical Mile
- Siluria Mill
- U.S. 31 Corridor
- U.S. 31 at SR 119/CR 11 Intersection

Residential growth areas are also identified in the City of Alabaster Comprehensive Plan. These were selected based on "evaluation of recent and current growth patterns, proposed planned expansion of the City (annexation), short-term and long-term transportation project plans, and public school strategies." The four residential growth areas specified in the plan are as follows:

- Between CR 12 (Smokey Road) and CR 26 (Fulton Springs Road)
- Between Alabaster's eastern boundary and the Saddle Lake community
- Along CR 17
- East of SR 119

Population Trends

New growth and expansion areas are needed as population increases. The population of the City of Alabaster has continued to increase in recent years and is expected to continue to increase at a rapid pace. **Table 4-26** and **4-27** are from the Center for Business and Economic Research at the University of Alabama and provide current and projected population growth trends for the study region.

Table 4-26. 2010 to 2015 Population Estimates

	April 1, 2010		Population Estimates (as of July 1)			Change, 2010-2015	
	Census	Est. Base	2010	2012	2015	Number	Percent
Alabama	4,779,736	4,780,127	4,785,161	4,816,089	4,858,979	78,852	1.6
Alabaster city	30,352	30,986	31,095	31,587	32,707	1,721	5.6

Source: U.S. Census Bureau, Population Division, and Center for Business and Economic Research, University of Alabama, May 2016.

Table 4-27. 2000-2010 Population and 2015-2040 Projections

MSA	Census		Projection				Change 2010-2040	
	2000	2010	2015	2020	2030	2040	Number	Percent
Alabama	4,447,100	4,779,736	4,855,847	4,941,485	5,124,710	5,319,305	539,569	11.3
Shelby County	143,293	195,085	208,085	224,628	253,485	276,373	81,288	41.7

Note: These projections are driven by population change between Census 2000 and Census 2010, taking into account 2015 population estimates. Data on births and deaths for 2000 to 2010 as well as more recent data from the Alabama Department of Public Health are used to derive birth and death rates for the state and each county.

Source: U.S. Census Bureau and Center for Business and Economic Research, University of Alabama, March 2017.

Table 4-28. City of Alabaster Population Estimates

	2014	2020	2025	2030	2035	2040
Population	31,566	35,453	39,025	42,596	46,168	49,739
Growth Rate 2014-2040	-	12.3%	23.6%	34.9%	46.3%	57.6%

Source: RPCGB Forecasts and Alabaster Forward: City of Alabaster Comprehensive Plan Update, March 14, 2016

4.3.6 Future Flooding Conditions

With an increasing population and continued development within the City, changes to the flooding conditions can be expected. Based on the population estimates in **Table 4-26**, the population of the City of Alabaster is expected to be approximately 49,739 by 2040. This is an expected increase in population of over 63% since 2010. With the increase in population,

development will continue to expand to provide housing, commercial, and government facilities (schools, police, fire, etc.) to keep up with the ever-increasing demand.

The population increase will increase the pressure to develop properties within floodplains and other less desirable sites. Future development within the floodplain could potentially have an adverse effect on flooding due to loss of floodplain storage, increased flows, and higher velocities. Moreover, the more developed each watershed becomes, the greater the increase in flows; consequently, higher flood elevations and more frequent flooding can be expected.

Chapter 5 – Mitigation Strategy

5.1 Floodplain Management Goals
5.2 Review of Floodplain Management Activities
5.3 Floodplain Management Action Plan

5.1 Floodplain Management Goals

5.1.1. Purpose and Basis for Goals

The Vision

The goals that guide this Mitigation Strategy for floodplain management have been developed to help achieve the City's long-range vision for flood disaster resistance and community resiliency. Ultimately, the City aims to achieve active resistance to the threats of flooding and related natural hazards to human life and property through publicly-supported mitigation actions with proven results. The City embraces a long-term commitment to reduce the exposure and risks to flooding and related hazards within its jurisdiction. The City plans to activate all of its available resources through cooperative governmental and private sector initiatives, augmenting public knowledge and awareness, and enhancing local mitigation capabilities to maximize community resiliency.

Consistency with Adopted County Plan

The goals of this plan are fully consistent with the goals set forth in the 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan, which has been adopted by the City of Alabaster.

5.1.2. Goals for Floodplain Management

To attain its vision, the City of Alabaster hereby establishes the following goals to guide its floodplain management activities:

1. **Preventive Goal.** Manage the development of land and buildings to minimize risks of loss due to flooding and related natural hazards. Protect structures and their occupants and contents from the damaging effects of such hazards.

2. **Property Protection Goal.** Protect structures and their occupants and contents from the damaging effects of flooding and related natural hazards.

3. **Public Education and Awareness Goal.** Educate and inform the public about the risks of flooding and related natural hazards and the techniques available to reduce threats to life and property.

4. **Natural Resources Protection Goal.** Preserve and restore the beneficial functions of floodplains and the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.

5. **Structural Projects Goal.** Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of flooding and related natural hazards, where found to be feasible, cost effective, and environmentally suitable.

6. **Emergency Services Goal.** Improve the efficiency, timing, and effectiveness of response and recovery efforts for flooding and related natural disasters.

5.2 Review of Floodplain Management Activities

5.2.1 Review of Current CRS Floodplain Management Activities

As part of the planning process, an assessment was conducted to identify potential credits for current flood plain management activities under the Community Rating System (CRS) Program. Upon application to the CRS Program, a CRS Verification Visit will be conducted by the Insurance Services Office, Inc. (ISO), which will issue a Verification Report that documents the points that can be credited for the City's initial entry into the CRS Program. Usually, a community will enter the CRS as a class 9 community.

A summary of these findings with estimated credit points for each of the current activities are organized according to the goals of this plan, as follows:

1. **Preventive Activities.**

- Activity 310 – Elevation Certificates: The Building Official maintains elevation certificates for new and substantially improved buildings. (38 points)
- Activity 320 – Map Information Service: Credit is provided for furnishing inquirers with basic flood zone information from the community's latest Flood Insurance Rate Map. To receive credit, the service must be publicized annually and records must be maintained. (30 points)
- Activity 430 – Higher Regulatory Standards: Credit is provided for enforcing regulations that require freeboard for new and substantial improvement construction, cumulative substantial improvement, and local drainage protection. Credit is also provided for the enforcement of building codes. (177 points)
- Activity 440 – Flood Data Maintenance: Credit is provided for maintaining and using overlay maps in the day to day management of the floodplain.

Credit is also provided for maintaining copies of all previous FIRMs. (100 points)

- Activity 450 – Stormwater Management: The community enforces regulations for stormwater management, soil and erosion control. (84 points)

2. **Property Protection Activities**

   - No credit.

3. **Public Education and Awareness Activities**

   - No credit.

4. **Natural Resources Protection Activities**

   - No credit.

5. **Structural Projects Activities**

   - No credit.

6. **Emergency Services Activities**

   - No credit.

5.2.2 Review Criteria

STAPLEE Review

In addition to the current activities, which have been carried forward to the Action Plan, a range of other possible activities have been reviewed for effectiveness in preventing or reducing the severity of the problems identified in *Chapter 4. - Risk Assessment*. With the exception of certain activities that are clearly not feasible or inappropriate, all of the remaining activities described here have been evaluated for possible inclusion in the Action Plan. These include a wide range of possible activities to assure all potential alternatives have been considered.

The pros and cons of each activity have been evaluated by applying the STAPLEE method, the same method applied to the evaluation of mitigation measures in the County plan. The STAPLEE method examines social, technical, administrative, political, legal, environmental, and economic considerations and provides a ready method for rating and prioritizing each mitigation activity. To perform this evaluation, each measure must respond to many of the questions presented below for each of the areas of consideration:

Social Considerations.

- *Environmental justice.* Will the proposed measure be socially equitable to minority, disadvantaged, and special needs populations, such as the elderly and handicapped?

- *Neighborhood impact.* Will the measure disrupt established neighborhoods or improve quality of life for affected neighborhoods?

- *Community support.* Is the measure consistent with community values? Will the affected community support the measure?

- *Impact on social and cultural resources.* Does the measure adversely affect valued local resources or enhance those resources?

Technical Considerations.

- *Technical feasibility.* Is the proposal technically possible? Are there technical issues that remain? Does the measure effectively solve the problem or create new problems? Are there secondary impacts that might be considered? Have professional experts been consulted?

Administrative Considerations.

- *Staffing.* Does the City have adequate staff resources and expertise to implement the measure? Will additional staff, training, or consultants be necessary? Can local funds support staffing demands? Will the measure overburden existing staff loads?

- *Maintenance.* Does the City have the capabilities to maintain the proposed project once it is completed? Are staff, funds, and facilities available for long-term project maintenance?

- *Timing.* Can the measure be implemented in a timely manner? Are the timeframes for implementation reasonable?

Political Considerations.

- *Political support.* Do the Mayor and City Council support the proposed measure? Does the public support the measure? Do stakeholders support the measure? What advocates might facilitate implementation of the proposal?

Legal Considerations.

- *Legal authority.* Does the City have the legal authority to implement the measure? What are the legal consequences of taking action to implement

the measure as opposed to an alternative action or taking no action? Will new legislation be required?

Environmental Considerations.

- *National Environmental Policy Act (NEPA).* Will the measure be consistent with Federal NEPA criteria? How will the measure affect environmental resources, such as land, water, air, wildlife, vegetation, historic properties, archaeological sites, etc.? Can potentially adverse impacts be sufficiently mitigated through reasonable methods?

- *State and local environmental regulations.* Will the measure be in compliance with State and local environmental laws, such as flood plain management regulations, water quality standards, and wetlands protection criteria?

- *Environmental conservation goals.* Will the proposal advance the overall environmental goals and objectives of the community?

Economic Considerations.

- *Availability of funds.* Will the measure require Federal or other outside funding sources? Are local funds available? Can in-kind services reduce local obligations? What is the projected availability of required funds during the timeframe for implementation? Where funding is not apparently available, should the project still be considered but at a lower priority?

- *Benefits to be derived from the proposed measure.* Will the measure likely reduce dollar losses from property damages in the event of a hazard? To what degree?

- *Costs.* Are the costs reasonable in relation to the likely benefits? Do economic benefits to the community outweigh estimated project costs? What cost reduction alternatives might be available?

- *Economic feasibility.* Have the costs and benefits of the preferred measure been compared against other alternatives? What is the economic impact of the no-action alternative? Is this the most economically effective solution?

- *Impact on local economy.* Will the proposed measure improve local economic activities? What impact might the measure have on the tax base?

- *Economic development goals.* Will the proposal advance the overall economic goals and objectives of the community?

The STAPLEE method of evaluation also facilitates the prioritization of measures. If a measure under consideration is found to be financially feasible and has

high ratings within other areas of consideration, it might be given a higher priority for implementation than measures that fell lower in the ratings. Moreover, a general economic evaluation can be performed as part of the STAPLEE method, as described above. Weighing potential economic benefits to reducing damages against costs make it possible to select among competing projects.

Especially important to the selection process is availability of funds through local, State, Federal, and private resources. Potential FEMA Hazard Mitigation Assistance (HMA) grant programs, such as FEMA's Hazard Mitigation Grant Program (HMGP), Pre-Disaster Mitigation Grant Program (PDM), and the Flood Mitigation Assistance (FMA) Program are sometimes available to help fund eligible projects. As new sources of funding become available through the HMA grant programs, or other sources, the priorities for implementation of select projects may need to be reevaluated.

Another consideration for evaluating alternative mitigation measures is the capability of the City to implement the measures. Appendix D "Community Mitigation Capabilities Assessment" examines select capability measures.

5.2.3 Individual Mitigation Action Plan of the County Plan

The activities listed in this section are those related to the mitigation of flooding and related hazards that are included in the *City of Alabaster Individual Mitigation Action Plan* in the 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan that has been adopted by the Alabaster City Council. All of these activities have been considered for inclusion in the Floodplain Management Action Plan.

Hazard Goal & Actions	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL1a	Distribute flood awareness and preparedness literature at events. City website.	Local Govt.	Local funds	1,104 110,350	2015 2020	81
HW3a	Adopt/enforce comprehensive Building Code legislation. Use the IBC codes.	Planning	Local funds	1,104 110,350	2015 2020	81
AH3y	Insure building code compliance Inspections are conducted on construction projects.	Building Services	Local funds	11,035 110,350	2015 2020	79
FL3a	Participate in the National Flood Insurance Program (NFIP).	City Govt.	Local funds	1,104 110,350	2015 2020	78
FL3h	Educate developers on Watershed, Floodplain, and wetland development restrictions.	Building	Local funds	1,104 110,350	2015 2020	77

AH1i	Develop/maintain a public information website on hazard preparedness and response. City website.	City officials	City Budget	11,035 551,750	2015 2020	74
FL3d	Participate in the NFIP Community Rating System.	City Govt.	Local funds	1,104 110,350	2015 2020	74
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas.	Building	Local funds	8,828 110,350	2015 2020	72
FL3f	Identify roadways, culverts, and bridges damaged by flooding (several locations). Inspected every 2 years.	Street	Grant Local funds	1,104 11,035	2015 2020	71
FL3a4	Educate developers, builders, and the public on the location of NFIP designated floodplains.	City Govt. Planning	Local funds	1,104 11,035	2015 2020	70
FL3f3	Obtain/install barriers to block flooding roadways and bridges.	Street	Grant Local funds	11,035 110,350	2015 2020	70
FL3a1	Adopt/enforce an NFIP floodplain management plan that includes wetlands and watersheds.	City Govt.	Local funds	11,035 110,350	2015 2020	68
FL3a2	Adopt/enforce floodplain legislation to require structure to be elevated above the NFIP BFE.	City Govt.	Local funds	1,104 110,350	2015 2020	68
FL3a3	Educate builders, developers, and the public on the National Flood Insurance Program (NFIP). Continual.	City Govt. Planning	Local funds	1,104 110,350	2015 2020	65
FL3f	Develop a storm water management plan for the jurisdiction.	Planning City Govt.	Local funds	1,104 11,035	2015 2020	65
FL3c	Obtain funding to retrofit, elevate, or relocate NFIP repetitive flooding structures.	EMA, City Govt.	Grant Local funds	1,103,500 5,000,000	2015 2020	64
FL3e	Adopt/enforce land use floodplain wetlands and watershed zoning. No zoning for restrictive use areas.	City Govt.	Local funds	1,104 110,350	2015 2020	64
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt.	Local funds	1,104 11,035	2015 2020	64

FL3f1	Install/replace/maintain culverts, ditches, and bridges to reduce storm water flooding. Review annually or as needed.	Street	Grant Local funds	551,750 1,103,500	2015 2020	60

5.2.4 Discussion of Alternative Mitigation Activities

The Floodplain Management Planning Committee (FMPC) reviewed the current activities that could be credited under the Community Rating System (CRS) Program (see section 5.2.1 above), the activities endorsed by the City of Alabaster in its Individual Mitigation Action Plan, adopted as a component of the 2016 Shelby County Multi-Jurisdictional Multi-Hazard Mitigation Plan and further evaluated a full range of alternative mitigation activities presented in this section. All of these potential mitigation activities were summarized and presented as an exercise completed by members of the FMPC and discussed at their March 13, 2018, meeting. The results of this exercise can be found in Appendix G "Alternative Mitigation Measures Exercise." The alternatives considered for inclusion in the Floodplain Management Action Program have been grouped according to the six goal areas, noted below. These activities have been evaluated according to the STAPLEE method for appropriateness, taking into account the pros and cons of each potential mitigation activity. Further, the City's funding and implementation capabilities have been carefully considered. A discussion of the evaluation results follows.

1. Preventive Activities

Existing Preventive Activities.

The City has a range of planning and regulatory tools available to manage development and reduce future flood losses, as discussed below. The City Engineer, Planning and Zoning Coordinator, and Building Official have primary responsibility for maintaining and enforcing these tools.

The City has a longstanding record of active comprehensive planning. Comprehensive plans adopted by the City over the past decades intend to manage future growth and development throughout the City, thereby reducing future flood losses.

As described in Appendix D "Mitigation Capabilities Assessment," the City adopted the Alabaster Forward Comprehensive Plan on March 14, 2016. The overall purpose of this plan is to guide decisions and actions that can influence future growth and land development over a long-range period.

The City administers the 2009 International Code Series of building and technical codes that establish minimum design and construction standards for all aspects of building construction. The codes are enforced through residential and commercial

permitting systems and are integrated with other development controls, including floodplain management controls, through permitting systems and interdepartmental review processes.

Central to land use and development control is the Zoning Ordinance of Alabaster, Alabama. The Zoning Ordinance lays out district land use, dimensional standards, and other development criteria in accordance with a zoning map of the land use districts. In turn, the comprehensive plan guides the mapping of zoning district. The Alabaster Subdivision and Development Regulations, work in concert with the Zoning Ordinance and other development controls to ensure minimum design and construction standard be met for major subdivisions, and the regulations set out the procedures for platting lots.

The Flood Hazard Ordinance follows the model provisions recommended by the State NFIP Coordinator but exceeds the minimums required for participation in the NFIP. An estimated CRS Credit for 177 points is available for higher regulatory standards. Credit can be given for enforcing regulations that require a one foot freeboard (elevation) construction within the floodplain. Other points can be credited for cumulative substantial improvement provisions, local drainage protection, and the enforcement of building codes.

The FMPC considered many preventive options and determined that the City's floodplain management ordinance could be amended to include additional higher regulatory standards to further reduce potential flood losses. Among other revisions that might be considered are higher regulatory standards to increase the freeboard. Given the extents of the flood risks identified in Chapter 4 "Risk Assessment" and projected City growth, a review of all of the development controls discussed in this section would assure a more integrated program of floodplain management.

2. Property Protection Activities

As noted in Appendix G, the FMPC considered various property protection activities, such as property acquisitions, which might be feasible.

3. Public Education and Outreach Activities

Public outreach activities are low cost and popular. The FMPC offers full support of such efforts, which is reflected in the Floodplain Management Action Plan in Section 4.3.

4. Natural Resource Protection Activities

A range of natural resource protection activities were considered including zoning and subdivision controls to require open space or establish larger lot size minimums in the floodplains.

5. Structural Projects Activities

The City recognizes the benefits of comprehensive drainage system maintenance to reduce flood losses and would consider additional measures to improve maintenance. Among other measures to be considered is a program of regular channel inspections and debris removal.

6. Emergency Services Activities

The Shelby County EMA has primary responsibility county-wide for emergency response to flooding and other natural disasters.

5.3 Floodplain Management Action Plan

This section presents the Floodplain Management Action Plan recommended by the Floodplain Management Planning Committee and adopted by the Alabaster City Council. This Action Plan is the culmination of the planning process and schedules implementation of the listed measures over the next five year planning cycle ending on December 31, 2023. The Action Plan is continually reviewed for progress towards implementation and may be updated and amended from time-to-time, in accordance with Chapter 6 "Plan Maintenance Procedures."

The following key explains the components of the Action Plan:

Key

- *"Mitigation Actions by Goal Area and Objective."* Each mitigation action has been grouped according to the six long-term planning goals. Within each goal area, the actions have been organized according to plan objectives.
- *"Implementation Responsibility."* This action plan assigns lead responsibility for implementation to a specific department or agency or position within the organization.
- *"Timeframe for Completion."* Timeframes are *Short-Range* (less than 2 years), *Mid-Range* (2-3years), *Long-Range* (more than 3 years) or *Ongoing*.
- *"Funding Source(s)." P*otential funding sources are identified. FEMA Hazard Mitigation Assistance (HMA) grant programs, where noted, include the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation (PDM) grant, and Flood Mitigation Assistance (FMA) grants. These are possible funding sources but are subject to final eligibility determination, including, among other eligibility criteria, a positive benefit/cost analysis and the availability of funds.
- *"Priority." Priorities are High, Medium, and Low.*
- *"TBD"* is to be determined.

Table 5-1. 2018-2023 Floodplain Management Action Plan

#	Mitigation Actions by Goal Area and Objective	Implementation Responsibility	Timeframe for Completion	Funding Source	Priority
1	***Goal for Prevention.*** ***Manage the development of land and buildings to minimize risks of loss due to flooding and related natural hazards. Protect structures and their occupants and contents from the damaging effects of such hazards.***				
1.1	**Elevation Certificates.** Maintain FEMA Elevation Certificates for buildings in the floodplain.				
1.1.1	Maintain FEMA elevation certificates for all new or substantially-improved buildings and existing "post-FIRM" buildings constructed after the effective date of the City's first FIRM on January 2, 1981.	City Engineer	Ongoing	Existing City funds	High
1.2	**Floodplain Mapping.** Keep accurate and current floodplain maps and data used for regulatory purposes.				
1.3	**Higher Regulatory Standards.** Amend the City's Flood Damage Prevention Ordinance to establish new regulatory standards that exceed the NFIP minimums that are effectively administered by qualified City staff.				
1.3.1	Consider a requirement for additional freeboard of more than one foot for minimum building elevation and flood protection.	City Engineer	Mid-Range	Existing City funds	Medium
1.3.2	Continue to require foundations to be designed by a licensed engineer.	Building Safety	Ongoing	Existing City funds	Medium
1.3.3	Consider lowering the threshold for substantial improvements to less than 50% of the building value requires full compliance with floodplain management ordinance.	City Engineer	Long-Range	Existing City funds	Low
1.3.4	Consider a requirement that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years.	City Engineer	Long-Range	Existing City funds	Low
1.3.5	Consider protection of critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation.	City Engineer	Mid-Range	Existing City funds	Medium
1.3.6	Consider a requirement for compensatory storage for fill.	City Engineer	Long-Range	Existing City funds	Low
1.3.7	Consider a prohibition on outdoor storage of hazardous materials in the floodplain.	City Engineer	Mid-Range	Existing City funds	Medium
1.4	**Flood Data Maintenance.** Maintain essential field data for floodplain management.				
1.4.1	Maintain elevation reference marks.	Public Works and City Engineer	Ongoing	Existing City funds	Low
1.5	**Stormwater Management.** Effectively manage stormwater to maintain water quality and minimize flooding.				

#	Mitigation Actions by Goal Area and Objective	Implementation Responsibility	Timeframe for Completion	Funding Source	Priority
1.5.1	Enforce stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions	City Engineer	Ongoing	Existing City funds	High
1.5.2	Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention).	City Engineer	Short-Range	Existing City funds	High
2	***Property Protection Goal.*** ***Protect structures and their occupants and contents from the damaging effects of flooding and related natural hazards.***				
2.1	**Acquisition and Relocation.** Remove flood-threatened buildings from high risk flood locations.				
2.1.1	Acquire and demolish flood-prone buildings and maintain the property as permanent open space, where feasible.	Building Safety	Long-Range	FEMA HMA Grants	Low
2.1.2	Relocate flood-prone buildings so that they are out of the floodplain, where feasible.	Building Safety	Long-Range	FEMA HMA Grants	Low
2.2	**Flood Protection.** Take measures to permanently protect existing flood-prone properties from flood damage on a building-by-building basis.				
2.2.1	Retrofit existing non-residential flood-prone buildings by flood proofing.	City Engineer	Long-Range	FEMA HMA Grants	Low
2.3	**Flood Insurance Promotion.** Promote the purchase of flood insurance, especially for high risk properties in the flood plain.				
3	***Public Education and Awareness Goal.*** ***Educate and inform the public about the risks of flooding and related natural hazards and the techniques available to reduce threats to life and property.***				
3.1	**Map Information Service.** Provide flood map information to the public.				
3.1.1	Provide Flood Insurance Rate Map (FIRM) information to people who inquire and publicize this service.	I.T.	Ongoing	Existing City funds	High
3.2	**Outreach Projects.** Regularly perform public outreach and education programs to inform the public of flood risks and mitigation alternatives.				
3.2.1	Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.	City Engineer	Ongoing	Existing City funds	Medium
3.3	**Hazard Disclosure.** Take steps to inform the public of flood hazards.				
3.3.1	Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.	Building Safety and City Engineer	Ongoing	Existing City funds	High

#	Mitigation Actions by Goal Area and Objective	Implementation Responsibility	Timeframe for Completion	Funding Source	Priority
3.4	**Flood Protection Information.** Distribute flood protection information to the general public.				
3.4.1	Maintain FEMA publications and reference materials in the City's public library.	City Engineer	Ongoing	Existing City funds	High
3.4.2	Create a webpage on the City's website to disseminate flood protection information to the public.	I.T.	Mid-Range	Existing City Funds	Medium
3.5	**Flood Protection Assistance.** Provide technical guidance for protection of buildings from flood damage.				
4	***Natural Resources Protection Goal. Preserve and restore the beneficial functions of floodplains and the natural environment to promote sustainable community development that balances the constraints of nature with the social and economic demands of the community.***				
4.1	**Open Space Preservation.** Preserve open space to restore the natural functions of the flood plain, where feasible.				
4.1.1	Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions.	Parks and Recreation, Public Works	Ongoing	Existing City funds	High
4.1.2	To the extent possible, maintain or restore City-owned flood plains to their natural condition.	Parks and Recreation	Ongoing	Existing City funds	High
4.1.3	Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Enforce provisions for clustering and conservation subdivisions.	Planning and Zoning	Short-Range	Existing City funds	High
5	***Structural Projects Goal. Apply engineered structural modifications to natural systems and public infrastructure to reduce the potentially damaging impacts of flooding and related natural hazards, where found to be feasible, cost effective, and environmentally suitable.***				
5.1	**Drainage System Maintenance.** Maintain natural and manmade drainage systems to effectively discharge stormwater and reduce flooding.				
5.1.1	Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed.	Public Works	Ongoing	Existing City funds	High
5.1.2	Regularly inspect all City-owned detention and retention facilities constructed pursuant to the City's stormwater management regulations to ensure proper functioning.	Public Works	Ongoing	Existing City funds	High
5.1.3	Establish an annual capital improvements programming process for drainage system improvements.	City Manager, Public Works, City Engineer	Ongoing	Existing City funds	High
5.1.4	Enforce no stream dumping regulations.	Police, Building Safety	Ongoing	Existing City funds	High
5.2	**Flood Protection.** Implement structural improvements where deemed effective to reduce flooding.				

#	Mitigation Actions by Goal Area and Objective	Implementation Responsibility	Timeframe for Completion	Funding Source	Priority
6	***Emergency Services Goal.*** ***Improve the efficiency, timing, and effectiveness of response and recovery efforts for flooding and related natural disasters.***				
6.1	**Flood Warning and Response.** Apply advanced technological systems to monitor flood threats and warn the public.				
6.1.1	Coordinate flood warning and response activities with critical facilities operators.	Police, Fire, and Shelby County EMA	Ongoing	Existing City funds	High

Chapter 6 – Plan Maintenance Procedures

6.1 Scope and Purpose of Procedures
6.2 Plan Implementation Responsibilities
6.3 Plan Monitoring and Ongoing Review
6.4 Annual Evaluation Report
6.5 Plan Amendments
6.6 Plan Evaluation Following a Flood Disaster
6.7 Five-Year Plan Update

6.1 Scope and Purposes of Procedures

This chapter addresses the procedures for plan maintenance that ensure the 2017 City of Alabaster Floodplain Management Plan ("Plan") remains a dynamic and effective document. These procedures, which have been developed in accordance with the currently effective National Flood Insurance Program CRS Coordinator's Manual (2017 Edition), establish a useful and ongoing planning process that is continuously monitored, evaluated, and updated to reflect changing conditions. This chapter describes how the adopted Plan will be implemented, reviewed, and updated, and provides procedures that, at minimum, provide for an annual review and a five-year update.

6.2 Plan Implementation Responsibilities

The City of Alabaster's City Engineer, who also serves as the Floodplain Administrator. assumes responsibility for overseeing the implementation and maintenance of this Plan and serves as Floodplain Management Planning Committee ("FMPC") Chair. Plan implementation, however, is a combined effort among all FMPC members and all individuals representing agencies responsible for implementation of identified mitigation measures in the Action Plan. Those individuals and the entire membership of the FMPC should assume active roles throughout the ongoing plan implementation cycle.

To maintain a dynamic and useful Plan, the FMPC will remain an active component of the ongoing planning process throughout the five-year planning cycle. The FMPC may, at its own discretion, create subcommittees to oversee and evaluate plan implementation.

6.3 Plan Monitoring and Ongoing Review

The FMPC's ongoing review process should continually monitor the current status of the mitigation measures scheduled for implementation. The FMPC will conduct annual meetings. Ongoing progress reports should be reported to the FMPC by the agencies assigned implementation responsibilities for specific mitigation measures. Progress reports should include the following information:

- Actions that have been undertaken to implement the scheduled mitigation measure, such as, obtaining funding, permits, approvals or other resources to begin implementation;
- Mitigation measures that have been completed, including public involvement activities;
- Revisions to the priority, timeline, responsibility, or funding source of a measure and cause for such revisions or additional information or analysis that has been developed that would modify the mitigation measure assignment, as initially adopted in the plan; and
- Measures that the City no longer intends to implement and justification for cancellation.

6.4 Annual Evaluation Report

As a part of its ongoing implementation program, the City will perform an annual evaluation of the Floodplain Management Plan, which is also required for recertification in the CRS program. The City will develop an Annual Evaluation Report with support from the Planning Committee. The report will evaluate the City's progress towards achieving the Plan's goals and objectives and carrying out the measures presented in the Action Plan. Some potential questions by the FMPC during its annual review may address the following concerns:

- Are there any new potential flood hazards that have developed and were not addressed in the Plan?
- Have any flood disasters occurred that are not included in the Plan?
- Are there additional mitigation ideas that need to be incorporated into the Plan?
- What projects or other measures have been initiated, completed, deferred, or deleted?
- Are there any changes in local capabilities to carry out mitigation measures?
- Have funding levels to support mitigation actions either increased or decreased, including new opportunities for funding through FEMA Hazard Mitigation Assistance grant programs?

Reporting the implementation progress of the Action Plan and the FMPC's findings and recommendations annually is a minimum requirement. It not only reports on implementation progress, but also provides a framework for monitoring the Plan's effectiveness. The Annual Evaluation Report of the FMPC will be submitted to the City Council and made available to media outlets and the public for review and comment.

6.5 Plan Amendments

The ongoing review process may require adjustments to the selection of mitigation measures, priorities, timelines, lead responsibilities, and funding sources scheduled in the Action Plan. Annual adjustments should be made to the Action Plan, as needed, to reflect current implementation progress, priorities, capabilities, and funding resources. Moreover, goals, objectives, and mitigation actions may likewise need to be revised from year-to-year. In the event modifications to the Action Plan are warranted as a result of the annual review or other conditions, the FMPC will oversee and approve all amendments to the Plan by majority vote of a quorum of FMPC members. Conditions that might warrant amendments to this plan would include, but not be limited to, special opportunities for funding and response to a flood disaster.

6.6 Plan Evaluation following a Flood Disaster

Immediately following a significant flooding disaster event having a substantial impact on any part of the City, the FMPC will conduct or oversee an analysis of the event to evaluate the responsiveness of the Plan. An assessment of the event should examine the direct and indirect damages, response and recovery costs (economic impacts) and the location, type, and extents of the damages. The findings of the assessment should determine any new mitigation initiatives that should be incorporated into this Plan to avoid similar losses from future hazard events. The results of the assessment will be provided to City Council and the public for review. These results may also provide useful information when considering new mitigation initiatives as an amendment to the existing Action Plan.

6.7 Five-Year Plan Update

This Plan's adoption, by resolution of the City of Alabaster City Council (Appendix H – "Adopting Resolution"), marks the beginning of the five-year planning cycle until the next major plan update becomes due.

The Plan must be updated at least every five years in accordance with the most current version of the CRS Coordinator's Manual (Activity 510 Floodplain Management Planning). The update will follow the CRS Ten-Step Planning Process to include a review of any new plans, studies, or reports, as well as any revised directives or goals for the City. The flood hazard risk profiles and vulnerability assessments will be updated to reflect best available data and information. The hazard assessments will account for any additional repetitive flood loss properties, impacts of completed flood mitigation projects, increased development in the floodplain, major floods or disasters and any other change in flooding conditions.

The Action Plan will be reviewed and revised to account for completed, changed, or removed mitigation goals, objectives, and mitigation measures. While the FMPC's membership may change, the committee will continue to be involved in the planning process for the plan update. Public meetings will be conducted and media releases will

be organized. The City Council will adopt the updated plan and publish it for public distribution.

Appendix A
Resolution Establishing the Planning Process

Resolution 071017-A

Council Member Farrell introduced the following Resolution, which was seconded by Council Member Pate.

RESOLUTION NO. 071017-A

A RESOLUTION TO ESTABLISH THE PLANNING PROCESS FOR THE PREPARATION OF THE 2017 CITYOF ALABASTER FLOODPLAIN MANAGEMENT PLAN AND CREATE THE FLOODPLAIN MANAGEMENT PLANNING COMMITTEE.

WHEREAS, the City of Alabaster has been awarded a FEMA Flood Mitigation Assistance ("FMA") grant to fund the preparation of the 2017 City of Alabaster Floodplain Management Plan (the "Plan"); and,

WHEREAS, the ten-step planning process for the preparation of the Plan is hereby established in accordance with activity 510 of the Community Rating System Coordinator's Manual, 2017 edition; and,

WHEREAS, the City of Alabaster Floodplain Management Planning Committee ("Planning Committee") is hereby created as a standing committee to oversee the preparation of the Plan and its ongoing implementation; and,

WHEREAS, the City Engineer, who also serves as the Floodplain Administrator, is hereby appointed Chair of the Planning Committee; and,

WHEREAS, the following individuals from City Departments with representative interests noted are hereby appointed as the initial members of the Floodplain Management Planning Committee:

City Department Members:

Name and Position	*Department*	*Representative Interest*
Brett Tucker	Engineer	Chair
Mark Harris, Director	Public Works	Structural Flood Control
Ben Williams, Park Superintendent	Park & Rec	Natural Resources Protection
Sherri Proctor, P&Z Coordinator	Administration	Preventive Measures
Patrick Johnson, IT Director	Administration (IT)	Public Information
Mike Jones	Police	Emergency Services
Chip Brantley	Fire Department	Property Protection

and,

WHEREAS, the Chair is hereby authorized to appoint future members of the Planning Committee as vacancies occur; and,

WHEREAS, the City's Planning and Zoning Coordinator is hereby directed to become actively involved in the planning process; and,

WHEREAS, City personnel are hereby authorized to provide staff support to the Planning Committee under the direction of the Chair; and,

WHEREAS, the planning process for preparing the 2017 City of Alabaster Floodplain Management Plan shall commence on the date of the initial kickoff meeting of the Planning Committee to be set by the Committee Chair; and,

WHEREAS, the Planning Committee is hereby directed to complete the plan within the period of performance required by the FMA grant conditions.

NOW THEREFORE, BE IT RESOLVED by the City Council of the City of Alabaster that this Resolution is hereby adopted and immediately made effective.

ADOPTED AND APPROVED THIS 10th DAY OF JULY, 2017.

ATTEST:

Brian Binzer, City Manager / Clerk

CITY OF ALABASTER

Scott Brakefield, Council President

APPROVED:

Marty B. Handlon, Mayor

Appendix B
Hazard Profile Data

App. B – Hazard Profile Data

1.0 Records of Previous Occurrences of Hazard Events

1.0 Records of Previous Occurrences of Hazard Events

This appendix contains the detailed records of previous occurrences of hazard events reported in Section 4.3 “Previous Occurrence,” for events reported by the National Climatic Data Center. In addition, records of Presidential Disaster Declarations are included in this appendix.

Past Occurrences of Flooding

Table B-1. City of Alabaster Flash Flooding Events, 1995-2016

Mag: Magnitude **Dth:** Deaths **Inj:** Injuries **PrD:** Property Damage **CrD:** Crop Damage

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:					1	0	425.00K	30.00K
COUNTYWIDE	3/6/1996	0:20	Flash Flood		0	0	200.00K	25.00K
COUNTYWIDE	1/7/1998	9:30	Flash Flood		1	0	35.00K	5.00K
COUNTYWIDE	9/22/2002	4:00	Flash Flood		0	0	100.00K	0.00K
COUNTYWIDE	7/1/2003	13:00	Flash Flood		0	0	12.00K	0.00K
COUNTYWIDE	9/16/2004	9:56	Flash Flood	8	0	0	20.00K	0.00K
COUNTYWIDE	11/24/2004	7:00	Flash Flood		0	0	50.00K	0.00K
COUNTYWIDE	4/1/2005	6:00	Flash Flood		0	0	2.00K	0.00K
COUNTYWIDE	7/10/2005	18:00	Flash Flood		0	0	6.00K	0.00K
ALABASTER	5/10/2006	13:45	Flash Flood		0	0	0.00K	0.00K
ALABASTER	8/21/2006	17:00	Flash Flood		0	0	0.00K	0.00K
Totals:					1	0	425.00K	30.00K

Source: National Climatic Data Center

Table B-2. City of Alabaster Flooding Events, 1995-2016

Mag: Magnitude **Dth:** Deaths **Inj:** Injuries **PrD:** Property Damage **CrD:** Crop Damage

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:					0	0	0.00K	0.00K
SHELBY (ZONE)	4/1/2005	0:00	Flood		0	0	0.00K	0.00K
Totals:					0	0	0.00K	0.00K

Source: National Climatic Data Center

Past Occurrences of Hurricanes

Table B-3. City of Alabaster Hurricane and Tropical Storm Events, 1995-2016

Mag: Magnitude **Dth:** Deaths **Inj:** Injuries **PrD:** Property Damage **CrD:** Crop Damage

Location	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:					0	0	3.200M	0.00K
SHELBY (ZONE)	7/10/2005	17:00	Tropical Storm		0	0	200.00K	0.00K
SHELBY (ZONE)	8/29/2005	17:00	Tropical Storm		0	0	3.000M	0.00K
SHELBY (ZONE)	8/23/2008	12:00	Tropical Depression		0	0	0.00K	0.00K
SHELBY (ZONE)	11/09/2009	14:00	Tropical Depression		0	0	5.00K	0.00K
Totals:					0	0	3.205M	0.00K

Source: National Climatic Data Center

Presidential Disaster Declarations

Table B-4. History of Shelby County Flood Hazard Related Events with Presidential Disaster Declarations

Federal Disaster Declaration	Incident Period	Declared Date	Description
DR-1549	September 13, 2004 to September 30, 2004	September 15, 2004	Hurricane Ivan
DR-1593	July 10, 2005 to July 16, 2005	July 10, 2005	Hurricane Dennis
DR-1971	April 15, 2011 to May 31, 2011	April 28, 2011	Severe Storms, Tornadoes, Straight-line Winds, and Flooding

Appendix C
Risk Assessment Data

App. C – Risk Assessment Data

1.0 Summary of Vulnerability and Impacts
2.0 HAZUS-MH: Flood Global Risk Report

1.0 Summary of Vulnerability and Impacts

Tables C-2 and C-3 summarize the City of Alabaster's vulnerability to flooding and other natural hazards, according to the methodology developed by the Shelby County Hazard Mitigation Committee. These tables are an abridged version, based upon the comparable Tables 6.6 and 6.7 found in chapter 6 of the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan prepared under the Committee's direction. Tables C-2 and C-3 include a summary of all hazards identified in Chapter 4 *Risk Assessment* in Section 4.2 of this Alabaster plan, except for dam and levee failures, which were not addressed in the County plan.

To summarize and quantify the impacts and risks associated with the various hazards, the Shelby County Hazard Mitigation Committee designed its own rating methodology. Their methodology relies on the Committee's qualitative assessment of historical and anecdotal data, community input, and historic and projected hazard events. This assessment is based upon the hazard ratings assigned by the Shelby County's Hazard Mitigation Committee described in Table C-1 below.

Table C-1 Hazards Rating Table

Category	0	1	2	3	4	5
Fatalities and Injuries	0 Fatalities or Injuries	< 3 Fatalities or Injuries	4 to 14 Fatalities or Injuries	15 to 49 Fatalities or Injuries	50 to 99 Fatalities or Injuries	>100 Fatalities or Injuries
Economic Loss	No Loss	Less than $500K cost	From $500K to $2.9Mil cost	From $3Mil to $7.9Mil cost	From $8Mil to $19.9Mil cost	More than $20Mil cost
Area Impacted	Local No Evacuation	Local minimal evacuation	Local some evacuation	1 mile some evacuation	1 mile high evacuation	>3 mile and evacuation
Probability of Occurrence	Once Every 100+ Years	Once every 36 to 99 years	Once every 10 to 35 years	Once every 4 to 9 years	Once every 1 to 3 years	More than once a year
Repetitive Loss	< 3	3 to 10	11 to 24	25 to 49	50 to 99	> 100

Source: 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan

The Shelby County Hazard Mitigation Committee developed the historic and future hazard profile vulnerability assessment summary tables (Tables C-2 and C-3) using the above Hazards Rating Table (Table C-1) by assigning a value (1 through 5) for each category. In addition, fatalities and injuries were assigned a weighting factor of 3,

and economic loss was assigned a weighting factor of 2. Table C-2 "Summary of Historic Hazards and Community Impacts" below provides an assessment of the present risk due to hazard events. A brief summary of future impacts of hazard events can be found in Table C-3 "Summary of Future Hazards and Community Impacts." Each of tables prioritizes the overall risk and threat of the 13 hazards, according to their vulnerability scores.

Table C-2. Summary of Historic Hazards and Community Impacts

Hazard	Hazard Status	Hazard Profile Vulnerability Index						
	Risk/Threat	Fatality and Injury	Economic Loss	Extent of Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
High Wind	High/High	15	10	2	5	5	37	**1**
Urban Fires	Moderate/Moderate	12	10	1	5	3	31	**2**
Flooding	Moderate/High	6	8	2	4	3	23	**3**
Wildfires	Moderate/Moderate	0	8	2	5	5	20	**4**
Extreme Temperature	Moderate/Minimal	6	8	0	3	2	13	**5**
Hail	Moderate/Minimal	6	4	0	5	1	16	**7**
Ice/Snow Storm	Moderate/Moderate	6	4	1	4	1	16	**6**
Lightning	Moderate/Low	6	2	0	3	2	13	**8**
Drought	Moderate/Slight	0	4	0	3	2	9	**9**
Land Subsidence	Moderate/Minimal	0	2	0	4	1	5	**10**
Landslides/Mudslides	Low/Minimal	0	0	0	3	0	3	**11**
Earthquake	Low/Moderate	0	0	0	1	0	1	**12**
Tsunami	Low/Low	0	0	0	0	0	0	**13**

Source: 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan

Note: Dam and levee failures were not considered in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan vulnerability assessment.

Table C-3. Summary of Future Hazards and Community Impacts

Hazard	Hazard Status	Hazard Profile Vulnerability Index						
	Risk/Threat	Fatality and Injury	Economic Loss	Extent of Impact	Probability of Occurrence	Repetitive Loss	Vulnerability Score	Priority
High Wind	High/High	15	10	2	5	5	37	**1**
Flooding	High/High	9	8	3	4	5	29	**2**
Urban Fires	-	9	8	2	5	4	28	**3**
Earthquake	High/Moderate	9	10	5	1	0	25	**4**
Wildfires	-	6	6	3	5	4	24	**5**
Ice/Snow Storm	Low/Moderate	6	4	1	4	2	17	**6**
Lightning	-	6	4	0	3	2	15	**7**
Extreme Temperature	High/Moderate	6	2	1	3	2	14	**8**
Hail	Moderate/Moderate	3	4	0	5	1	13	**9**
Drought	Low/Low	0	4	0	3	3	10	**10**
Land Subsidence	Low/ Moderate	0	2	1	4	1	8	**11**
Landslides/Mudslides	Low/ Moderate	0	2	1	3	1	7	**12**
Tsunami	-	0	0	0	0	0	0	**13**

Source: 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan

Note: Dam and levee failures were not considered in the 2016 Shelby County Multi-Hazard, Multi-Jurisdictional Mitigation Plan vulnerability assessment.

2.0 HAZUS-MH: Flood Global Risk Report

FEMA's HAZUS-MH risk assessment software was used to estimate losses due to flooding for the City of Alabaster study area. The results of the modeled flood scenario are included in the following Flood Global Risk Report generated from HAZUS-MH, which have been integrated into this plan in Chapter 4. Risk Assessment.

Hazus-MH: Flood Global Risk Report

Region Name: AlabasterFlood

Flood Scenario: scenario3

Print Date: Friday, September 29, 2017

Disclaimer:
This version of Hazus utilizes 2010 Census Data.
Totals only reflect data for those census tracts/blocks included in the user's study region.

The estimates of social and economic impacts contained in this report were produced using Hazus loss estimation methodology software which is based on current scientific and engineering knowledge. There are uncertainties inherent in any loss estimation technique. Therefore, there may be significant differences between the modeled results contained in this report and the actual social and economic losses following a specific Flood. These results can be improved by using enhanced inventory data and flood hazard information.

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General Description of the Region

Hazus is a regional multi-hazard loss estimation model that was developed by the Federal Emergency Management Agency (FEMA) and the National Institute of Building Sciences (NIBS). The primary purpose of Hazus is to provide a methodology and software application to develop multi-hazard losses at a regional scale. These loss estimates would be used primarily by local, state and regional officials to plan and stimulate efforts to reduce risks from multi-hazards and to prepare for emergency response and recovery.

The flood loss estimates provided in this report were based on a region that included 1 county(ies) from the following state(s):

- Alabama

Note:
Appendix A contains a complete listing of the counties contained in the region.

The geographical size of the region is 43 square miles and contains 853 census blocks. The region contains over 14 thousand households and has a total population of 39,975 people (2010 Census Bureau data). The distribution of population by State and County for the study region is provided in Appendix B.

There are an estimated 15,585 buildings in the region with a total building replacement value (excluding contents) of 4,489 million dollars (2010 dollars). Approximately 93.85% of the buildings (and 85.60% of the building value) are associated with residential housing.

Building Inventory

General Building Stock

Hazus estimates that there are 15,585 buildings in the region which have an aggregate total replacement value of 4,489 million (2014 dollars). Table 1 and Table 2 present the relative distribution of the value with respect to the general occupancies by Study Region and Scenario respectively. Appendix B provides a general distribution of the building value by State and County.

Table 1
Building Exposure by Occupancy Type for the Study Region

Occupancy	Exposure ($1000)	Percent of Total
Residential	3,842,433	85.6%
Commercial	431,912	9.6%
Industrial	126,507	2.8%
Agricultural	8,839	0.2%
Religion	46,499	1.0%
Government	4,109	0.1%
Education	28,673	0.6%
Total	**4,488,972**	**100.0%**

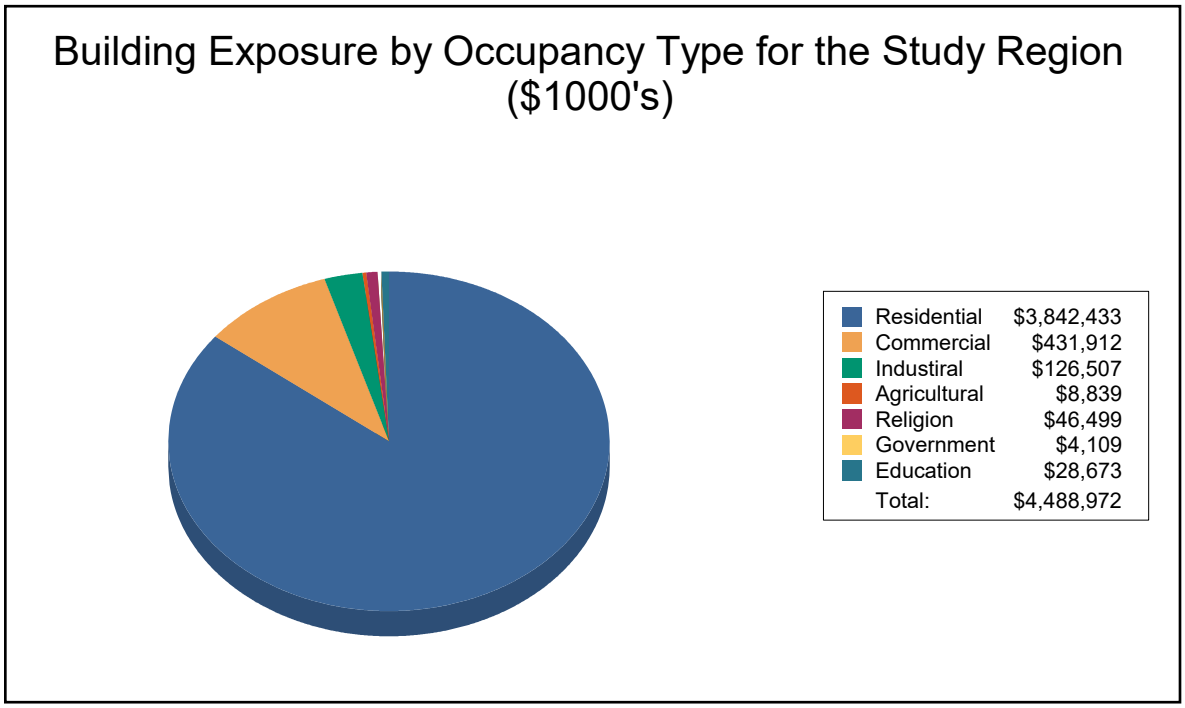
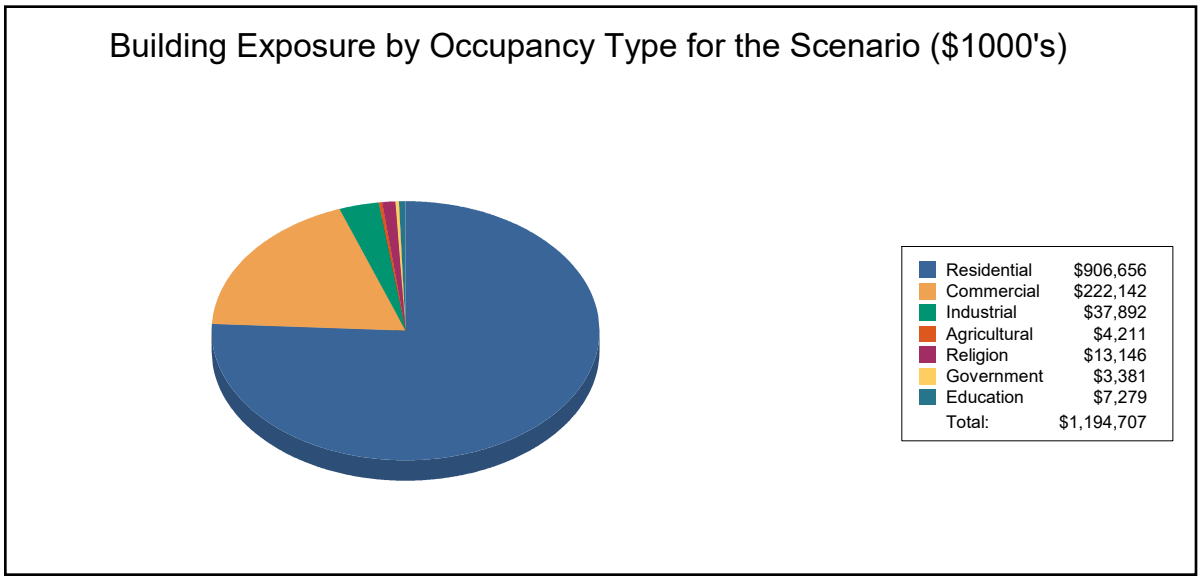


Table 2
Building Exposure by Occupancy Type for the Scenario

Occupancy	Exposure ($1000)	Percent of Total
Residential	906,656	75.9%
Commercial	222,142	18.6%
Industrial	37,892	3.2%
Agricultural	4,211	0.4%
Religion	13,146	1.1%
Government	3,381	0.3%
Education	7,279	0.6%
Total	**1,194,707**	**100.0%**



Essential Facility Inventory

For essential facilities, there are 1 hospitals in the region with a total bed capacity of 228 beds.
There are 7 schools, 1 fire station, 1 police station and no emergency operation centers.

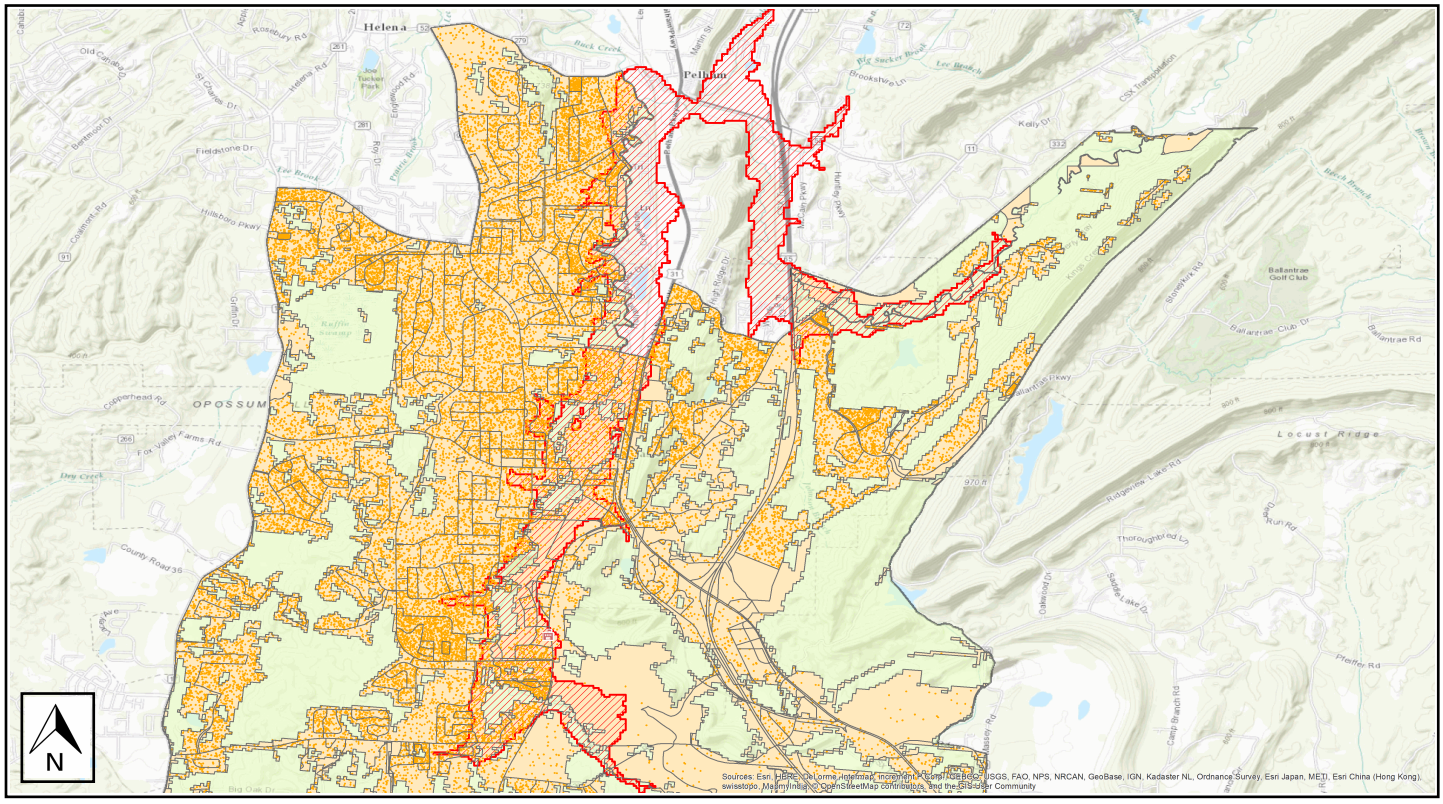
Flood Scenario Parameters

Hazus used the following set of information to define the flood parameters for the flood loss estimate provided in this report.

Study Region Name:	AlabasterFlood
Scenario Name:	scenario3
Return Period Analyzed:	100
Analysis Options Analyzed:	No What-Ifs

Study Region Overview Map

Illustrating scenario flood extent, as well as exposed essential facilities and total exposure



Building Damage

General Building Stock Damage

Hazus estimates that about 318 buildings will be at least moderately damaged. This is over 62% of the total number of buildings in the scenario. There are an estimated 4 buildings that will be completely destroyed. The definition of the 'damage states' is provided in Volume 1: Chapter 5 of the Hazus Flood Technical Manual. Table 3 below summarizes the expected damage by general occupancy for the buildings in the region. Table 4 summarizes the expected damage by general building type.

Total Economic Loss (1 dot = $300K) Overview Map

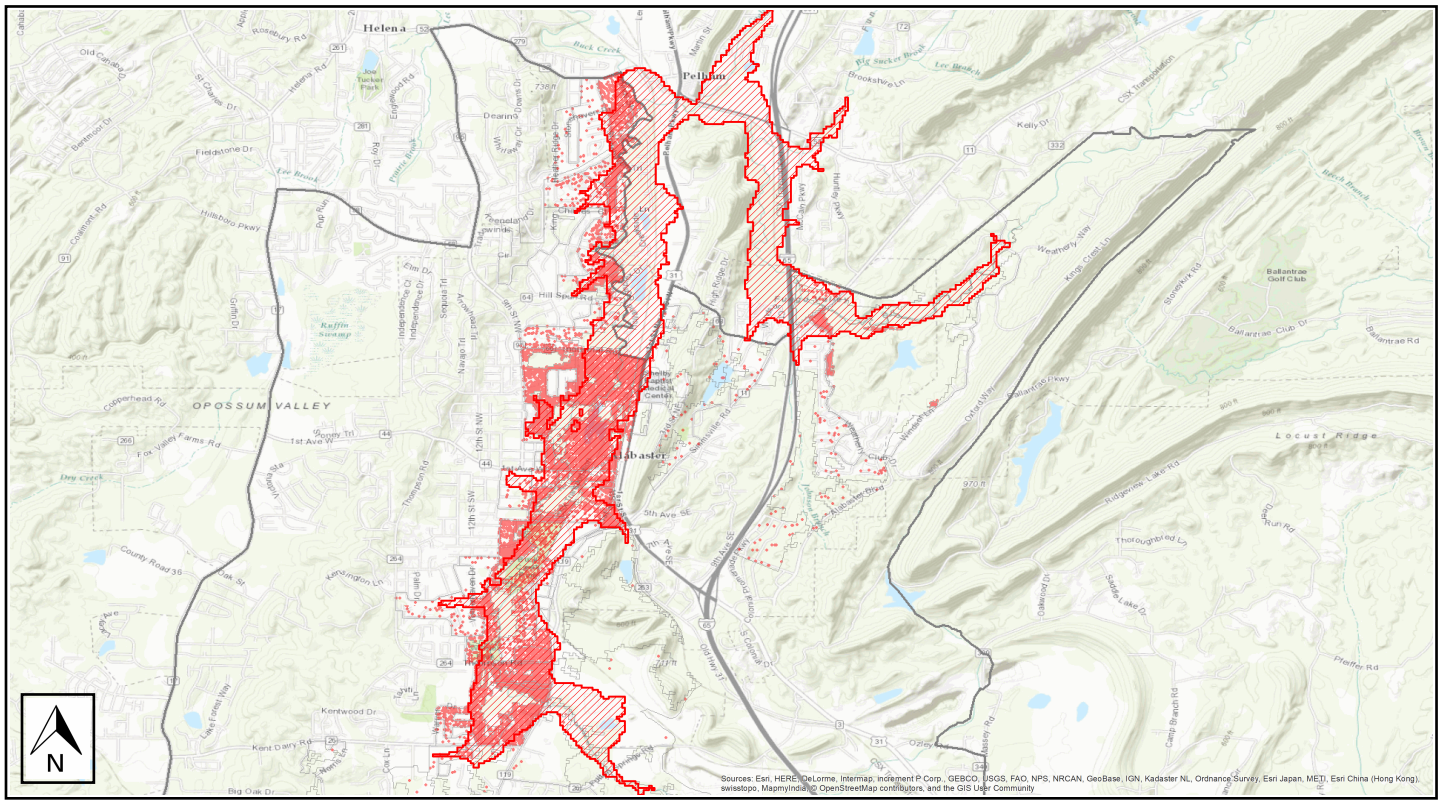


Table 3: Expected Building Damage by Occupancy

	1-10		11-20		21-30		31-40		41-50		Substantially	
Occupancy	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**	**Count**	**(%)**
Agriculture	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Commercial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Education	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Government	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Industrial	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Religion	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Residential	134	29.65	167	36.95	74	16.37	57	12.61	16	3.54	4	0.88
Total	**134**		**167**		**74**		**57**		**16**		**4**	

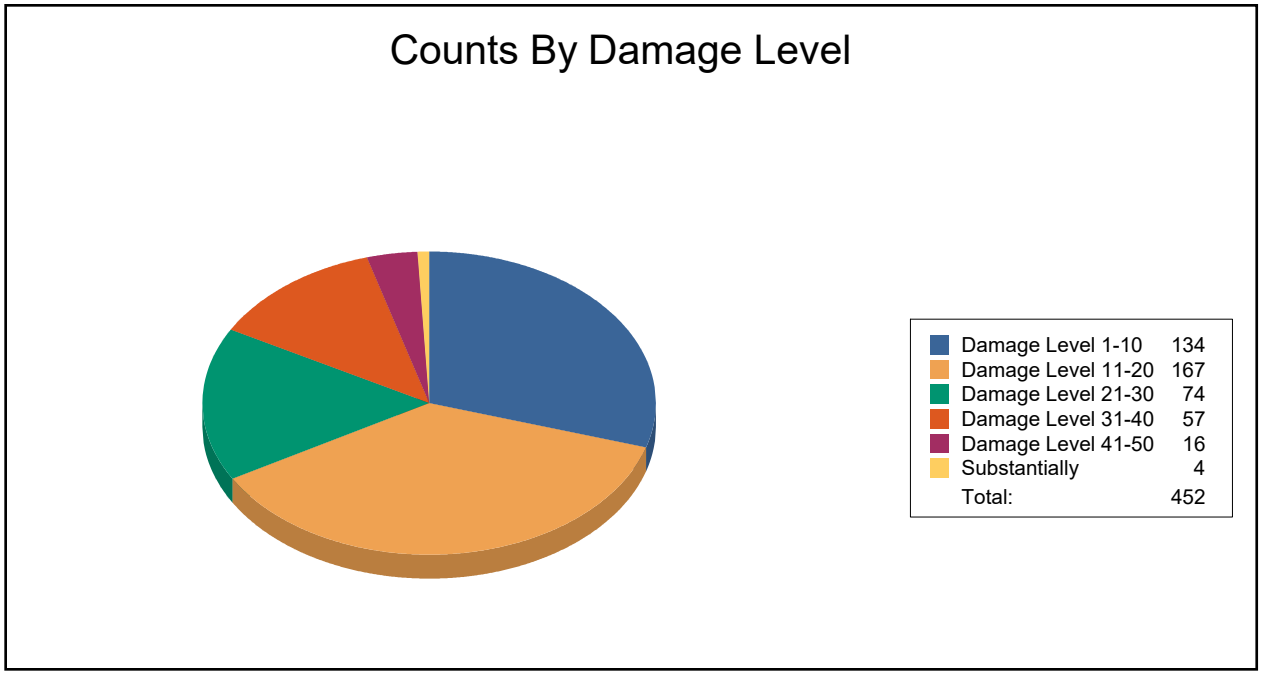


Table 4: Expected Building Damage by Building Type

Building Type	1-10		11-20		21-30		31-40		41-50		Substantially	
	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)	Count	(%)
Concrete	0	0	0	0	0	0	0	0	0	0	0	0
ManufHousing	0	0	0	0	1	25	0	0	0	0	3	75
Masonry	3	43	4	57	0	0	0	0	0	0	0	0
Steel	0	0	0	0	0	0	0	0	0	0	0	0
Wood	132	30	163	37	73	17	57	13	16	4	1	0

Essential Facility Damage

Before the flood analyzed in this scenario, the region had 228 hospital beds available for use. On the day of the scenario flood event, the model estimates that 228 hospital beds are available in the region.

Table 5: Expected Damage to Essential Facilities

		# Facilities		
Classification	Total	At Least Moderate	At Least Substantial	Loss of Use
Fire Stations	1	0	0	0
Hospitals	1	0	0	0
Police Stations	1	0	0	0
Schools	7	2	0	2

If this report displays all zeros or is blank, two possibilities can explain this.

(1) None of your facilities were flooded. This can be checked by mapping the inventory data on the depth grid.

(2) The analysis was not run. This can be tested by checking the run box on the Analysis Menu and seeing if a message box asks you to replace the existing results.

Induced Flood Damage

Debris Generation

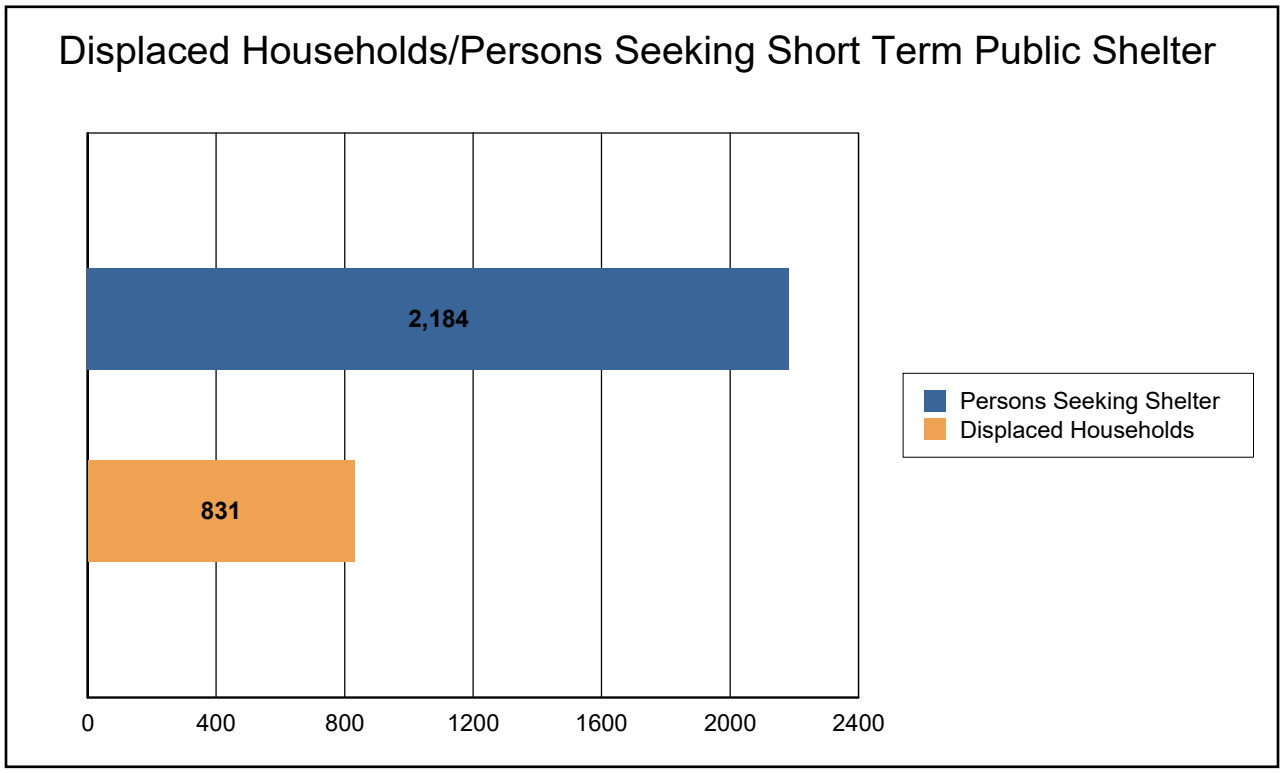
Hazus estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories: 1) Finishes (dry wall, insulation, etc.), 2) Structural (wood, brick, etc.) and 3) Foundations (concrete slab, concrete block, rebar, etc.). This distinction is made because of the different types of material handling equipment required to handle the debris.

Analysis has not been performed for this Scenario.

Social Impact

Shelter Requirements

Hazus estimates the number of households that are expected to be displaced from their homes due to the flood and the associated potential evacuation. Hazus also estimates those displaced people that will require accommodations in temporary public shelters. The model estimates 831 households will be displaced due to the flood. Displacement includes households evacuated from within or very near to the inundated area. Of these, 2,184 people (out of a total population of 39,975) will seek temporary shelter in public shelters.



Economic Loss

The total economic loss estimated for the flood is 98.83 million dollars, which represents 8.27 % of the total replacement value of the scenario buildings.

Building-Related Losses

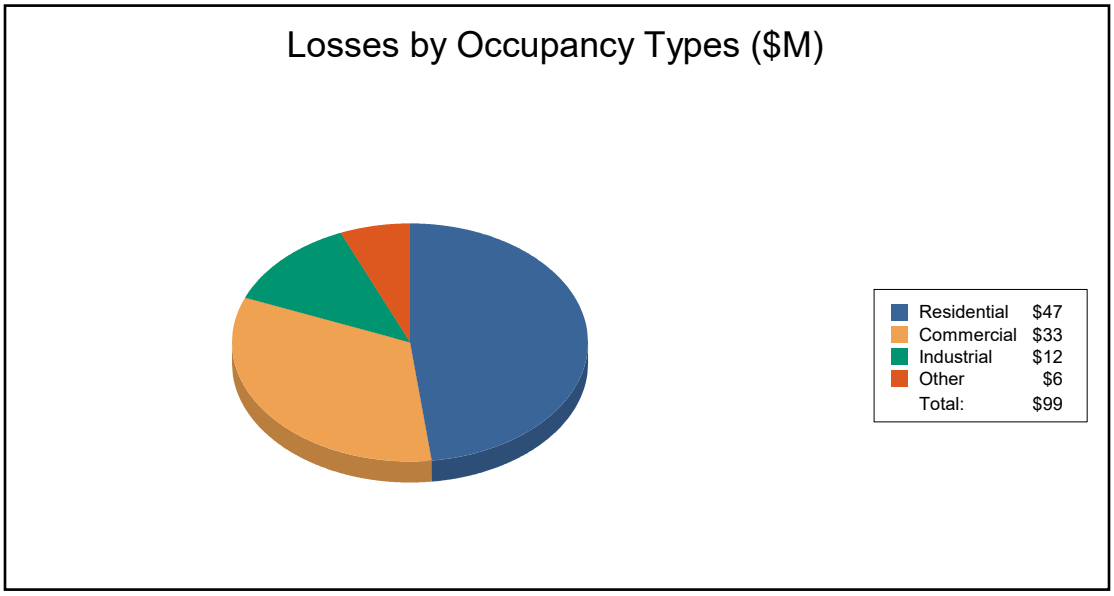
The building losses are broken into two categories: direct building losses and business interruption losses. The direct building losses are the estimated costs to repair or replace the damage caused to the building and its contents. The business interruption losses are the losses associated with inability to operate a business because of the damage sustained during the flood. Business interruption losses also include the temporary living expenses for those people displaced from their homes because of the flood.

The total building-related losses were 98.16 million dollars. 1% of the estimated losses were related to the business interruption of the region. The residential occupancies made up 48.02% of the total loss. Table 6 below provides a summary of the losses associated with the building damage.

Table 6: Building-Related Economic Loss Estimates

(Millions of dollars)

Category	Area	Residential	Commercial	Industrial	Others	Total
Building Loss						
	Building	29.95	8.42	3.39	0.84	42.60
	Content	17.40	23.34	7.85	5.26	53.84
	Inventory	0.00	0.52	1.18	0.02	1.72
	Subtotal	**47.35**	**32.28**	**12.42**	**6.12**	**98.16**
Business Interruption						
	Income	0.00	0.17	0.00	0.02	0.19
	Relocation	0.09	0.03	0.00	0.01	0.13
	Rental Income	0.02	0.02	0.00	0.00	0.04
	Wage	0.00	0.15	0.00	0.16	0.31
	Subtotal	**0.11**	**0.37**	**0.00**	**0.19**	**0.67**
ALL	**Total**	**47.46**	**32.65**	**12.42**	**6.31**	**98.83**



Appendix A: County Listing for the Region

Alabama

- Shelby

Appendix B: Regional Population and Building Value Data

	Population	Building Value (thousands of dollars)		
		Residential	Non-Residential	Total
Alabama				
Shelby	39,975	3,842,433	646,539	4,488,972
Total	**39,975**	**3,842,433**	**646,539**	**4,488,972**
Total Study Region	**39,975**	**3,842,433**	**646,539**	**4,488,972**

Appendix D
Mitigation Capabilities Assessment

App. D – Mitigation Capabilities Assessment

1.0 Summary of Findings

1.0 Summary of Findings

The City of Alabaster has exceptional capabilities for implementation of a full range of mitigation activities. This finding is based upon the five measures of capability identified below:

1. Planning and Regulatory Tools.

- *Hazard mitigation planning.* The City has a record of experience in hazard mitigation planning. It has been an active participant on the Shelby County Hazard Mitigation Planning Committee since it was first created in 2003. They participated in the planning processes for the initial 2004 plan and the 2010 update and adopted both editions of the plan. Most recently the City again participated in the 2016 plan update and adopted the 2016 Shelby County, Alabama, Multi-Jurisdictional Multi-Hazard Mitigation Plan. This plan includes the "All-Hazard Mitigation Action Plan" for the City of Alabaster which lays out mitigation measures that respond to flooding and related natural hazards.

- *Comprehensive planning.* The City's first comprehensive plan, Comprehensive Plan for Alabaster, Alabama was prepared by the Alabama Development Office in 1971 and was updated by the Birmingham Regional Planning Commission in 1978. In 1990, the City embarked on a more creative and strategic approach to comprehensive planning with the 1990 adoption of Reshaping Alabaster, Planning for the Future: A Comprehensive Land Us Planning Program, 1990-2010 by the Birmingham Regional Planning Commission (now the Regional Planning Commission of Greater Birmingham). The City waited until 2005, however, to revive its long-range planning initiatives with the adoption of Alabaster Comprehensive Plan 2030: A City for Families! Planning for the Future!, also prepared by the Regional Planning Commission (RPC), The last initiative, adopted in 2015, has been termed Alabaster Forward by the RPC, with a 25-year planning horizon to the year 2040. It is the currently effective comprehensive plan.

- *Zoning Ordinance.* The current Zoning Ordinance of Alabaster, Alabama was adopted in 1999, with a number of amendments since then. It is a conventional zoning ordinance, which regulates land uses and development standards by district. The Department of Planning and Zoning administers and enforces the zoning ordinance.

- *Subdivision Regulations.* The Planning and Safety Division in association with the Office of the City Engineer administers the City of Alabaster Subdivision and Development Regulations, which set forth platting requirements and design and construction standards, which include standards for drainage improvements.

- *Building and Technical Codes.* The City enforces the International Building Code series, 2009 edition, through the Planning and Safety Division.

- *Stormwater Management Ordinance.* The Office of the City Engineer administers the City's stormwater regulations for erosion and sedimentation control, stormwater discharge, and drainage improvements.

- *Flood Hazard Ordinance.* The City Engineer serves as the Floodplain Administrator who administers and enforces the provisions of the Flood Hazard Areas Ordinance. This ordinance is based upon the model recommended by the Alabama State Floodplain Administrator. It includes a freeboard of one foot, and some higher regulatory standards have been added to the model.

2. GIS Resources.

- The City maintains GIS data and software by trained GIS technicians and provides full access for use by City staff.

- Flood hazard maps and data are maintained in GIS, in addition to a complete inventory of other essential City attributes.

3. Staffing and Administrative Resources.

The City operates under a mayor-council form of government and has a City Manager who oversees for the management of day-to-day operations. Council representatives from seven wards are elected every four years. Every four years the Council elects a Council President who presides over Council meetings and a President Pro-Tem to act in the absence of the Council President. The City Council is the City's legislative branch that enacts ordinances and resolutions, adopts budgets, and establishes City policies. The City Manager oversees the operations of City departments and also serves as the City Clerk. Department heads and principal staff include the following titles:

- Chief of Police
- Fire Chief
- Finance Director
- Treasurer
- City Engineer
- Planning & Zoning Coordinator
- Library Director
- Clerk of Court
- Public Works Director
- Parks and Recreation Director
- Human Resources Director
- Environmental Services Director

4. Fiscal Resources.

City fiscal resources are very sound. Because of Alabaster's growing economy coupled with sound fiscal management by the City, the ending fund balance in the City's General Fund has grown significantly over the past 10 year period between 2007 and 2016. The fund balance for fiscal year 2016 ended with $6,118,380, a 131% increase over fiscal year 2007. With such healthy reserve levels, Alabaster has the capabilities to fund significant mitigation projects without relying on long-term debt.

The City's annual budget includes a Capital Improvement Plan of major capital projects to be implemented over a five year period. Capital Projects Fund identifies funding for property acquisition, infrastructure improvements, and other capital improvements, including flood mitigation and drainage improvement projects. Capital projects are usually funded through debt proceeds, state appropriations, or federal and state grants.

The City maintains eligibility for FEMA's Hazard Mitigation Assistance (HMA) grants, including the Hazard Mitigation Grant Program (HMGP), the Pre-Disaster Mitigation (PDM) program, and the Flood Mitigation Assistance (FMA) program. To date, the City has not actively pursued these funds for mitigation projects.

5. Public Education and Outreach Programs.

The City maintains an open and interactive municipal government with many opportunities for public education, outreach, and involvement. Among other public involvement opportunities, such as public meetings, media releases, boards and committee representation, the City encourages interaction through the City's website at http://www.cityofalabaster.com/. Plans are in progress to add social media through Facebook and Twitter.

6. Insurance Services Office (ISO) Ratings.

Ratings are established by the Insurance Services Office on a scale of 1 (highest rating) though 10. The Public Protection Classification (PPC) rates the effectiveness of a municipality's fire-protection services, and the Building Code Effectiveness Grading Schedule (BCEGS) program rates the building codes in effect and how those codes are enforced.

- PPC rating = 2
- BCGES rating for residential = 6
- BCGES rating for commercial = 5

In addition to the above ratings, the ISO administers the optional Community Rating System (CRS) Program of the National Flood Insurance Program (NFIP). All NFIP participants are class 10 but can enter the CRS Program as a class 9 community. As of the end of 2017, the City had not yet entered the CRS Program. Until it does become a CRS community, the City remains a class 10 community.

Appendix E
Committee Meeting Documentation

App. E - Committee Meeting Documentation

1.0 Meeting Agendas and Sign-in Sheets

1.0 Meeting Agendas and Sign-in Sheets

This section documents the FMPC's meeting activities during the drafting phase of this plan, including who was involved in these meetings. Included here are the meeting agendas and sign-in sheets.

Kick-off Meeting
2017 City of Alabaster Floodplain Management Plan
City of Alabaster
1953 Municipal Way
Alabaster, AL 35007

August 1, 2017
2:00 p.m.

I. Call to Order

II. Welcome and Opening Remarks

III. Floodplain Management Planning Committee (FMPC)

IV. Introduction of Consultant Team

V. Scope of Plan

VI. Organization of 2017 Plan

VII. Review Draft Sections

A. Chapter 1 Introduction
B. Chapter 6 Plan Maintenance
C. Appendix A – Resolution Establishing FMPC
D. Appendix F – Resolution Adopting 2017 FMP

VIII. FMPC Exercise – Flood Hazard Identification

IX. Meeting Dates and Topics

A. FMPC Meetings
B. Community Meetings

X. Internet Access

A. Website: alabaster.floodplainmanagementplan.com
B. e-mail:

XI. Questions and Answers

XII. Other Business

XIII. Adjourn

Alabaster Floodplain Management Plan Kick-off Meeting

August 1, 2017

Name	Jurisdiction/Organization	Email Address	Phone Number
*Brett Tucker	City Engineer	btucker@cityofalabaster.com	205-664-6823
*Mark Harris	Public Works	mharris@cityofalabaster.com	205-664-6810
*Ben Williams	Parks & Recreation	bwilliams@cityofalabaster.com	205-~~664~~ 739 4062
*Sherri Proctor	Planning & Zoning	sproctor@cityofalabaster.com	205-664-6823
*Patrick Johnson	Information Technology	pjohnson@cityofalabaster.com	205-~~664~~ 378-4063
*Mike Jones	Police Department	mjones@cityofalabaster.com	205-664-7401
*Chip Brantley	Fire Department	cbrantley@~~cityofalabaster.com~~ alabasterfire.org	205-664- 6823
William Thomas	Walter Schoel Engineering	wthomas@schoel.com	205-313-1150
Jim Lehe	Lehe Planning	jelehe@leheplanning.com	205-978-3633
Tim Hamm	P+R	thamm@cityofalabaster.com	205-240-4999
Brian Binzer	City Manager	bbinzer@cityofalabaster.com	205-664-6832

* - indicates committee member

FMP Meeting
2017 City of Alabaster Floodplain Management Plan
City of Alabaster
1953 Municipal Way
Alabaster, AL 35007

October 17, 2017
2:00 p.m.

I. Call to Order

II. Welcome and Opening Remarks

III. Review Draft Sections

A. Chapter 2 Community Profile
B. Chapter 4, Part I: Risk Assessment: Flood Hazard Profile
C. Appendix B – Hazard Profile Data
D. Appendix F – Community Involvement Documentation

IV. Meeting Schedule

V. Coordination with Shelby County Multi-Hazard Mitigation Plan

VI. Questions and Answers

VII. Other Business

VIII. Adjourn

Alabaster Floodplain Management Meeting

October 17, 2017

Name	Jurisdiction/Organization	Email Address	Phone Number
*Brett Tucker	City Engineer	btucker@cityofalabaster.com	205-664-6823
*Mark Harris	Public Works	mharris@cityofalabaster.com	205-664-6810
*Ben Williams	Parks & Recreation	bwilliams@cityofalabaster.com	205-739-4062
*Sherri Proctor	Planning & Zoning	sproctor@cityofalabaster.com	205-664-6823
*Patrick Johnson	Information Technology	pjohnson@cityofalabaster.com	205-378-4063
*Mike Jones	Police Department	mjones@cityofalabaster.com	205-664-7401
*Chip Brantley	Fire Department	cbrantley@cityofalabaster.com	205-664-6823
William Thomas	Walter Schoel Engineering	wthomas@schoel.com	205-313-1150
Jim Lehe	Lehe Planning	jelehe@leheplanning.com	205-978-3633

* - indicates committee member

FMP Meeting
2017 City of Alabaster Floodplain Management Plan
City of Alabaster
1953 Municipal Way
Alabaster, AL 35007

December 12, 2017
2:00 pm

I. Call to Order

II. Welcome and Opening Remarks

III. Review Draft Sections

A. Chapter 4, Part II: Assessing the Problem
B. Appendix C – Risk Assessment Data

IV. Meeting Schedule

V. Questions and Answers

VI. Other Business

VII. Adjourn

Alabaster Floodplain Management Meeting

December 12, 2017

	Name	Jurisdiction/Organization	Email Address	Phone Number	
*Brett Tucker		City Engineer	btucker@cityofalabaster.com	205-664-6823	
*Mark Harris		Public Works	mharris@cityofalabaster.com	205-664-6810	
*Ben Williams		Parks & Recreation	bwilliams@cityofalabaster.com	205-739-4062	
*Sherri Proctor		Planning & Zoning	sproctor@cityofalabaster.com	205-664-6823	
*Patrick Johnson		Information Technology	pjohnson@cityofalabaster.com	205-378-4063	
*Mike Jones		Police Department	mjones@cityofalabaster.com	205-664-7401	
*Chip Brantley		Fire Department	cbrantley@cityofalabaster.com	205-664-6823	
William Thomas		Walter Schoel Engineering	wthomas@schoel.com	205-313-1150	
Jim Lehe		Lehe Planning	jelehe@leheplanning.com	205-978-3633	
Mike Watts		Fire Department	Mwatts@AlabasterFire.org	(205) 296-2928	

* - indicates committee member

FMP Meeting
2017 City of Alabaster Floodplain Management Plan
City of Alabaster
1953 Municipal Way
Alabaster, AL 35007

March 13, 2018
2:00 – 3:30 p.m.

I. Call to Order

II. Welcome and Opening Remarks

III. Review Draft Sections

A. Chapter 5A, Mitigation Strategy
B. Appendix D – Mitigation Capabilities Assessment

IV. Alternative Mitigation Measures Exercise

V. Questions and Answers

VI. Other Business

VII. Adjourn

Alabaster Floodplain Management Meeting

March 13, 2018

Name	Jurisdiction/Organization	Email Address	Phone Number
*Brett Tucker	City Engineer	btucker@cityofalabaster.com	205-664-6823
*Mark Harris	Public Works	mharris@cityofalabaster.com	205-664-6810
*Ben Williams	Parks & Recreation	bwilliams@cityofalabaster.com	205-739-4062
*Sherri Proctor	Planning & Zoning	sproctor@cityofalabaster.com	205-664-6823
*Patrick Johnson	Information Technology	pjohnson@cityofalabaster.com	205-378-4063
*Mike Jones	Police Department	mjones@cityofalabaster.com	205-664-7401
Rick Benson / Mike Waits	Fire Department		205-664-6823
William Thomas	Walter Schoel Engineering	wthomas@schoel.com	205-313-1150
Jim Lehe	Lehe Planning	jelehe@leheplanning.com	205-978-3633
Mike Waits	Fire Dept.	MWaits@AlabasterFire.org	(205) 533-0240
	AFD		

* - indicates committee member

FMP Meeting
2017 City of Alabaster Floodplain Management Plan
City of Alabaster
1953 Municipal Way
Alabaster, AL 35007

May 15, 2018
2:00 – 3:30 p.m.

I. Call to Order

II. Opening Remarks

III. Review Draft Sections

A. Remaining Sections of Chapter 5 Mitigation Strategy
B. App. G Alternative Mitigation Measures Exercise
C. Chapter 3 Planning Process
D. App. E Committee Meeting Documentation
E. App. F Community Involvement Documentation

IV. Next Steps:

A. Plan Adoption by City Council
B. Submittal to ISO for CRS Credits
C. Closeout with AEMA

V. Questions and Answers

VI. Other Business

VII. Adjourn

Alabaster Floodplain Management Meeting

May 15, 2018

Name	Jurisdiction/Organization	Email Address	Phone Number
*Brett Tucker	City Engineer	btucker@cityofalabaster.com	205-664-6823
*Mark Harris	Public Works	mharris@cityofalabaster.com	205-664-6810
*Ben Williams	Parks & Recreation	bwilliams@cityofalabaster.com	205-739-4062
*Sherri Proctor	Planning & Zoning	sproctor@cityofalabaster.com	205-664-6823
*Patrick Johnson	Information Technology	pjohnson@cityofalabaster.com	205-378-4063
*Mike Jones	Police Department	mjones@cityofalabaster.com	205-664-7401
*Mike Waits	Fire Department	mwaites@alabasterfire.org	205-664-6823
William Thomas	Walter Schoel Engineering	wthomas@schoel.com	205-313-1150
Jim Lehe	Lehe Planning	jelehe@leheplanning.com	205-978-3633

* - indicates committee member

Appendix F
Community Involvement Documentation

App. F - Community Involvement Documentation

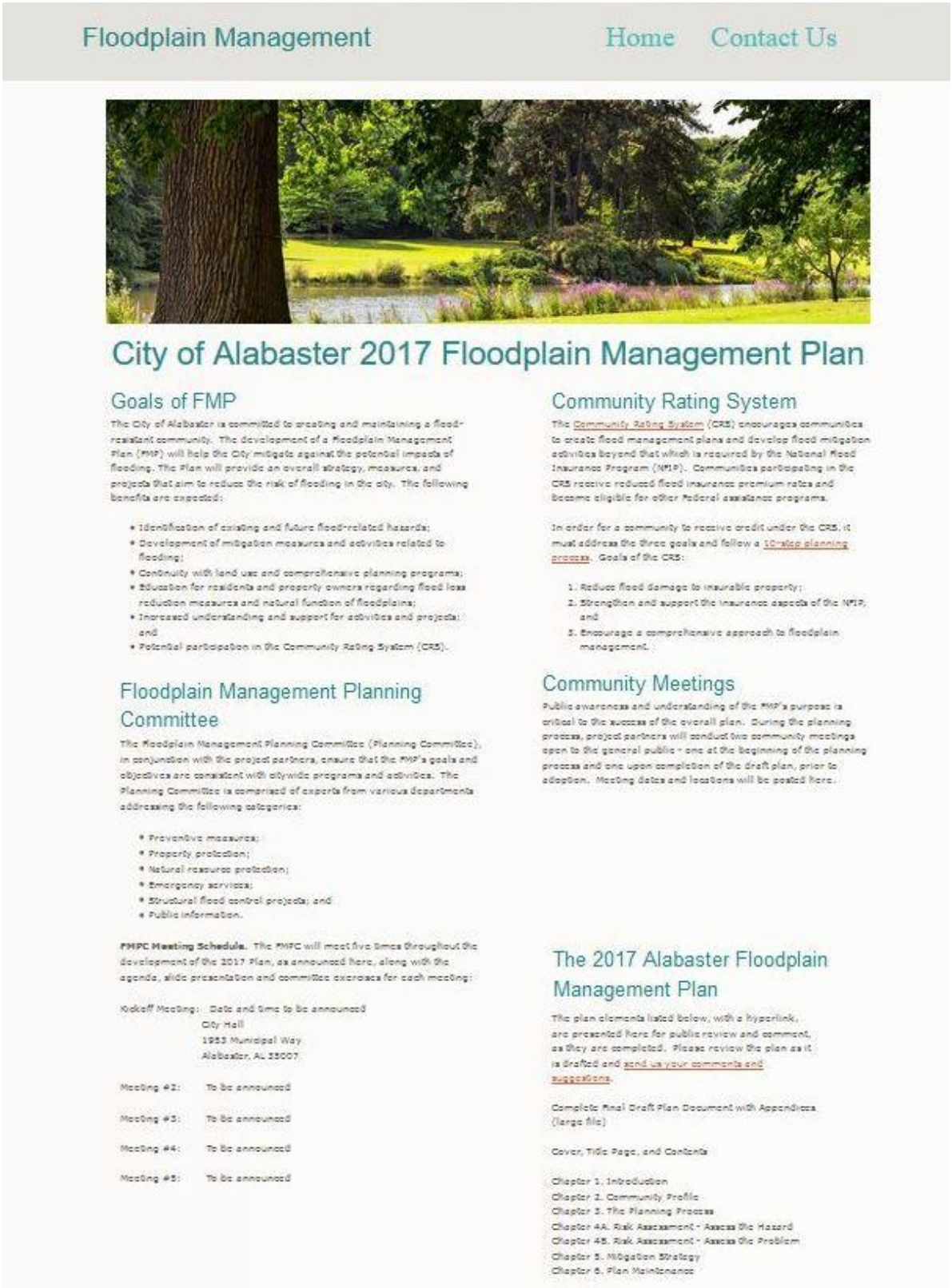
1.0 Documentation

1.0 Documentation

This Appendix includes the following documentation of community involvement activities and opportunities:

- An image of the plan website http://alabaster.floodplainmanagementplan.com/
- Sign in sheet documenting attendance at the October 3, 2017 community meeting.
- A community survey form with results and comments.
- Photos of the October 3, 2017 community meeting.
- Sign in sheet documenting attendance at the July 9, 2018 community meeting.
- City website advertisement of July 9, 2018 community meeting
- A community survey form with results and comments.
- Photos of the July 9, 2018 community meeting.

Figure F-1 Image of website http://alabaster.floodplainmanagementplan.com/



Floodplain Management

Home Contact Us

City of Alabaster 2017 Floodplain Management Plan

Goals of FMP

The City of Alabaster is committed to creating and maintaining a flood-resistant community. The development of a Floodplain Management Plan (FMP) will help the City mitigate against the potential impacts of flooding. The Plan will provide an overall strategy, measures, and projects that aim to reduce the risk of flooding in the city. The following benefits are expected:

- Identification of existing and future flood-related hazards;
- Development of mitigation measures and activities related to flooding;
- Continuity with land use and comprehensive planning programs;
- Education for residents and property owners regarding flood loss reduction measures and natural function of floodplains;
- Increased understanding and support for activities and projects; and
- Potential participation in the Community Rating System (CRS).

Floodplain Management Planning Committee

The Floodplain Management Planning Committee (Planning Committee), in conjunction with the project partners, ensure that the FMP's goals and objectives are consistent with citywide programs and activities. The Planning Committee is comprised of experts from various departments addressing the following categories:

- Preventive measures;
- Property protection;
- Natural resource protection;
- Emergency services;
- Structural flood control projects; and
- Public information.

FMPC Meeting Schedule. The FMPC will meet five times throughout the development of the 2017 Plan, as announced here, along with the agenda, slide presentation and committee exercises for each meeting:

Kickoff Meeting: Date and time to be announced
City Hall
1953 Municipal Way
Alabaster, AL 35007

Meeting #2: To be announced

Meeting #3: To be announced

Meeting #4: To be announced

Meeting #5: To be announced

Community Rating System

The Community Rating System (CRS) encourages communities to create flood management plans and develop flood mitigation activities beyond that which is required by the National Flood Insurance Program (NFIP). Communities participating in the CRS receive reduced flood insurance premium rates and become eligible for other federal assistance programs.

In order for a community to receive credit under the CRS, it must address the three goals and follow a 10-step planning process. Goals of the CRS:

1. Reduce flood damage to insurable property;
2. Strengthen and support the insurance aspects of the NFIP, and
3. Encourage a comprehensive approach to floodplain management.

Community Meetings

Public awareness and understanding of the FMP's purpose is critical to the success of the overall plan. During the planning process, project partners will conduct two community meetings open to the general public - one at the beginning of the planning process and one upon completion of the draft plan, prior to adoption. Meeting dates and locations will be posted here.

The 2017 Alabaster Floodplain Management Plan

The plan elements listed below, with a hyperlink, are presented here for public review and comment, as they are completed. Please review the plan as it is drafted and send us your comments and suggestions.

Complete Final Draft Plan Document with Appendices (large file)

Cover, Title Page, and Contents

Chapter 1. Introduction
Chapter 2. Community Profile
Chapter 3. The Planning Process
Chapter 4A. Risk Assessment - Assess the Hazard
Chapter 4B. Risk Assessment - Assess the Problem
Chapter 5. Mitigation Strategy
Chapter 6. Plan Maintenance

Figure F-2. Sign-in Sheet for October 3, 2017 Community Meeting

Alabaster

"A City for Families, Planning for the Future"

Community Meeting Sign-in Sheet

City of Alabaster Floodplain Management Plan

October 3, 2017

Name	City of Alabaster Resident Y/N	Address	Email
Crystal Peebles	N	189 Rossburg Dr. Calera	Crystal.Peebles038@yahoo.com
Shamea Erskine	Y	104 Barnhill Cir	Shell2le0hotmail.com
Dawn Gerrells	Y	101 Dogwood Trail	
Daniel Hunsford	N	5801 Hwy 39, Chelsea	DHunsford1@yahoo.com
Deborah D Benner	Y	109 Old Spanish Trail	Bennerdeborah@gmail.com
B. Parker	Y	2526 Tahiti Lane	
Kaylee Allen	Y	Woodbrook Circle 1820 G	
Rebecca Cox	Y	116 Traymoor Dr.	Wecandbec@yahoo.com
Mark Watson	Y	12th St SW	
Tim Cullighan	Y	3/2 Winford Trace	TJCullighan@hotmail.com
Ann Lewis	Y	121 Cedar Grove Pkwy	Ann.lewis121echaster.net

Figure F-3. Community Survey Form with Results and Comments

OCTOBER 3, 2017, SURVEY RESPONSES

Community Survey
2017 City of Alabaster
Floodplain Management Plan

1. How great of a threat is flooding to people and properties within the City of Alabaster?
   - ○ Not a threat **1 response**
   - ○ Slight threat **4 responses**
   - ○ Moderate threat **2 responses**
   - ○ Serious threat **0 responses**

2. How concerned are you with flooding within the City of Alabaster?
   - ○ Not at all concerned **3 responses**
   - ○ Slightly concerned **3 responses**
   - ○ Moderately concerned **1 response**
   - ○ Very concerned **0 responses**

3. What specific concerns about flooding, if any, do you have?

(A)Although we don't have flooding near our home, there tends to be lots of flooding near Buck Creek Park.
(B) Damage to home, 12th Street, SW
(C) Water on the road

(You may add additional comments on the reverse side).

4. Do you have any recommended actions the City might consider to reduce the risks of flooding?

(A) Everything's fine.

(You may add additional comments on the reverse side).

Be sure to keep abreast of the City's progress in developing its plan and offer your ideas and suggestions through our website at:
http://alabaster.floodplainmanagementplan.com/

Thank you for your participation in the planning process!

Figure F-4. Photos of the October 3, 2017 Community Meeting





Figure F-5. Sign-in Sheets for July 9, 2018 Community Meeting

Alabaster
"A City for Families, Planning for the Future"

Community Meeting Sign-in Sheet
City of Alabaster Floodplain Management Plan
July 9, 2018

Name	City of Alabaster Resident Y/N	Address	Email
John Haggard	Y	312 Fox Valley Highlands Cir	john.r.haggard@gmail.com
[illegible]	Y	448 Sugar Hill Lane	[illegible]
[illegible]	Y	148 Scenic Hill Circle	
Stacy Rakestraw	Y	129 Sundance	stacyrake@gmail.com
[illegible]	Y	807 Drummond Pointe Dr.	[illegible]
Rick Ellis	Y	1123 Whisperwind Dr	ellisr@cityofalabaster.com
Russell Bedsole	Y	417 Sterling Park Cir Alabaster, AL	bedsole@cityofalabaster.com
Glen Farrell	Y	161 Stellar Long Gate Dr	FARRELL@cityofalabaster.com
Sherri Pruitt	N	1005 Mossy Rd, Vestavia and Spruitt@cityofalabaster.com	

Figure F-6. City website advertisement of July 9, 2018 community meeting



Figure F-7. Community Survey Form with Results and Comments

Community Survey
2017 City of Alabaster
Floodplain Management Plan

1. How great of a threat is flooding to people and properties within the City of Alabaster?
   - Not a threat
   - Slight threat
   - Moderate threat **2 responses**
   - Serious threat **2 responses**

2. How concerned are you with flooding within the City of Alabaster?
   - Not at all concerned
   - Slightly concerned **2 responses**
   - Moderately concerned **2 responses**
   - Very concerned **2 responses**

3. What specific concerns about flooding, if any, do you have?

(1) Proper flow of water due to future and current building;
(2) Buck Creek flooding;
(3) Damage to property, infrastructure;
(4) Infrastructure being designed in a way to address flooding & if flood management is adequately addressed when considering future building.

(You may add additional comments on the reverse side).

4. Do you have any recommended actions the City might consider to reduce the risks of flooding?

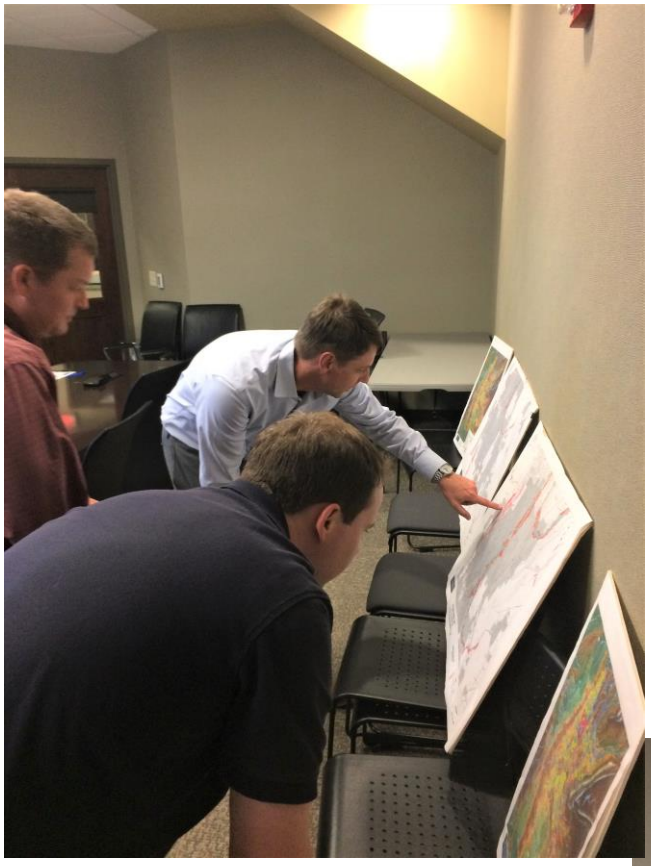
(1) Clear/maintain water runoff, educate people on keeping water runoffs clear of growth and debris;
(2) Allocate more funds to flood management and infrastructure improvement to reduce risk & inconvenience to citizens.

(You may add additional comments on the reverse side).

Be sure to keep abreast of the City's progress in developing its plan and offer your ideas and suggestions through our website at:
http://alabaster.floodplainmanagementplan.com/

Thank you for your participation in the planning process!

Figure F-8. Photos of the July 9, 2018 Community Meeting





Appendix G
Alternative Mitigation Measures Exercise

Response from Brett Tucker, City Engineer

Alternative Mitigation Measures Exercise
2017 City of Alabaster Floodplain Management Plan

Instructions. The purpose of this exercise is to narrow down the mitigation measures to be considered for the City's Five Year Action Plan component of the 2017 Floodplain Management Plan. Take into consideration the City's capabilities to carry out flood hazard mitigation measures and the STAPLEE approach (Social, Technical, Administrative, Political, Legal, Economic, and Environmental considerations discussed in chapter 5). Given these considerations, please review the alternative mitigation measures described in this exercise. These measures have been grouped according to six categories that match the plan's goals.

Please eliminate those measures that are not appropriate and should not be further considered for the Five-Year Action Plan, by marking through them. At this step in the planning process, we are paring down the alternatives. The final selection of measures to be included in the Action Plan will be the next step. These activities have been identified in the CRS Coordinator's Manual, but the Action Plan can also consider activities that are not creditable under the CRS Program. Provide any comments or other suggested activities you might have in the space provided at the end of this exercise.

1. **Preventive activities** keep flood problems from getting worse through planning, permitting, and regulatory tools.

Activity 310 Elevation Certificates

- Maintain FEMA elevation certificates for only new or substantially-improved buildings in the floodplain. We do this.
- Maintain FEMA elevation certificates for all new or substantially-improved buildings and existing "post-FIRM" buildings constructed after the effective date of the City's first FIRM on January 2, 1981. We do this. Some info is missing 1981 - 2006
- Maintain FEMA elevation certificates for all new or substantially-improved buildings and all existing "pre-FIRM" and "post-FIRM" buildings constructed in the floodplain.

Comments: Very little pre-FIRM info exists.

Activity 410 Floodplain Mapping

- Develop new flood elevations, floodway delineations, and other regulatory flood hazard data for areas not mapped in detail by the most recent NFIP Flood Insurance Study (FIS). We do not have the capability to perform mapping beyond FEMA provided info.
- Develop studies and maps that apply higher standards than the FEMA criteria.
- Establish a higher floodway standard.

Comments:
We do not have higher standards. There is no current desire for higher standards.

Activity 430 Higher Regulatory Standards

- Require additional freeboard than one foot for minimum building elevation and flood proofing Administrative decision.
- Prohibit flood proofing and require flood protection by elevation only. [Only 1 in previous 10yrs. has chosen to flood proof.]
- Prohibit fill in the floodway. - Allowed only with FEMA approval.
- Prohibit septic tanks in the flood plain. - Shelby Co. Health Dept. regulates septic tanks.
- Require foundations to be designed by a licensed engineer. - We do this.
- Lower the threshold for substantial improvements to less than 50% of the building value requires full compliance with floodplain management ordinance. Administrative decision.
- Require that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years. Administrative decision.
- Protect critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation. Administrative decision.
- Require compensatory storage for fill. Administrative decision. Needed.
- Prohibit outdoor storage of materials in the floodplain. Administrative decision. Difficult to enforce
- Require elevation of hazardous materials storage indoors. ↗
- Maintain Certified Floodplain Managers (CFM) on staff for ordinance administration. Administrative decision. Limited personnel + resources.

Comments:

Activity 440 Flood Data Maintenance

- Maintain elevation reference marks. Currently maintained by others.

Comments:

Activity 450 Stormwater Management

- Increase stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions. We currently do this.
- Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention). Currently suggest, but don't require.
- Regulate new construction to protect or improve water quality. Water quality not considered beyond State requirements.

Comments:

2. **Property protection** activities are measures taken to permanently protect property from flood damage on a building-by-building basis.

Activity 520 Acquisition and Relocation

- Acquire and demolish flood-prone buildings and maintain the property as permanent open space Administrative decision. Not performed to date.
- Relocate flood-prone buildings so that they are out of the floodplain.

Comments:

Activity 530 Flood Protection

- Retrofit existing non-residential flood-prone buildings by flood proofing. Administrative
- Protect existing flood-prone buildings by elevation above flood levels. decision on both.

Comments:

Very expensive if even possible.

Activity 370 Flood Insurance Promotion

- Perform a flood insurance coverage assessment of the City's current level of coverage and identify shortcomings.
- Prepare and implement a coverage improvement plan under the direction of a committee of local lenders and insurance agents.

Comments:

Administrative decision. Difficult to get buy in.

3. **Public information** activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

Activity 320 Map Information Service

- Provide Flood Insurance Rate Map (FIRM) information to people who inquire, and publicize this service.

Comments:

We do this. Could be better publicized with adequate staff.

Activity 330 Outreach Projects

- Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.

Comments:
We provide minimal information. More resources needed.

Activity 340 Hazard Disclosure

- Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.

Comments:
They should be required to do this.

Activity 350 Flood Protection Information

- Maintain publications and reference materials at public libraries. – Some brochures, but mainly kept @ City Hall.
- Create a webpage to disseminate flood protection information to the public.

Comments: ↳ This grant will help with this.

Activity 360 Flood Protection Assistance

- Give inquiring property owners technical advice on how to protect their buildings from flooding, and publicize this service.

Comments: I am concerned with liability issues with this.

~~In house~~

4. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

Administrative decision.

Activity 420 Open Space Preservation

- Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions. Administrative decision.
- To the extent possible, maintain or restore City-owned flood plains to their natural condition. Administrative decision. Financial restrictions
- Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Consider provisions for clustering and conservation subdivisions. We have some provisions limiting floodplain development.
- Restrict subdivision of flood plain lands to 5 or more acres.

Comments:
↳ Difficult to place an arbitrary acreage (5). We require ~~minimum~~ adequate area, outside of floodplain, if a property is subdivided.

5. **Structural projects** provide flood damage protection by maintaining drainage systems, retrofitting existing buildings to prevent flood damage, and constructing flood control and drainage improvement projects. Administrative decision.

Activity 540 Drainage System Maintenance

- Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed. We do this.
- Regularly inspect all detention and retention facilities constructed pursuant to the City's stormwater management regulations and all city-owned facilities to ensure proper functioning. We do this for city-owned, but not others.
- Maintain a comprehensive GIS inventory of the conveyance system and storage basins. We do not currently have this capability.
- Establish an annual capital improvements programming process for drainage system improvements. Administrative decision.
- Enact and publicize no stream dumping regulations.

We do this as part of MS4 permit. Illicit discharge.

Comments:

Activity 530 Flood Protection

- Perform engineering studies that evaluate the feasibility of structural flood controls.
- Protect existing floodplain development by structural projects, where deemed feasible.

Comments: Administrative decision.

6. **Emergency services** measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

Activity 610 Flood Warning and Response

- Establish an automated flood threat recognition and forecasting system to identify impending floods. ~~Currently performed by visual inspection~~
- Establish methods for early flood warnings to the public.
- Develop a detailed flood response operations plan keyed to flood forecasts for City Council adoption.
- Coordinate flood warning and response activities with critical facilities operators.

Comments:

Fire, Police, Public Works, + Environmental Services coordinate these efforts. Difficult + expensive to automate, ~~most~~

Response from Ben Williams, Park Superintendent

Alternative Mitigation Measures Exercise
2017 City of Alabaster Floodplain Management Plan

Instructions. The purpose of this exercise is to narrow down the mitigation measures to be considered for the City's Five Year Action Plan component of the 2017 Floodplain Management Plan. Take into consideration the City's capabilities to carry out flood hazard mitigation measures and the STAPLEE approach (Social, Technical, Administrative, Political, Legal, Economic, and Environmental considerations discussed in chapter 5). Given these considerations, please review the alternative mitigation measures described in this exercise. These measures have been grouped according to six categories that match the plan's goals.

Please eliminate those measures that are not appropriate and should not be further considered for the Five-Year Action Plan, by marking through them. At this step in the planning process, we are paring down the alternatives. The final selection of measures to be included in the Action Plan will be the next step. These activities have been identified in the CRS Coordinator's Manual, but the Action Plan can also consider activities that are not creditable under the CRS Program. Provide any comments or other suggested activities you might have in the space provided at the end of this exercise.

1. **Preventive activities** keep flood problems from getting worse through planning, permitting, and regulatory tools.

Activity 310 Elevation Certificates

- Maintain FEMA elevation certificates for only new or substantially-improved buildings in the floodplain.
- Maintain FEMA elevation certificates for all new or substantially-improved buildings and existing "post-FIRM" buildings constructed after the effective date of the City's first FIRM on January 2, 1981.
- Maintain FEMA elevation certificates for all new or substantially-improved buildings and all existing "pre-FIRM" and "post-FIRM" buildings constructed in the floodplain.

Comments:

Activity 410 Floodplain Mapping

- Develop new flood elevations, floodway delineations, and other regulatory flood hazard data for areas not mapped in detail by the most recent NFIP Flood Insurance Study (FIS).
- Develop studies and maps that apply higher standards than the FEMA criteria.
- Establish a higher floodway standard.

Comments:

Activity 430 Higher Regulatory Standards

- Require additional freeboard than one foot for minimum building elevation and flood proofing
- Prohibit flood proofing and require flood protection by elevation only.
- Prohibit fill in the floodway.
- Prohibit septic tanks in the flood plain.
- Require foundations to be designed by a licensed engineer.
- Lower the threshold for substantial improvements to less than 50% of the building value requires full compliance with floodplain management ordinance.
- Require that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years.
- Protect critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation.
- Require compensatory storage for fill.
- Prohibit outdoor storage of materials in the floodplain.
- Require elevation of hazardous materials storage indoors.
- Maintain Certified Floodplain Managers (CFM) on staff for ordinance administration.

Comments:

Activity 440 Flood Data Maintenance

- Maintain elevation reference marks.

Comments:

Activity 450 Stormwater Management

- Increase stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions.
- Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention).
- Regulate new construction to protect or improve water quality.

Comments:

2. **Property protection** activities are measures taken to permanently protect property from flood damage on a building-by-building basis.

Activity 520 Acquisition and Relocation

- Acquire and demolish flood-prone buildings and maintain the property as permanent open space
- Relocate flood-prone buildings so that they are out of the floodplain.

Comments:

Activity 530 Flood Protection

- Retrofit existing non-residential flood-prone buildings by flood proofing.
- Protect existing flood-prone buildings by elevation above flood levels.

Comments:

Activity 370 Flood Insurance Promotion

- Perform a flood insurance coverage assessment of the City's current level of coverage and identify shortcomings.
- Prepare and implement a coverage improvement plan under the direction of a committee of local lenders and insurance agents.

Comments:

3. **Public information** activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

Activity 320 Map Information Service

- Provide Flood Insurance Rate Map (FIRM) information to people who inquire, and publicize this service.

Comments:

Activity 330 Outreach Projects

- Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.

Comments:

Activity 340 Hazard Disclosure

- Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.

Comments:

Activity 350 Flood Protection Information

- Maintain publications and reference materials at public libraries.
- Create a webpage to disseminate flood protection information to the public.

Comments:

Activity 360 Flood Protection Assistance

- Give inquiring property owners technical advice on how to protect their buildings from flooding, and publicize this service.

Comments:

4. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

Activity 420 Open Space Preservation

- Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions.
- To the extent possible, maintain or restore City-owned flood plains to their natural condition.
- Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Consider provisions for clustering and conservation subdivisions.
- Restrict subdivision of flood plain lands to 5 or more acres.

Comments:

5. **Structural projects** provide flood damage protection by maintaining drainage systems, retrofitting existing buildings to prevent flood damage, and constructing flood control and drainage improvement projects.

Activity 540 Drainage System Maintenance

- Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed.
- Regularly inspect all detention and retention facilities constructed pursuant to the City's stormwater management regulations and all city-owned facilities to ensure proper functioning.
- Maintain a comprehensive GIS inventory of the conveyance system and storage basins.
- Establish an annual capital improvements programming process for drainage system improvements.
- Enact and publicize no stream dumping regulations.

Comments:

Activity 530 Flood Protection

- Perform engineering studies that evaluate the feasibility of structural flood controls.
- Protect existing floodplain development by structural projects, where deemed feasible.

Comments:

6. **Emergency services** measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

Activity 610 Flood Warning and Response

- Establish an automated flood threat recognition and forecasting system to identify impending floods.
- Establish methods for early flood warnings to the public.
- Develop a detailed flood response operations plan keyed to flood forecasts for City Council adoption.
- Coordinate flood warning and response activities with critical facilities operators.

Comments:

Response from Mike Waits, Fire Department

Alternative Mitigation Measures Exercise
2017 City of Alabaster Floodplain Management Plan

Instructions. The purpose of this exercise is to narrow down the mitigation measures to be considered for the City's Five Year Action Plan component of the 2017 Floodplain Management Plan. Take into consideration the City's capabilities to carry out flood hazard mitigation measures and the STAPLEE approach (Social, Technical, Administrative, Political, Legal, Economic, and Environmental considerations discussed in chapter 5). Given these considerations, please review the alternative mitigation measures described in this exercise. These measures have been grouped according to six categories that match the plan's goals.

Please eliminate those measures that are not appropriate and should not be further considered for the Five-Year Action Plan, by marking through them. At this step in the planning process, we are paring down the alternatives. The final selection of measures to be included in the Action Plan will be the next step. These activities have been identified in the CRS Coordinator's Manual, but the Action Plan can also consider activities that are not creditable under the CRS Program. Provide any comments or other suggested activities you might have in the space provided at the end of this exercise.

1. **Preventive activities** keep flood problems from getting worse through planning, permitting, and regulatory tools.

Activity 310 Elevation Certificates

- Maintain FEMA elevation certificates for only new or substantially-improved buildings in the floodplain.
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- Maintain FEMA elevation certificates for all new or substantially-improved buildings and all existing "pre-FIRM" and "post-FIRM" buildings constructed in the floodplain.

Comments:

Activity 410 Floodplain Mapping

- Develop new flood elevations, floodway delineations, and other regulatory flood hazard data for areas not mapped in detail by the most recent NFIP Flood Insurance Study (FIS).
- Develop studies and maps that apply higher standards than the FEMA criteria.
- Establish a higher floodway standard.

Comments:

Activity 430 Higher Regulatory Standards

- Require additional freeboard than one foot for minimum building elevation and flood proofing
- Prohibit flood proofing and require flood protection by elevation only.
- Prohibit fill in the floodway.
- Prohibit septic tanks in the flood plain.
- Require foundations to be designed by a licensed engineer.
- Lower the threshold for substantial improvements to less than 50% of the building value requires full compliance with floodplain management ordinance.
- Require that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years.
- Protect critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation.
- Require compensatory storage for fill.
- Prohibit outdoor storage of materials in the floodplain.
- Require elevation of hazardous materials storage indoors.
- Maintain Certified Floodplain Managers (CFM) on staff for ordinance administration.

Comments:

- Have Mandatory signage in Area's in Flood plain with new construction

Activity 440 Flood Data Maintenance

- Maintain elevation reference marks.

Comments:

Activity 450 Stormwater Management

- Increase stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions.
- Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention).
- Regulate new construction to protect or improve water quality.

Comments:

- Anual measurement + Reports of Storm water Retiton Ponds.
  Dredge every 5 to 10 years.

2. **Property protection** activities are measures taken to permanently protect property from flood damage on a building-by-building basis.

Activity 520 Acquisition and Relocation

- Acquire and demolish flood-prone buildings and maintain the property as permanent open space
- Relocate flood-prone buildings so that they are out of the floodplain.

Comments:

- By Property for Repeat offenders, Fema Funds

Activity 530 Flood Protection

- Retrofit existing non-residential flood-prone buildings by flood proofing.
- Protect existing flood-prone buildings by elevation above flood levels.

Comments:

Activity 370 Flood Insurance Promotion

- Perform a flood insurance coverage assessment of the City's current level of coverage and identify shortcomings.
- Prepare and implement a coverage improvement plan under the direction of a committee of local lenders and insurance agents.

Comments:

3. **Public information** activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

Activity 320 Map Information Service

- Provide Flood Insurance Rate Map (FIRM) information to people who inquire, and publicize this service.

Comments:

Activity 330 Outreach Projects

- Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.

Comments:

Activity 340 Hazard Disclosure

- Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.

Comments:

Activity 350 Flood Protection Information

- Maintain publications and reference materials at public libraries.
- Create a webpage to disseminate flood protection information to the public.

Comments:

Activity 360 Flood Protection Assistance

- Give inquiring property owners technical advice on how to protect their buildings from flooding, and publicize this service.

Comments:

4. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

Activity 420 Open Space Preservation

- Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions.
- To the extent possible, maintain or restore City-owned flood plains to their natural condition.
- Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Consider provisions for clustering and conservation subdivisions.
- Restrict subdivision of flood plain lands to 5 or more acres.

Comments:

5. **Structural projects** provide flood damage protection by maintaining drainage systems, retrofitting existing buildings to prevent flood damage, and constructing flood control and drainage improvement projects.

Activity 540 Drainage System Maintenance

- Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed.
- Regularly inspect all detention and retention facilities constructed pursuant to the City's stormwater management regulations and all city-owned facilities to ensure proper functioning.
- Maintain a comprehensive GIS inventory of the conveyance system and storage basins.
- Establish an annual capital improvements programming process for drainage system improvements.
- Enact and publicize no stream dumping regulations.

Comments:

Activity 530 Flood Protection

- Perform engineering studies that evaluate the feasibility of structural flood controls.
- Protect existing floodplain development by structural projects, where deemed feasible.

Comments:

6. **Emergency services** measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

Activity 610 Flood Warning and Response

- Establish an automated flood threat recognition and forecasting system to identify impending floods.
- Establish methods for early flood warnings to the public.
- Develop a detailed flood response operations plan keyed to flood forecasts for City Council adoption.
- Coordinate flood warning and response activities with critical facilities operators.

Comments:

Patrick Johnson
I.T. Department

Alternative Mitigation Measures Exercise
2017 City of Alabaster Floodplain Management Plan

Instructions. The purpose of this exercise is to narrow down the mitigation measures to be considered for the City's Five Year Action Plan component of the 2017 Floodplain Management Plan. Take into consideration the City's capabilities to carry out flood hazard mitigation measures and the STAPLEE approach (Social, Technical, Administrative, Political, Legal, Economic, and Environmental considerations discussed in chapter 5). Given these considerations, please review the alternative mitigation measures described in this exercise. These measures have been grouped according to six categories that match the plan's goals.

Please eliminate those measures that are not appropriate and should not be further considered for the Five-Year Action Plan, by marking through them. At this step in the planning process, we are paring down the alternatives. The final selection of measures to be included in the Action Plan will be the next step. These activities have been identified in the CRS Coordinator's Manual, but the Action Plan can also consider activities that are not creditable under the CRS Program. Provide any comments or other suggested activities you might have in the space provided at the end of this exercise.

1. **Preventive activities** keep flood problems from getting worse through planning, permitting, and regulatory tools.

   Activity 310 Elevation Certificates
   - Maintain FEMA elevation certificates for only new or substantially-improved buildings in the floodplain.
   - Maintain FEMA elevation certificates for all new or substantially-improved buildings and existing "post-FIRM" buildings constructed after the effective date of the City's first FIRM on January 2, 1981.
   - Maintain FEMA elevation certificates for all new or substantially-improved buildings and all existing "pre-FIRM" and "post-FIRM" buildings constructed in the floodplain.

   Comments:

   Activity 410 Floodplain Mapping
   - Develop new flood elevations, floodway delineations, and other regulatory flood hazard data for areas not mapped in detail by the most recent NFIP Flood Insurance Study (FIS).
   - Develop studies and maps that apply higher standards than the FEMA criteria.
   - Establish a higher floodway standard.

   Comments:

Activity 430 Higher Regulatory Standards

- Require additional freeboard than one foot for minimum building elevation and flood proofing
- Prohibit flood proofing and require flood protection by elevation only.
- Prohibit fill in the floodway.
- Prohibit septic tanks in the flood plain.
- Require foundations to be designed by a licensed engineer.
- Lower the threshold for substantial improvements to less than 50% of the building value requires full compliance with floodplain management ordinance.
- Require that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years.
- Protect critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation.
- Require compensatory storage for fill.
- Prohibit outdoor storage of materials in the floodplain.
- Require elevation of hazardous materials storage indoors.
- Maintain Certified Floodplain Managers (CFM) on staff for ordinance administration.

Comments:

Activity 440 Flood Data Maintenance

- Maintain elevation reference marks.

Comments:

Activity 450 Stormwater Management

- Increase stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions.
- Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention).
- Regulate new construction to protect or improve water quality.

Comments:

2. **Property protection** activities are measures taken to permanently protect property from flood damage on a building-by-building basis.

Activity 520 Acquisition and Relocation

- Acquire and demolish flood-prone buildings and maintain the property as permanent open space
- Relocate flood-prone buildings so that they are out of the floodplain.

Comments: Does this happen through our Abatement Board or some other department?

Activity 530 Flood Protection

- Retrofit existing non-residential flood-prone buildings by flood proofing.
- Protect existing flood-prone buildings by elevation above flood levels.

Comments: Would this be a Code Enforcement issue or up to the building owner?

Activity 370 Flood Insurance Promotion

- Perform a flood insurance coverage assessment of the City's current level of coverage and identify shortcomings.
- Prepare and implement a coverage improvement plan under the direction of a committee of local lenders and insurance agents.

Comments:

3. **Public information** activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

Activity 320 Map Information Service

- Provide Flood Insurance Rate Map (FIRM) information to people who inquire, and publicize this service.

Comments: We are in the process of developing an in-house GIS department, this could be one of their plans for 2019.

Activity 330 Outreach Projects

- Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.

Comments: Can this be posted on our website to be updated periodically?

Activity 340 Hazard Disclosure

- Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.

Comments:

Activity 350 Flood Protection Information

- Maintain publications and reference materials at public libraries.
- Create a webpage to disseminate flood protection information to the public.

Comments: Already in place

Activity 360 Flood Protection Assistance

- Give inquiring property owners technical advice on how to protect their buildings from flooding, and publicize this service.

Comments:

4. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

Activity 420 Open Space Preservation

- Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions.
- To the extent possible, maintain or restore City-owned flood plains to their natural condition.
- Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Consider provisions for clustering and conservation subdivisions.
- Restrict subdivision of flood plain lands to 5 or more acres.

Comments:

5. **Structural projects** provide flood damage protection by maintaining drainage systems, retrofitting existing buildings to prevent flood damage, and constructing flood control and drainage improvement projects.

Activity 540 Drainage System Maintenance

- Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed.
- Regularly inspect all detention and retention facilities constructed pursuant to the City's stormwater management regulations and all city-owned facilities to ensure proper functioning.
- Maintain a comprehensive GIS inventory of the conveyance system and storage basins.
- Establish an annual capital improvements programming process for drainage system improvements.
- Enact and publicize no stream dumping regulations.

Comments: This can be tasked to our GIS department.

Activity 530 Flood Protection

- Perform engineering studies that evaluate the feasibility of structural flood controls.
- Protect existing floodplain development by structural projects, where deemed feasible.

Comments:

6. **Emergency services** measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

Activity 610 Flood Warning and Response

- Establish an automated flood threat recognition and forecasting system to identify impending floods.
- Establish methods for early flood warnings to the public.
- Develop a detailed flood response operations plan keyed to flood forecasts for City Council adoption.
- Coordinate flood warning and response activities with critical facilities operators.

Comments: Would the warning be required, our systems do not notify quickly enough to the general public at this time. We can post but have to expect the public to check and read updates.

Items highlighted are favorable.

Comments from Sherri Proctor, Planning and Zoning Coordinator

Alternative Mitigation Measures Exercise
2017 City of Alabaster Floodplain Management Plan

Instructions. The purpose of this exercise is to narrow down the mitigation measures to be considered for the City's Five Year Action Plan component of the 2017 Floodplain Management Plan. Take into consideration the City's capabilities to carry out flood hazard mitigation measures and the STAPLEE approach (Social, Technical, Administrative, Political, Legal, Economic, and Environmental considerations discussed in chapter 5). Given these considerations, please review the alternative mitigation measures described in this exercise. These measures have been grouped according to six categories that match the plan's goals.

Please eliminate those measures that are not appropriate and should not be further considered for the Five-Year Action Plan, by marking through them. At this step in the planning process, we are paring down the alternatives. The final selection of measures to be included in the Action Plan will be the next step. These activities have been identified in the CRS Coordinator's Manual, but the Action Plan can also consider activities that are not creditable under the CRS Program. Provide any comments or other suggested activities you might have in the space provided at the end of this exercise.

1. **Preventive activities** keep flood problems from getting worse through planning, permitting, and regulatory tools.

Activity 310 Elevation Certificates

- ✓ Maintain FEMA elevation certificates for only new or substantially-improved buildings in the floodplain.
- ~~Maintain FEMA elevation certificates for all new or substantially-improved buildings and existing "post-FIRM" buildings constructed after the effective date of the City's first FIRM on January 2, 1981.~~
- ✗ Maintain FEMA elevation certificates for all new or substantially-improved buildings and all existing "pre-FIRM" and "post-FIRM" buildings constructed in the floodplain.

Comments:

Activity 410 Floodplain Mapping

- Develop new flood elevations, floodway delineations, and other regulatory flood hazard data for areas not mapped in detail by the most recent NFIP Flood Insurance Study (FIS).
- Develop studies and maps that apply higher standards than the FEMA criteria.
- Establish a higher floodway standard.

Comments:

Activity 430 Higher Regulatory Standards

- Require additional freeboard than one foot for minimum building elevation and flood proofing
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- Protect critical facilities (police, fire, public utilities, schools, medical, etc.) to the 500 year flood elevation.
- Require compensatory storage for fill.
- Prohibit outdoor storage of materials in the floodplain.
- Require elevation of hazardous materials storage indoors.
- Maintain Certified Floodplain Managers (CFM) on staff for ordinance administration.

Comments:

Enforcing the regulations we have and the highlighted items should be sufficient.

Activity 440 Flood Data Maintenance

- Maintain elevation reference marks.

Comments:

Activity 450 Stormwater Management

- Increase stormwater management standards (design storm and size of development) for the regulation of new development to ensure that post-development peak runoff is no worse than pre-development conditions.
- Enact regulations to require the implementation of low impact development (LID) techniques to minimize the need for more traditional stormwater management controls (pipes, channels, and detention).
- Regulate new construction to protect or improve water quality.

Comments:

We have some such regulations that could be strengthened. Our 119 overlay provides encouragement of LID methods.

2. **Property protection** activities are measures taken to permanently protect property from flood damage on a building-by-building basis.

Activity 520 Acquisition and Relocation

- Acquire and demolish flood-prone buildings and maintain the property as permanent open space
- Relocate flood-prone buildings so that they are out of the floodplain.

Comments:
No budget - would be a hard sell to Council

Activity 530 Flood Protection

- Retrofit existing non-residential flood-prone buildings by flood proofing.
- Protect existing flood-prone buildings by elevation above flood levels.

Comments:
staff availability to write grants... ??

Activity 370 Flood Insurance Promotion

- Perform a flood insurance coverage assessment of the City's current level of coverage and identify shortcomings.
- Prepare and implement a coverage improvement plan under the direction of a committee of local lenders and insurance agents.

Comments:

3. **Public information** activities advise people about the flood hazard, encourage the purchase of flood insurance, and provide information about ways to reduce flood damage. These activities also generate data needed by insurance agents for accurate flood insurance rating. They generally serve all members of the community.

Activity 320 Map Information Service

- Provide Flood Insurance Rate Map (FIRM) information to people who inquire, and publicize this service.

Comments:
this is doable.

Activity 330 Outreach Projects

- Send information about the flood hazard, flood insurance, flood protection measures, and/or the natural and beneficial functions of floodplains to residents.

Comments:

This we can consider.

Activity 340 Hazard Disclosure

- Encourage real estate agents to advise potential purchasers of flood-prone property about the flood hazard.

Comments:

Encourage is the key word.

Activity 350 Flood Protection Information

- Maintain publications and reference materials at public libraries.
- Create a webpage to disseminate flood protection information to the public.

Comments:

This can be done.

Activity 360 Flood Protection Assistance

- Give inquiring property owners technical advice on how to protect their buildings from flooding, and publicize this service.

Comments:

As long as the right knowledgeable person is offering the advise.

4. **Natural resource protection** activities preserve or restore natural areas or the natural functions of floodplain and watershed areas. They are implemented by a variety of agencies, primarily parks, recreation, or conservation agencies or organizations.

Activity 420 Open Space Preservation

- Preserve City-owned floodplain lands as permanent open space, kept free from development through deed restrictions.
- To the extent possible, maintain or restore City-owned flood plains to their natural condition.
- Provide zoning and subdivision incentives to set aside flood plains as permanent open space in new developments. Consider provisions for clustering and conservation subdivisions.
- Restrict subdivision of flood plain lands to 5 or more acres.

Comments:

working on these ideas, clustering and conservation sub.
currently we only have Planned Development Districts which work well with conservation and protection. We are researching the possibility of clustering subs.

5. **Structural projects** provide flood damage protection by maintaining drainage systems, retrofitting existing buildings to prevent flood damage, and constructing flood control and drainage improvement projects.

Activity 540 Drainage System Maintenance

- Conduct regular inspections and maintenance of all channels and conveyance facilities and remove debris as needed.
- Regularly inspect all detention and retention facilities constructed pursuant to the City's stormwater management regulations and all city-owned facilities to ensure proper functioning.
- Maintain a comprehensive GIS inventory of the conveyance system and storage basins.
- Establish an annual capital improvements programming process for drainage system improvements.
- Enact and publicize no stream dumping regulations.

Comments:
All of the above are great ideas, but there is no staff for this.

Activity 530 Flood Protection

- Perform engineering studies that evaluate the feasibility of structural flood controls.
- Protect existing floodplain development by structural projects, where deemed feasible.

Comments:

6. **Emergency services** measures protect life and property during a flood, through flood warning and response programs during an emergency to minimize its impact. These measures are usually the responsibility of local emergency management staff and the owners or operators of critical facilities.

Activity 610 Flood Warning and Response

- Establish an automated flood threat recognition and forecasting system to identify impending floods.
- Establish methods for early flood warnings to the public.
- Develop a detailed flood response operations plan keyed to flood forecasts for City Council adoption.
- Coordinate flood warning and response activities with critical facilities operators.

Comments:
Seems like a huge effort.

Based on the exercise, the only area I would be involved in would be **Area 6 Activity 610 Flood Warning and Response**. Emergency Services and in so much that it is not currently feasible to install and maintain automated flood threat recognition devices, the current system of monitoring all areas that regularly cause issues during a significant weather event through actual Officers on the ground and reporting these issues through a Command and Control Center will adequately, as it has in the past, handle these issues. Please let me know if you require any further clarification. Thanks.

Lt. Mike Jones
Alabaster Police Department
Operations Commander

Appendix H
Adopting Resolution

Alabaster

RESOLUTION NO. 072318-C

A RESOLUTION TO ADOPT THE 2017 CITY OF ALABASTER FLOODPLAIN MANAGEMENT PLAN

WHEREAS, the National Flood Insurance Program (NFIP) makes federally-supported flood insurance available for purchase to property owners and renters in communities that maintain minimum regulatory requirements for development in regulatory flood zones; and,

WHEREAS, the Community Rating System (CRS) reduces flood insurance premiums 5% for each improvement in CRS Class - from Class 9 through Class 1 - for NFIP policy holders in those CRS communities that do more than implement the minimum NFIP regulatory requirements; and,

WHEREAS, the City of Alabaster desires to pursue participation in the CRS Program and, in so doing, provide NFIP insurance premium reductions to policy holders; and,

WHEREAS, the Federal Emergency Management Agency (FEMA) awarded a planning grant funded through the FEMA Flood Mitigation Assistance (FMA) grant program to the City of Alabaster to partially fund the preparation of the 2017 City of Alabaster Floodplain Management Plan (Plan); and,

WHEREAS, the City of Alabaster Floodplain Management Planning Committee directed the completion of the Plan, which assesses the risks of flooding and guides the City's ongoing flood hazard mitigation activities and participation in the NFIP and CRS; and,

WHEREAS, the Floodplain Management Planning Committee recommends that the Plan be adopted by the City Council; and

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALABASTER that the **2017 City of Alabaster Floodplain Management Plan** is hereby adopted.

BE IT FURTHER RESOLVED that a copy of this resolution shall be maintained in the Office of the Clerk of the City of Alabaster.

ADOPTED AND APPROVED THIS 23rd DAY OF JULY 2018.

ATTEST:

Brian Binzer, City Manager / Clerk

CITY OF ALABASTER

By: Scott Brakefield, Council President

APPROVED:

Marty B. Handlon, Mayor

CITY OF CALERA INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

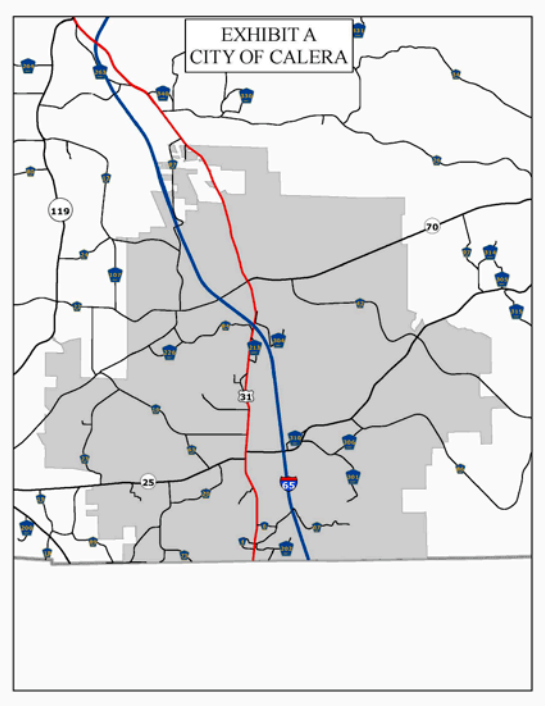
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CITY OF CALERA MITIGATION ACTION PLAN

Geography/History

Calera is located at 33°6′27″N, 86°45′0″W (33.107572, -86.749964). According to the United States Census Bureau, the city has a total area of 12.9 square miles (33.5 km), of which, 12.9 square miles (33.4 km) of it is land and 0.04 square miles (0.1 km) of it (0.23%) is water.



Only a few families lived in Calera in early 1850, and the small community was called Buxahatchie. The arrival of the first railroad in Calera was chartered March 4, 1848, and the tracks were laid between January 1854 and June 15, 1855. "The first through train between Louisville, Kentucky and Montgomery, Alabama ran through Calera on September 28, 1872.

When the railroad arrived, lime workers came to settle, as the major industry in Calera was the manufacture of lime. In 1882 several limekilns were operating the place acquired the name of Limeville. A Confederate post office was established during the war years. During the war the name was changed to Lime Kilns, also referred to as Lime City and Lime Station. In 1860 "Limeville Baptist Church" was constituted. According to railroad schedules and post office records, the community name was changed to Calera in 1869, when the U.S. post office was established. Calera comes from the Latin word "calx" meaning lime.

Calera was noted for its fine hotels, boarding houses and restaurants. The first hotel was built in 1872. However, it burned in 1874. The three major hotels, all conveniently located near the train depot, were The Moss House, the Calera House, or, as it was later called, The Calera Hotel or The Campbell House, probably the oldest of the three. The Vanderbilt was Calera's most renowned hotel. It was built in 1882

Several newspapers have been published in Calera over the years: the Shelby Sentinel, the Tariff and Labor Advocate, the Farmers' Alliance, the Shelby News, the Calera Journal, all of the nineteenth century; the Calera News, the Shelby County Review, and the Calera Independent, published in the twentieth century. The earliest of these, the Shelby Sentinel, formerly called the Shelby Guide, was first published Columbiana in 1875 and moved its offices to Calera in late 1883.

The Shelby Sentinel, dated January 18, 1883, indicated that there had been a school in Calera for "two or three years." On January 29, 1885 a petition was presented in the state legislature for the incorporation of Calera. On August 7, 1885 the citizens of Calera met to organize support for a permanent public high school. At the state fair in 1887 the Calera Shoe Factory won a prize for the best exhibit of Alabama manufactured shoes.

Significant Characteristics

Calera is home to the Heart of Dixie Railroad Museum; a three-block area which features antique locomotives and railcars, a railroad museum and excursion train rides. The museum contains a restored depot and railroad cars that sit outside the depot. A train, complete with snack and gift shop car, passenger cars from 1910-1950, engine, and caboose takes passengers down the rails through the forest.

The Calera Parks and Recreation Department provides quality leisure and cultural opportunities for all the citizens of Calera while protecting and enhancing Calera's natural heritage. The Parks and Recreations Department maintain three parks the Oliver Park Sports Complex, the George W. Roy Recreational Park and The Ackridge Arboretum Park.

Other notable characteristics include the Rolling Hills Camp, Dargin Community Center and the Nazarene Church Lake reservoir.

Population and Demographics

As of the 2020 Census, the city covers 24.2 square miles and there were 15,962 people. The population density was 660.5 people per square mile. The racial makeup of the city was 63.15% White, 28.3% Black or African American, 0% Native American, 1.67% Asian, 0% Pacific Islander, 4.88% from other races, and 2.01% from two or more races. 5.4% of the population was Hispanic or Latino of any race. 91.07% of town residents speak English while Spanish is spoken by 6.35% of the population.

According to the 2019 American Community Survey, there were 5,100 households out of which 1993 had children under the age of 18 living with them, 2,665 were married couples living together, 730 had a female householder with no spouse present, and 1,631 were non-families. 26.4% of all householders were made up of individuals and 11.7% had someone living alone who was 65 years of age or older. The average household size was 2.71 and the average family size was 3.396. Mobile homes made up 2.6% of structures.

In the city the population was spread out with 29.1% under the age of 18, 7.9% from 18 to 24, 46.6% from 15 to 44, 15.6% from 45 to 64, and 10.3% who were 65 years of age or older. The median age was 33.1 years. For every 100 females there were 89.2 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 3.2% of the city’s population had a hearing difficulty, 2% vision difficulty, 5.1% cognitive difficulty, 4.5% ambulatory difficulty, 1.8% self-care difficulty, and 5.2% an independent living difficulty. 10.3% of the population had some type of disability.

Year	2010	2020	Change
Population	11,620	15,962	37.37
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $61,594.00 and the median income for a family was $74,801.00. Males had a median income of $53,158.00 versus $32,752.00 for

females. The per capita income for the city was $45,107.00. About 5.35% of the population were below the poverty line, including 7.22% of females and 3.24% of males.

Below are the Single-family new house construction building permits in Calera:

- 2009: 174 buildings
- 2010: 163 buildings
- 2011: 106 buildings
- 2012: 103 buildings
- 2013: 86 buildings
- 2014: 117 buildings
- 2015: 141 buildings
- 2016: 169 buildings, average cost: $140,504.00
- 2017: 192 buildings, average cost: $149,063.00
- 2018: 204 buildings, average cost: $148,010.00
- 2019: 215 buildings, average cost: $146,094.00
- 2020: 308 buildings, average cost: $145,200.00

Calera's atmosphere and central location is conducive to continued industrial development. Evidence of this lies in the several large industries that have located in Calera, including LaFarge Cement, Vulcan Materials, Chemlime, Sysco Corporation and Alabama Dynamics. Many smaller, specialized industries have also located in Calera. Calera's retain centers along the Interstate 65 Corridor are maintaining a consistent growth pattern.

Infrastructure

The Calera Fire is a 46 member service designed to serve Calera and surrounding areas. This unit was formed in late 1999. The unit performs high angle rescue, confined space rescue, and has the Alabama Mutual Aid Surface Water Team.

Calera has 32 officers full-time and their own 911 system, comprised of 6 full-time dispatchers and 2 part-time.

The Public Works Department for the City of Calera is comprised of the Street and Sanitation Departments. The Street Department is responsible for most street repair, street resurfacing, road building, drainage pipe installation, sign placement/replacement, and any other such task. The Sanitation Department collects all refuse including household waste and yard debris and certain commercial garbage collection.

Calera's public schools are part of the Shelby County Schools system and are accredited by Southern Association of Colleges and Schools, which provides them with an access to a network of services and technical assistance.

School	Enrollment
Calera High School	1009
Calera Middle School	805
Calera Intermediate	747

Calera Elementary	730

Transportation infrastructure consists of roadways Interstate I-65 (Three Access Locations) Exits 228, 231, 234, US Highway 31, AL Highway 25 and AL Highway 70. Railroads are CSX and Norfolk Southern. Shelby County Airport is located within Calera City Limits and the Birmingham International Airport is 25 miles North of Calera

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Calera Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited**	**Higher Authority**	**Electronic copy Available**
Building Codes	International Building Codes	2012	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2014		**N**	**N**	**N**
Comprehensive Plan	Resolution	2002		**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2009		**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2013		**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2013		**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2009		**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2009		**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	2009		**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may

be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Calera Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	45	45	45
Fire Personnel	Professional(s)	Fire Dept.	46	46	46
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	1	1	1
Government Elected	Elected Officials	Mayor/Council	7	7	7
Government Administration	Employees	Jurisdiction	170	170	170
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	30	30	30
Information Systems	Certified Professional	IT department	2	2	2
Land Use/Management	Engineer(s)/Planners	State/Local Planning	1	1	1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	32	32	32
Medical Practioners	Professional(s)	Medical Facilities	6	6	6
Public Works	Directors/Engineers	Public Works	28	28	28
Public Communication	911 specialists	E-911	43	43	43
Public Utilities	Professionals	Public Utilities	20	20	20
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Calera Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**X**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**X**
	PDM for disaster resistant universities		**X**		

	PDM Grants for communities	X			X
	Department of Health Grants		X		
	Department of Justice Grants	X			X
	Department of Agriculture Grants		X		
	Department of Energy Grants		X		
	Department of Education Grants		X		
	Fire department grants	X			X
	Flood Management Grants (FMA)	X			X
	Homeland Security Grant Program (HSGP)	X			X
	Repetitive Flood Claims Grants (RFC)	X			
	Severe Repetitive Loss Grants (SRL)	X			
	Private foundation grants	X			X
	Private business/industry grants	X			X
Debt Procurement	Incur debt through special tax/revenue bonds	X			X
Dept Procurement	Incur debt through private activity bonds	X			X
Impact Fees	Developer fees for new developments	X			X
Jurisdiction Bonds	Incur debt through general obligation bonds	X			X
Project Funding	Capital improvement	X			X
Spending Restrictions	Withhold spending in hazard-prone areas	X			X
Special Taxes	Authority to levy taxes for specific purposes	X			X
Utility Fees	Fees for water, sewer, gas, or electric service	X			X

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Calera. The following goal statements represent a broad target for City of Calera and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Calera	Objective AH.1: Improve the City of Calera's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Calera's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the City of Calera	Objective FL.1: Improve the City of Calera's flood warning and information distribution to citizens Objective FL.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Calera's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Calera	Objective HW.1: Improve the City of Calera's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Calera's capability to prepare for, respond to and recover from High Winds events

Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Calera	Objective IS.1: Improve the City of Calera's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Calera's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Calera	Objective WF7.1: Improve the City of Calera's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Calera's capability to prepare for, respond to and recover from Wild-land Fire events
Illegal Drug Lab Hazard Goal: Mitigate the impact of Illegal Drug Laboratories the City of Calera	Objective ID.1: Improve the City of Calera's Illegal Drug Laboratories warning and information distribution to citizens Objective ID.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to Illegal Drug Laboratories Objective ID.3: Improve the City of Calera's capability to prepare for, respond to and recover from Illegal Drug Laboratories existence
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Calera	Objective UF.1: Improve the City of Calera's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Calera's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Calera's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic

items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The actual table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists

Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1, FS# 2 FS # 3, Pump Stations	City Govt, FD	Grants, Local Funds	165,525 772,450	2022 2027	69
AH1f	Encouraged citizens to develop emergency preparedness, response and recovery plans.	FD City Govt	Local Funds	1,104 110,350	2022 2027	88

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3x	Develop a community shelter program for mobile home parks Installed community shelter with grant funds in 2015. Review annually.	City Govt	Grants Local Funds	110,350 662,100	2022 2027	88
AH3i1	Evaluate shelter requirements annually & add necessary shelters	ARC, City Govt, EMA, ADPH	Local Funds	11,035 441,400	2022 2027	88
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt	Grants, Local Funds	55,175 551,750	2022 2027	88
HW1b	Educate the public on High Wind weather preparedness, response and recovery	FD, NWS, EMA	Local Funds	1,104 110,350	2022 2027	87
HW1c	Educate special needs/school/local populations on high wind preparedness and response	FD, NWS, EMA	Local Funds	1,104 11,035	2022 2027	87
HW1c	Distribute high wind preparedness information to special needs/school and local populations	FD, NWS, EMA	Local Funds	1,104 11,035	2022 2027	87
AH1e	Distribute safe room/Shelter in place information to schools/special needs and local populations	FD, BOE, City Govt	Grants Local Funds	5,518 551,750	2022 2027	84
UF1a	Educate school/special needs/local populations on fire safety and response	FD, BOE	Grants Local Funds	56, 279 110,350	2022 2027	84
UF1b	Educate school, special needs and the community population on fire extinguisher use	FD	Local Funds	1,104 110,350	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA, FD	Local Funds	1,104 110,350	2022 2027	84
FL3e	Inspect and maintain natural drainage channels and clear beaver dams and debris	City Govt, FD	Grants, Local Funds	11,035 110,350	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities	FD	Local Funds	11,035 551,750	2022 2027	83
AH3v	Require critical sites to develop and provide to EMA an emergency plan	City Govt, EMA, LEPC	Local Funds	1,104 110,350	2022 2027	82
FL1a	Distribute flood awareness and preparedness literature at events.	FD	Local Funds	1,104 110,350	2022 2027	82
FL2a	Obtain PPE for all personnel responding to flood events Have PDF's on trailer	FD	Grants Local Funds	55,175 331,050	2022 2027	82
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	City Govt, EMA, NWS	Grants, Local Funds	11,035 551,750	2022 2027	82
TR1b	Educate schools, special needs and government officials on for handling suspicious mail	BOE, LE	Local Funds	5,518 110,350	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 110,350	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 1,103,500	2022 2027	81

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3f	Adopt/enforce commercial and special needs facilities sprinkler legislation	City Govt, FD	Local Funds	1,104 110,350	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, FD	Local Funds	1,104 110,350	2022 2027	81
AH3l	Encourage schools to implement a disaster phone line	City Govt, BOE	Local Funds	5,518 110,350	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	FD	Grants Local Funds	55,175 551,750	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	1,104 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 110,350	2022 2027	79
AH3u	Ensure that mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, ADPH, ADHR, EMA	Local Funds	1,104 110,350	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	1,104 110,350	2022 2027	79
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 110,350	2022 2027	79
FL3h	Request a study of the feasibility of flood control measures.	City Govt	Grants, Local Funds	27,588 165,525	2022 2027	79
IL1a	Educate school and local populations on Meth Lab awareness	BOE, FD, LE	Local Funds	1,104 11,035	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept, 911	Local Funds	3,311 110,350	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 110,350	2022 2027	78
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	1,104 110,350	2022 2027	78
IL3a	Join/participate in local state and federal drug task forces	LE, FD	HLS Grants Local Funds	1,104 110,350	2022 2027	78
IL3c	Require businesses to refuse large quantity sales of precursors	City Govt	Local Funds	1,104 110,350	2022 2027	78
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	FD	Local Funds	1,104 110,350	2022 2027	78
HW3g	Adopt/enforce down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	1,104 220,700	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	FD, LE	Local Funds	5,518 110,350	2022 2027	77
WF1b	Educate school/businesses and the public on the causes of wild land fires	AFC, FD	Local Funds	1,104 110,350	2022 2027	77
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt	Local Funds	1,104 110,350	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH2c	Train 1st responders in search and rescue techniques	FD	Grant, Local Funds	27,588 165,525	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt, FD	Local Funds	1,104 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt, FD	Grants, Local Funds	11,035 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records Location to house critical equipment.	City Govt	Local Funds	1,104 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	FD, PD	Grants, Local Funds	27,588 110,350	2022 2027	76
IL3b	Maintain/publicize a hotline to report suspected meth labs	LE, PD	Local Funds	1,104 110,350	2022 2027	76
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 110,350	2022 2027	75
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grants Local Funds	93,798 551,750	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually	FD	Grants Local Funds	5,518 220,700	2022 2027	75
UF3a	Strive to be NHPA compliant.	City Govt, FD	Local Funds	1,104 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD, City Govt	Local Funds	5,518 11,035	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt, FD	DHL Grants Local Funds	25,518 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Operations and the EOP	City Govt, FD	Local Funds	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt, FD, EMA	Local Funds	11,035 110,350	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	EMA, City Govt	Grants, Local Funds	11,035 220,700	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt, BOE	Grants Local Funds	7,725 110,350	2022 2027	74
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	1,104 11,035	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities. Storm spotter class.	FD, BOE	Grants, Local Funds	33,105 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD, City Govt	HLS Grants	55,175 441,400	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt, EMA, Co Engr	Grants, Local Funds	22,070 441,400	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city	City Govt	Local Funds	1,104 275,875	2022 2027	74
WF1c	Educate schools/special needs/local populations on preparedness for and response to a wild-land fire	AFC, FD, BOE	Local Funds	1,104 110,350	2022 2027	74
WF1d	Distribute wildfire awareness and prevention information to schools/business/local populations	AFC, FD	Local Funds	1,104 110,350	2022 2027	74
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC, FD	Local Funds	1,104 110,350	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, FD	Local Funds	1,104 110,350	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grants	55,175 772,450	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD, City Govt	Grant, Local Funds	55,175 441,400	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD	Grants, DHL Grants	5,518 110,350	2022 2027	73
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	1,104 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt, FD	Local Funds	22,070 110,350	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grants Local Funds	16,553 331,050	2022 2027	73
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	FD	Local Funds	1,104 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for 4 uncovered areas	City Govt	Grant Local Funds	82,763 882,800	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt, FD	Grants Local Funds	22,000 331,050	2022 2027	72
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Local Funds	11,035 110,350	2022 2027	72
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Local Funds	1,104 11,035	2022 2027	72
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	1,104 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service. Storm spotter class.	NWS, FD, EMA	Local Funds	1,104 110,350	2022 2027	72
IS3d	Establish snow and ice removal methods	FD, City Govt	Local Funds	1,104 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF2b	Train firefighters to obtain for state and national certifications	FD	Grants Local Funds	33,105 331,050	2022 2027	72
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt, FD	Local Funds	1,104 110,350	2022 2027	72
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, FD	Local Funds	1,104 110,350	2022 2027	72
AH3a1	Develop/maintain a citywide NIMS resource inventory software	City Govt, FD	Grants Local Funds	11,035 110,350	2022 2027	71
AH3d1	Obtain equipment and train staff to implement NOAA and Emergency Management Software	City Govt	Grants, Local Funds	27,588 220,700	2022 2027	71
FL2b	Train all 1st responders on repetitive flooding areas and structures	FD	Grants Local Funds	22,070 110,350	2022 2027	71
FL3a4	Educate developers, builders and the public on the location of NFIP designated floodplains	City Govt	Local Funds	1,104 110,350	2022 2027	71
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	FD, Streets	Grants, Local Funds	27,588 220,700	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt, FD	Grants Local Funds	11,035 110,350	2022 2027	71
IL2c	Train to all personnel responding to Meth Labs on appropriate response and recovery	LE, FD	Grants	11,035 110,350	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	1,104 110,350	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt, FD	Grants, Local Funds	11,035 551,750	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	FD	Local Funds	17,725 110,350	2022 2027	70
WF3h	Adopt/enforce wildfire and burning restriction legislation	City Govt	Local Funds	1,104 110,350	2022 2027	70
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	1,104 110,350	2022 2027	69
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	1,104 110,350	2022 2027	69
IL2a	Obtain PPE for all personnel that respond to Meth Labs	LE, EMA	Grants Local Funds	82,763 551,750	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt, EMA	Grants, Local Funds	33,105 551,750	2022 2027	68
HW3h	Encourage the use of shatter-proof windows in schools	City Govt, BOE	Local Funds	1,104 110,350	2022 2027	68
HW3e	Obtain funding to build mobile home community storm shelters	City Gov, EMA	Grants Local Funds	220,700 1,103,500	2022 2027	67

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
PD3c	Develop a traffic flow and security plan for medical dispensing sites	LE, ADPH	Local Funds	5,518 110,350	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction.	FD	Grants Local Funds	110,350 1,103,500	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grants Local Funds	220,700 1,103,500	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques	FD, AFC	Local Funds	11,035 110,350	2022 2027	67
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 110,350	2022 2027	66
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grants Local Funds	11,035 110,350	2022 2027	66
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt, FD	Fire Grants HLS Grants	33,105 551,750	2022 2027	66
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	1,104 110,350	2022 2027	65
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 110,350	2022 2027	65
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grants Local Funds	551,750 1,103,500	2022 2027	65
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grants, Local Funds	110,350 662,100	2022 2027	63
WF2f	Exercise wildfire response regularly for residences, businesses and industry	FD	Local Funds	11,035 551,750	2022 2027	63
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	Grants State Grants	110,350 551,750`	2022 2027	62
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grants, Local Funds	110,350 551,750	2022 2027	61
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grants, Local Funds	55,175 331,050	2022 2027	61
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt, ADPH, EMA	Grants Local Funds	33,105 441,400	2022 2027	60

"STAPLEE" Mitigation Actions Prioritization Table																												
	Social				Technical			Administrative			Political			Legal			Economic				Environmental					Prioritization		
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=3	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score		
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots. (City Hall, FS# 1, FS# 2 FS # 3, Pump Stations	3	9	6	9	3	3	3	3	3	2	3	3	3	3	3	2	6	2	4	2	3	3	3	3	3	90		
Encouraged citizens to develop emergency preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88		
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	2	3	2	2	3	3	2	6	2	4	2	3	3	3	3	3	88		
Evaluate shelter requirements annually & add necessary shelters	3	9	6	9	3	3	2	3	3	2	3	2	3	3	3	2	6	2	2	2	3	3	3	3	3	88		
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	3	3	3	2	2	2	2	3	3	3	6	2	4	2	3	3	3	3	3	88		
Educate the public on High Wind weather preparedness, response and recovery	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87		
Educate special needs/school/local populations on high wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87		
Distribute high wind preparedness information to special needs/school and local populations	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87		
Distribute safe room/Shelter in place information to schools/special needs and local populations	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84		

Educate school/special needs/local populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Inspect and maintain natural drainage channels and clear beaver dams and debris	2	6	6	7	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	83
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Require critical sites to develop and provide to EMA an emergency plan	2	6	4	9	2	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Distribute flood awareness and preparedness literature at events	2	6	2	7	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Obtain PPE for all personnel responding to flood events	2	6	4	7	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	82
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	7	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	82
Educate schools, special needs and government officials on for handling suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Adopt/enforce commercial and special needs facilities sprinkler legislation	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Encourage schools to implement a disaster phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Participate in the National Flood Insurance Program (NFIP)	3	0	4	7	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79

Request a study of the feasibility of flood control measures.	2	6	6	7	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	79
Educate school and local populations on Meth Lab awareness	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Require businesses to refuse large quantity sales of precursors	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	78
Encourage special needs facilities to implement a security system	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Adopt/enforce down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Educate school/businesses and the public on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Maintain/publicize a hotline to report suspected meth labs	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	6	4	2	3	3	3	3	3	3	3	76
Participate in the NFIP Community Rating System	3	0	0	7	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	75
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75

Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Operations and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Identify alternative access points for single access neighborhoods	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Acquire signage to indicate water depth at flooding points	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Educate schools/special needs/local populations on preparedness for and response to a wild-land fire	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Distribute wildfire awareness and prevention information to schools/business/local populations	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73

Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for 4 uncovered areas	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	7	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	72
Identify roadways, culverts and bridges damaged by flooding	3	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	72
Update City Land Use Plan to identify areas where development should be restrictive	2	3	6	7	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Establish snow and ice removal methods	2	6	2	3	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Develop/maintain a citywide NIMS resource inventory software	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Obtain equipment and train staff to implement NOAA and Emergency Management Software	2	6	4	9	3	2	3	1	1	1	1	1	2	3	3	3	4	2	4	1	3	3	3	3	3	71
Train all 1st responders on repetitive flooding areas and structures	2	3	2	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Educate developers, builders and the public on the location of NFIP designated floodplains	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	71
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Train to all personnel responding to Meth Labs on appropriate response and recovery	3	6	0	3	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	71

Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce wildfire and burning restriction legislation	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Adopt/enforce an NFIP flood plain management plan	2	0	4	7	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	69
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	7	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	69
Obtain PPE for all personnel that respond to Meth Labs	2	6	0	3	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Encourage the use of shatter-proof windows in schools	3	4	4	8	3	3	3	3	1	3	2	1	2	3	3	3	2	1	1	1	3	3	3	2	3	68
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Develop a traffic flow and security plan for medical dispensing sites	2	0	0	4	3	2	2	2	2	2	3	2	3	3	3	3	6	6	1	3	3	3	3	3	3	67
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	66
Develop a storm water management plan for the jurisdiction	2	3	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	66
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	7	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	65
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	7	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	65
Acquire and install six inch water mains/hydrants city wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	63
Exercise wildfire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63

Train and fund a position for school or workplace hostage negotiation	2	6	2	3	3	3	3	1	2	2	2	1	3	3	2	2	1	1	2	3	3	3	3	3	3	62
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain supplies and materials needed to vaccinate and prophylax 1stst responders	2	3	0	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	60

CITY OF CHELSEA INDIVIDUAL MITIGATION ACTION PLAN



SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

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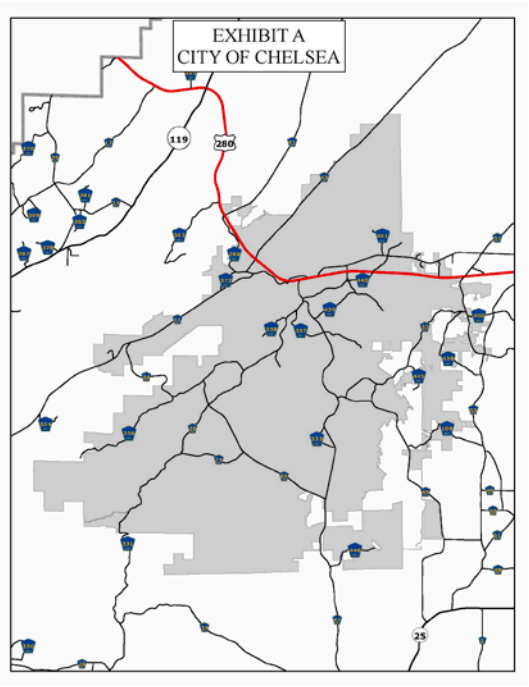
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CITY OF CHELSEA MITIGATION ACTION PLAN

Geography/History

The City of Chelsea is located in north central Shelby County approximately 10 miles Southeast of Birmingham along the U.S. Hwy 280 corridor. According to the U.S. Census Bureau, the county has a total area of 810 square miles (2,097 km²), of which, 795 square miles (2,058 km) of it is land and 15 square miles (38 km) of it (1.83%) is water.

The earliest settlers to this area came in the early 1830s and were led by two Revolutionary War soldiers, Able Kendrick and Lewis Turner, and portions of their families from Virginia to South Carolina, then through Georgia to Central Alabama and Shelby County Alabama. Several early families in this area are included.



Lewis Turner settled, along with James Lewis Kendrick, which had intermarried with the Turner family in South Carolina, settled at Kendrick Springs or K-Springs, which later became the City of Chelsea in Shelby County, Alabama.

In 1846, a few individuals established a local fellowship of believers in Chelsea, Alabama, and became known as Liberty Baptist Church. These believers continued to partner with God in His kingdom work and Liberty Baptist Church was among the first ten originating churches of the Shelby Baptist Association in 1852.

The City of Chelsea was incorporated March 1, 1996 with and estimated population of 901.

Special Characteristics

Notable characteristics in Chelsea include the Narrows. Lakes and streams include Lenora Lake, and Yellowleaf Creek.

Chelsea: is home to the Yellowleaf Game Preserve and Chelsea Park, which have a Pavilion, playground, soccer field baseball, and softball fields.

Population and Demographics

As of the 2020 Census, the city covers 23.1 square miles and there were 15908 people. The population density was 689.2 people per square mile. The racial makeup of the city was 89.6% White, 6.17% Black or African American, 0.2% Native American, 1.52% Asian, 0% Pacific Islander, 1.08% from other races, and 1.44% from two or more races. 1.5% of the population was Hispanic or Latino of any race. 95.49% of town residents speak English while Spanish is spoken by 1.3% of the population.

According to the 2019 American Community Survey, there were 4,508 households out of which 1,971 had children under the age of 18 living with them, 3,269 were married couples living together, 274 had a female householder with no spouse present, and 858 were non-families. 18.3% of all householders were made up of individuals and 7.7% had someone living alone who was 65 years of age or older. The average household size was 2.87 and the average family size was 3.26. Mobile homes made up 3.1% of structures.

In the city the population was spread out with 30.9% under the age of 18, 5.6% from 18 to 24, 39.4% from 15 to 44, 21.4% from 45 to 64, and 12.5% who were 65 years of age or older. The median age was 34.9 years. For every 100 females there were 93.5 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 2.2% of the city's population had a hearing difficulty, 1.6% vision difficulty, 2.6% cognitive difficulty, 3% ambulatory difficulty, 1.1% self-care difficulty, and 1.9% an independent living difficulty. 7.2% of the population had some type of disability.

Year	2010	2020	Change
Population	10,183	15,908	56.22
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $97,727.00 and the median income for a family was $104,395.00. Males had a median income of $69,783.00 versus $43,163.00 for females. The per capita income for the city was $54,548.00. About 3.54% of the population were below the poverty line, including 3.42% of females and 3.64% of males.

Single-family new house construction building permits include:

- 2007: 208 buildings, average cost: $172,639.21
- 2008: 56 buildings, average cost: $176,785.71
- 2009: 55 buildings, average cost: $157,132.85
- 2010: 45 buildings, average cost: $185,518.00
- 2011: 65 buildings, average cost: $184,076.92
- 2012: 143 buildings, average cost: $194,163.12
- 2013: 148 buildings, average cost: $222,034.25
- 2014: 108 buildings, average cost: $221,685.19
- 2015: 127 buildings, average cost: $237,000.00
- 2016: 201 buildings, average cost: $219,000.00
- 2017: 201 buildings, average cost: $212,000.00
- 2018: 243 buildings, average cost: $215,000.00
- 2019: 143 buildings, average cost: $290,000.00
- 2020: 171 buildings, average cost: $316,000.00
- 2021: 196 buildings, average cost: $334,000.00

Infrastructure

Chelsea government consists of a mayor and five council members. The city of Chelsea fire department consists of three stations with 48 fire personnel. Chelsea contracts with the Shelby County Sheriffs department for law enforcement.

Chelsea currently has five schools in the Shelby County School system.

School	Enrollment
Chelsea Park Elementary	873
Chelsea High School	1405
Chelsea Middle School	1055
Forest Oaks Elementary	678

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Chelsea Legal And Regulatory Capability						
Regulatory Tools/Plans	Regulatory Type: Ordinance Resolution Codes Plans Etc.	Year Adopted or Updated	Local Authority	State Prohibited	Higher Authority	Electronic copy Available
Building Codes	International Building Codes	2012	Y	N	Y	Y
Capital Improvements Plan	Annual Budget	2009		N	N	N
Comprehensive Plan	Resolution	2012		N	N	Y
Continuity of Operations Plan				N	N	N
Community Rating System				N	Y	N
Economic Development Plan	Comprehensive Plan Resolution	1998		N	N	Y
Emergency Response Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Flood Management, Plan	Resolution	2013		N	Y	Y
Growth Control Ordinance				N	N	N
Hazard Setback Regulations				N	N	N
Hillside Ordinance				N	N	N
Historic Ordinance				N	N	N
NFIP Participant	Resolution	2013		N	Y	Y
Post-disaster Ordinance				N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission	1960	N	N	Y	N

Site Plan Requirements	Zoning Ordinance	1989		N	N	Y
Subdivision Regulations	Zoning Ordinance	2005		N	N	Y
Wildfire Ordinance				N	N	N
Zoning Ordinances	Ordinance	2012		N	N	N

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Chelsea Administrative And Technical Capabilities

C=County Provides, S=State Provides, F=Federal Provides

Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C2/1	C2/1	C2/1
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	48	48	48
Fire Personnel	Professional(s)	Fire Dept.	48	48	48
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	1	1	1
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	6	6	6
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	C6	C6	C6
Information Systems	Certified Professional	IT department	C1	C1	C1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff's Office	C6	C6	C6
Medical Practioners	Professional(s)	Medical Facilities	10	10	10
Public Works	Directors/Engineers	Public Works	4	4	4
Public Communication	911 specialists	E-911	C35	C35	C35
Public Utilities	Professionals	Public Utilities			
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Chelsea Fiscal Capabilities					
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			X
	Hazard Mitigation Planning Grants (HMPG)	X			
	PDM for disaster resistant universities		X		
	PDM Grants for communities	X			
	Department of Health Grants		X		
	Department of Justice Grants		X		
	Department of Agriculture Grants		X		
	Department of Energy Grants		X		
	Department of Education Grants		X		
	Fire department grants	X			X
	Flood Management Grants (FMA)	X			
	Homeland Security Grant Program (HSGP)	X			X
	Repetitive Flood Claims Grants (RFC)	X			
	Severe Repetitive Loss Grants (SRL)	X			
	Private foundation grants	X			X
	Private business/industry grants	X			X
Debt Procurement	Incur debt through special tax/revenue bonds	X			X
Dept Procurement	Incur debt through private activity bonds		X		
Impact Fees	Developer fees for new developments		X		
Jurisdiction Bonds	Incur debt through general obligation bonds	X			
Project Funding	Capital improvement	X			X
Spending Restrictions	Withhold spending in hazard-prone areas		X		
Special Taxes	Authority to levy taxes for specific purposes	X			X
Utility Fees	Fees for water, sewer, gas, or electric service	X			X

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Chelsea. The following goal statements represent a broad target for City of Chelsea and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Chelsea	Objective AH.1: Improve the City of Chelsea's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from all hazards

Flooding Hazard Goal: Mitigate the impact of flooding on the City of Chelsea	Objective FL.1: Improve the City of Chelsea's flood warning and information distribution to citizens Objective FL.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Chelsea	Objective HW.1: Improve the City of Chelsea's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Chelsea	Objective IS.1: Improve the City of Chelsea's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Chelsea	Objective WF7.1: Improve the City of Chelsea's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Chelsea	Objective UF.1: Improve the City of Chelsea's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Chelsea's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Chelsea's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	1	2	3
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists

Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Encouraged citizens to develop emergency preparedness, response and recovery plans.	Fire Svcs	Local funds & Grants	6,069 110,350	2022 2027	88
HW1b	Educate the public on High Wind weather preparedness, response and recovery.	City Govt, Fire Svc, EMA, NWS	Local funds & Grants	1,048 55,175	2022 2027	87
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	City Govt, Fire Svc, EMA, NWS	Local funds & Grants	1,048 55,175	2022 2027	87
HW1c	Distribute High Wind preparedness information to special needs/school/local populations	City Govt, Fire Svc	Local funds & Grants	276 55,175	2022 2027	87

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt, Fire Svc	Local funds & Grants	3,311 110,350	2022 2027	85
UF1a	Educate school, special needs and the community populations on fire safety and response	City Govt, Fire Svc	Local funds & Grants	1,214 55,175	2022 2027	85
UF1b	Educate school, special needs and the community population on fire extinguisher use	City Govt, Fire Svc	Local funds & Grants	3,090 55,175	2022 2027	85
UF1c	Assist fire departments in obtaining fire prevention program materials	City Govt, Fire Svc	Local funds & Grants	1,214 55,175	2022 2027	85
AH1e	Distribute safe room/Shelter in place information to schools/special needs and local	City Govt, Fire Svc	Local funds & Grants	2,759 110,350	2022 2027	84
UF3d	Develop fire plans for all major businesses and critical facilities	City Govt, Fire Svc	Local funds & Grants	1,104 55,175	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt, EMA	Local funds & Grants	198,630 1,103,500	2022 2027	83
TR1b	Educate schools/special needs/government officials on procedures for handling suspicious mail	BOE, SCSO	Local funds & Grants	10,925 110,350	2022 2027	82
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	City Govt, Fire Svc	Local funds & Grants	386,225 1,103,500	2022 2027	82
UF3h	Acquire and install six inch water mains/hydrants city wide. City has replaced most mains.	City Govt, Fire Svc	Local funds & Grants	882,800 2,207,000	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City of Chelsea	Local funds	1,104 55,175	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City of Chelsea	Local funds	1,104 386,225	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt Planning	Existing	1,104 55,175	2022 2027	81
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH SCSO EMA, Fire Svcs	Existing	1,104 55,175	2022 2027	81
UF2c	Obtain/maintain fire fighting supplies at all fire departments	City Govt, Fire Svc	Local funds & Grants	4,524 110,350	2022 2027	81
FL1a	Distribute flood awareness and preparedness literature at events	City Govt, Fire Svc, EMA, NWS	Local funds & Grants	717 55,175	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events. All current personnel have PPE.	City Govt, Fire Svc	Local funds & Grants	4,966 110,350	2022 2027	80
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt Planning	Existing	1,104 386,225	2022 2027	80
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict Local funds flooding	City of Chelsea	Local funds & Grants	121,385 165,525	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local funds & Grants	1,104 110,350	2022 2027	79
AH3b2	Develop redundancy capabilities for emergency radio communications	City Govt, Fire Svc, EMA	Local funds & Grants	21,518 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt, Fire Svc	Local funds & Grants	1,048 55,175	2022 2027	79
AH3u	Ensure that mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, Fire Svc	Local funds & Grants	1,324 55,175	2022 2027	79

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3y	Insure building code compliance Inspections are conducted on construction projects	Fire Svcs, Shelby County	Local funds & Grants	3,311 551,750	2022 2027	79
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	City Govt, Fire Svc	Local funds & Grants	1,104 55,175	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Svcs, EMA	Local funds & Grants	8000 551,750	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt, Fire Svc	Local funds & Grants	500 55,175	2022 2027	78
IL3a	Join/participate in Local funds state and federal drug task forces	City Govt, SCSO	Grants Local funds	1,104 55,175	2022 2027	78
TR3m	Encourage special needs facilities to implement a security system	City Govt Fire Svc SCSO	Existing	1,104 55,175	2022 2027	78
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	City Govt, Fire Svc	Local funds & Grants	1,104 55,175	2022 2027	78
WF1c	Educate school/special needs/local populations on preparedness for and response to a wild-land fire	BOE City Govt, Fire Svc	Local funds & Grants	1,655 110,350	2022 2027	78
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons. Social Media.	Fire Svc	Local funds & Grants	1,250 110,350	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Existing	1,104 165,525	2022 2027	77
FL3d	Participate in the NFIP Community Rating System	City of Chelsea	Local funds	1,104 165,525	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt Planning	Existing	1,104 551,750	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	City Govt, Fire Svc	Local funds & Grants	4,414 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt BOE, Fire Svc	Local Funds Grants	1,104 55,175	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt Planning	Local funds	1,104 165,525	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	City Govt, Fire Svc	Local funds & Grants	1,214 55,175	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	City Govt, Fire Svc	Local funds & Grants	62,500 220,700	2022 2027	76
UF2d	Train all fire responders in fire combat techniques annually	City Govt, Fire Svc	Local funds & Grants	23,174 220,700	2022 2027	76
UF3a	Ensure that NFPA standards and codes are followed.	City Govt, Fire Svc	Existing	1,104 55,175	2022 2027	76
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt, Fire Svc	Local funds & Grants	11,035 275,1875	2022 2027	76
WF1d	Distribute wildfire awareness and prevention information to schools/businesses/local populations	FIRE SVCS, City Govt	Local funds & Grants	3,090 110,350	2022 2027	75
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	City Govt, Fire Svc	Local funds & Grants	662 55,175	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	Fire Svc.	Local funds & Grants	4,635 55,175	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt	Local funds & Grants	2,869 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt, Fire Svc	Local funds & Grants	2,869 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	EMA	Local funds, Grants	5,518 110,350	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	City Govt	Local funds & Grants	7,173 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt	Local funds & Grants	6,621 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	BOE, EMA	Local funds & Grants	20,967 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	City Govt, Fire Svcs	Local funds & Grants	9,821 110,350	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt Co Engineer	Existing	1,104 55,175	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	Shelby County	Existing	1,104 275,1875	2022 2027	74
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	Fire Svc	Local funds & Grants	29,243 110,350	2022 2027	74
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	City Govt, Fire Svcs	Local funds & Grants	1,655 55,175	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt, EMA	Local funds & Grants	55,175 220,700	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	Fire Svcs	Local funds & Grants	49,658 220,700	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	City Govt, Fire Svcs	Local funds & Grants	4,414 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt	Local funds & Grants	6,952 110,350	2022 2027	73
UF2b	Train firefighters to obtain for state and national certifications	City Govt, Fire Svcs	Local funds & Grants	6,842 110,350	2022 2027	73
UF3f	Adopt/enforce commercial and special needs facilities sprinkler/smoke alarm legislation	City Govt, Fire Svcs	Local funds & Grants	1,104 55,175	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas. Transition to weather radio and notification system.	City Govt, EMA	Local funds & Grants	165,525 662,100	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	EMA, City Govt	FEMA Grants	551,750 1,103,500	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	County Highway	Local funds & Grants	3,862 110,350	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt Planning	Local funds	2,759 110,350	2022 2027	72
FL3m	Acquire signage to indicate water depth at flooding points	City Govt Planning	Local funds Grants	7,725 165,525	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS, EMA, Fire Svcs	Local funds & Grants	3,421 110,350	2022 2027	72
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt Planning	Existing	16,533 165,525	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt	Local funds & Grants	16,533 165,525	2022 2027	71
WF3i	Adopt/enforce wildfire legislation that includes burning bans. Forestry and ADEM.	City Govt, Fire Svcs	Local funds & Grants	1,104 55,175	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	City Govt, Fire Svcs	Local funds & Grants	5,738 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & add necessary shelters	City Govt, EMA, Fire Svcs	Local funds & Grants	1,048 55,175	2022 2027	70
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt, EMA	Local funds & Grants	25,381 220,700	2022 2027	70
AH3s1	Encourage all businesses to develop Business Continuity Plans	City Govt, EMA	Existing	1,104 55,175	2022 2027	70
AH3s2	Develop strategies to prevent loss of public records	City of Chelsea	Local funds & Grants	3,521 110,350	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City of Chelsea	Local funds	1,104 55,175	2022 2027	70
FL3g	Update County Land Use Plan to identify areas where development should be restrictive	City Govt Planning	Local funds	11,035 165,525	2022 2027	70
FL2b	Train all 1st responders on repetitive flooding areas and structures	City Govt, Fire Svcs	Local funds & Grants	1,048 55,175	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated floodplains	City Govt Planning	Existing	1,104 165,525	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	City Govt, County Highway	City Budget Grants	11,035 165,525	2022 2027	69
UF1d	Obtain a fire education-training trailer for the jurisdiction.	City Govt, Fire Svcs	Local funds & Grants	94,901 331,050	2022 2027	68
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, Fire Svcs	Local funds & Grants	1,104 165,525	2022 2027	68
WF2c	Train fire 1st responders in wild-land fire response techniques	Fire Svcs	Local funds & Grants	3,600 220,700	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Existing	1,104 275,1875	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures are built above the NFIP BSE	City Govt	Existing	1,104 275,1875	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt, EMA	Local funds & Grants	198,630 1,103,500	2022 2027	67
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt, Fire Svcs	Local funds & Grants	23,174 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. Fire Stations 2 &3.	City of Chelsea	Local funds & Grants	16,533 165,525	2022 2027	66

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt,	Existing	1,104 275,1875	2022 2027	66
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt Planning	Existing	1,104 165,525	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Local funds Grants	27,588 275,1875	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	City Govt, Fire Svcs	Local funds & Grants	22,070 110,350	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt Planning	Existing	1,104 165,525	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt Planning	Local funds	1,104 165,525	2022 2027	63
WF2b	Obtain specialized equipment to combat wild-land fires.	Fire Svcs. City Govt	Local funds & Grants	5,076 220,700	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt Planning	Grants Local funds	110,350 551,750	2022 2027	61
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Local funds & Grants	882,800 1,103,500	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grants Local funds	110,350 551,750	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table																											
	Social				Technical			Administrative			Political		Legal			Economic				Environmental					Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=1-9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Encouraged citizens to develop emergency preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots.	3	9	3	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	3	3	3	3	3	3	87
Educate the public on High Wind weather preparedness, response and recovery	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87

Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information to special needs/school/local populations	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Evaluate shelter requirements annually & add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	9	6	9	3	3	3	2	3	1	2	2	3	3	3	3	4	4	3	2	3	3	3	3	3	85
Educate school, special needs and the community populations on fire safety and response	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Educate school, special needs and the community population on fire extinguisher use	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Assist fire departments in obtaining fire prevention program materials	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Distribute safe room/Shelter in place information to schools/special needs and local	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Develop fire plans for all major businesses and critical facilities	2	6	6	7	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	84
Educate schools/special needs/government officials on procedures for handling suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	4	7	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Acquire and install six inch water mains/hydrants county wide	2	6	4	7	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Maintain contact with state and federal agencies regarding biological and disease threats.	3	9	0	4	3	3	3	2	3	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	81
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	7	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	81
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	8	5	3	3	3	2	3	2	2	1	2	3	3	2	4	4	4	3	3	3	3	3	3	80

Obtain/install/maintain/monitor rainfall and stream gauges to predict Local funds flooding	2	6	6	5	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Develop redundancy capabilities for emergency radio communications	2	6	4	9	3	3	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	7	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Join/participate in Local funds state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Encourage special needs facilities to implement a security system	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	7	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Educate school/special needs/local populations on preparedness for and response to a wild-land fire	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Participate in the NFIP Community Rating System	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train all fire responders in fire combat techniques annually	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76

Ensure that NFPA standards and codes are followed.	2	0	4	7	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Obtain smoke detectors and provide free to residents in need.	2	6	2	7	3	3	1	1	2	1	3	3	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Distribute wildfire awareness and prevention information to schools/businesses/local populations	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	75
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	75
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	2	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	74
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	2	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train firefighters to obtain for state and national certifications	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Adopt/enforce commercial and special needs facilities sprinkler/smoke alarm legislation	2	6	4	7	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	73

Educate school/businesses/local populations on the causes of wild land fires	2	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	73
Obtain and/or expand warning sirens to for all uncovered areas	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	3	72
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	2	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Obtain funds for critical government departments to develop Continuity of Operations Plans	1	3	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	3	2	3	3	3	3	3	70
Encourage all businesses to develop Business Continuity Plans	1	3	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	3	2	3	3	3	3	3	70
Develop strategies to prevent loss of public records	1	3	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	3	2	3	3	3	3	3	70
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update County Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Educate developers, builders and the public on the location of NFIP designated floodplains	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	68
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	2	7	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	68
Train fire 1st responders in wild-land fire response techniques	2	6	2	2	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures are built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67

Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	9	6	7	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	66
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Exercise fire response regularly for residences, businesses and industry	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	64
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Obtain specialized equipment to combat wild-land fires.	2	6	2	2	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	63
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59

CITY OF COLUMBIANA INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

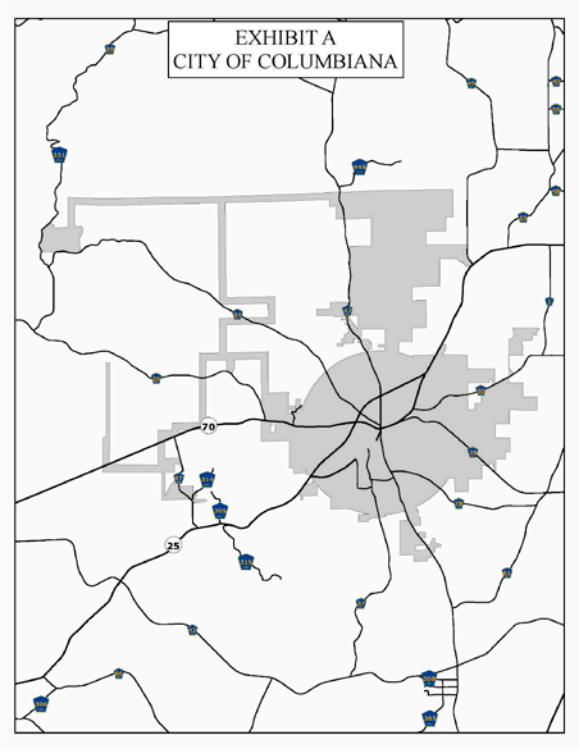
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CITY OF COLUMBIANA MITIGATION ACTION PLAN

Geography/History

The early history of Columbiana (Columbia, as it was originally called) preceded the organization of the county of Shelby, and the admission of Alabama as a State into the Union in 1819. Before any settlements were made at the place where Columbiana is located, several communities, having a considerable population, had been formed in different parts of the county with the vicinity of Montevallo being the most numerous. There were populous communities located in and around Harpersville. A large number had also settled m the neighborhood of Wilsonville. The first settlers at Columbiana came principally from the vicinity of Harpersville and Wilsonville in 1821, deriving title from the government. In 1824, the first mercantile business was started in Columbiana.



In 1826 the county courthouse was moved to an old school building in Columbia, located in the central part of Shelby County. The State Legislature changed its name to Columbiana on January 13, 1832, and the county seat was then permanently located at Columbiana. Incorporated in 1837, with corporate limits one-quarter mile in each direction from the public square.

The year 1837 was signalized by the departure of a large portion of the Indians, who were hostile to the whites. They were principally the Muscogees and Seminoles who had occupied portions of Talladega and Calhoun counties, and were occupying in large numbers the lands along the Tallapoosa River. They were always ready for an affray with the whites and their Indian allies. It was principally against these tribes that Gen'l Jackson came in 1813 with a large force to Talladega and Tallapoosa counties to protect the whites in those counties.

Prior to the Civil War, an iron foundry was located in Columbiana. Shelby Iron Works of Columbiana operated throughout the Civil War and antebellum period. Manufacturing at Shelby Iron Works was instrumental to Confederate States efforts during the Civil War. The company may well have been the largest Alabama supplier of Confederate iron during the war. The vast majority of the company output went to the Naval Department, although, iron for side arms and rifles was also supplied by the iron works

In 1850 a stage-line, connecting Columbiana with Montevallo, and other places was established. After the stage-line was superseded by the railroad in 1855, the old coach was still used for a long time as a hack to carry passengers from the depot to the tavern.

In 1854, the decision was made to build another county courthouse, which is today referred to as the "old courthouse." Construction began on the current stone courthouse in 1905. The cornerstone ceremony was held April 5, 1906. An addition was completed in 1954. It received a multi-million dollar renovation in the early 1990's. On March 4, 2006 the contents were removed from the cornerstone and placed on display at the Shelby County Museum & Archives.

Source "concise history of Columbiana" Joseph L. Peters

Special Characteristics

The Shelby County Historical Society Museum and archives is housed in the 1854 Shelby County Courthouse.

The Karl C. Harrison/ Smith Harrison Museum of George Washington (Largest collection of George and Martha Washington Memorabilia outside of Mount Vernon) is located in the Mildred B. Harrison Regional Library.

Park facilities include a Park near Elvin Hill Elementary School and the Columbiana Sports Complex on McDow Road. The City Park features a pavilion, picnic tables, playground and swing-sets. Adjacent are Lewis and Bolton Girls Softball Fields. The sports complex features batting cages, a playground, four baseball fields, a football field and a walking track.

In 1986 a group of patriotic citizens organized to sponsor Columbiana's first Liberty Day to honor and to celebrate the 100th anniversary of the Statue of Liberty. In response to their efforts, the first Liberty Day was held on Main Street in the summer of 1986 and featured patriotic music, local dance groups, and fireworks. Liberty Day is held each year on the last Saturday of June in downtown Columbiana, Alabama

Population and Demographics

As of the 2020 Census, the city covers 17.3 square miles and there were 4,544 people. The population density was 262.6 people per square mile. The racial makeup of the city was 72.44% White, 21.27% Black or African American, 0.11% Native American, 0% Asian, 0% Pacific Islander, 3.33% from other races, and 2.86% from two or more races. 1.1% of the population was Hispanic or Latino of any race. 96.74% of town residents speak English while Spanish is spoken by 2.65% of the population.

According to the 2019 American Community Survey, there were 1,641 households out of which 379 had children under the age of 18 living with them, 466 were married couples living together, 280 had a female householder with no spouse present, and 790 were non-families. 46% of all householders were made up of individuals and 21.2% had someone living alone who was 65 years of age or older. The average household size was 2.2% and the average family size was 3.01. Mobile homes made up 18% of structures.

In the city the population was spread out with 17.6% under the age of 18, 7.6% from 18 to 24, 42.4% from 15 to 44, 28.3% from 45 to 64, and 15.3% who were 65 years of age or older. The median age was 39.9 years. For every 100 females there were 97 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 7.6% of the city's population had a hearing difficulty, 4.4% vision difficulty, 11.5% cognitive difficulty, 14.4% ambulatory difficulty, 4.6% self-care difficulty, and 7.8% an independent living difficulty. 24% of the population had some type of disability.

Year	2010	2020	Change
Population	4,197	5,455	8.27
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $36,583.00 and the median income for a family was $45,121.00. Males had a median income of $30,449.00 versus $29,042.00 for females. The per capita income for the city was $29,375.00. About 18.58% of the population were below the poverty line, including 23.47% of females and 11.33% of males.

Single-family new house construction building permits include:

- 2007: 5 buildings, average cost: $138,600.00
- 2008: 4 buildings, average cost: $184,250.00
- 2009: 0 buildings
- 2010: 3 buildings, average cost: $239,333.00
- 2011: 3 buildings, average cost: $239,333.00
- 2012: 0 buildings
- 2013: 3 buildings, average cost: $136,333.00
- 2014: 4 buildings, average cost: $226,500.00
- 2015: 2 buildings, average cost: $229,000.00
- 2016: 3 buildings, average cost: $232,000.00
- 2017: 1 building, average cost: $150,000.00
- 2018: 2 buildings, average cost: $348,000.00
- 2019: 38 buildings, average cost: $247,000.00
- 2020: 41 buildings, average cost: $270,000.00
- 2021: 44 buildings, average cost: $276,000.00

Having easy access to Interstate I-65, Highway 280 and Lay Lake is a real plus in this charming bedroom community.

Infrastructure

Columbiana, as county seat, is home to many County Government offices and Organizations such as the Shelby County Board of Education, The Shelby County Sheriffs Department and the Adult Jail and the Harrison Regional Library, the main office of the Shelby County Libraries.
Columbiana has 13 Law Enforcement Employees and their own 911 system with 10 dispatchers full and part-time.
The fire department has 30 firefighters of which 2 are also EMT's.

School	Type	Enrollment
Elvin Hill Elementary School	K - 5	499

Columbiana Middle School	6 – 8	461
Shelby County High School	9 – 12	543
C-tech	9 – 12	454
New Direction	7 – 12	45
Cornerstone Christian School	K – 12	253

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Columbiana Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited**	**Higher Authority**	**Electronic copy Available**
Building, Plumbing, Gas and Mechanical Codes	International Building Codes	2018	**Y**	**N**	**Y**	**Y**
Electrical Code	International Building Codes	2020	**Y**	**N**	**Y**	**Y**
Residential Energy Code	International Building Codes	2015	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2021	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2003	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2003	**Y**	**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2005	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2005	**Y**	**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2019		**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2021		**N**	**N**	**Y**
Wildfire Ordinance	Ordinance	2000	**Y**	**N**	**N**	**N**

Zoning Ordinances	Ordinance	2019	**Y**	**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Columbiana Administrative And Technical Capabilities

C=County Provides, S=State Provides, F=Federal Provides

Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	1	1	1
Fire Personnel	Professional(s)	Fire Dept.	22	22	22
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	C1	C1	C1
Government Elected	Elected Officials	Mayor/Commission	6	6	6
Government Administration	Employees	Jurisdiction	83	83	83
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	C6	C6	C6
Information Systems	Certified Professional	IT department	3	3	3
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	13	13	13
Medical Practioners	Professional(s)	Medical Facilities	9	9	9
Public Works	Directors/Engineers	Public Works	12	12	12
Public Communication	911 specialists	E-911	C43 Ci10	C43 Ci10	C43 Ci10
Public Utilities	Professionals	Public Utilities	3	3	3
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Columbiana Fiscal Capabilities			
Financial Resources	**Description**	**Eligible**	

		Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			Y
	Hazard Mitigation Planning Grants (HMPG)	X			Y
	PDM for disaster resistant universities		X		N
	PDM Grants for communities	X			Y
	Department of Health Grants		X		N
	Department of Justice Grants	X			Y
	Department of Agriculture Grants		X		N
	Department of Energy Grants		X		N
	Department of Education Grants		X		N
	Fire department grants	X			Y
	Flood Management Grants (FMA)	X			N
	Homeland Security Grant Program (HSGP)	X			N
	Repetitive Flood Claims Grants (RFC)	X			N
	Severe Repetitive Loss Grants (SRL)	X			N
	Private foundation grants	X			N
	Private business/industry grants	X			N
Debt Procurement	Incur debt through special tax/revenue bonds	X			N
Dept Procurement	Incur debt through private activity bonds	X			N
Impact Fees	Developer fees for new developments	X			N
Jurisdiction Bonds	Incur debt through general obligation bonds	X			N
Project Funding	Capital improvement	X			Y
Spending Restrictions	Withhold spending in hazard-prone areas	X			N
Special Taxes	Authority to levy taxes for specific purposes	X			Y
Utility Fees	Fees for water, sewer, gas, or electric service	X			Y

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Columbiana. The following goal statements represent a broad target for City of Columbiana and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Columbiana	Objective AH.1: Improve the City of Columbiana's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from all hazards

Flooding Hazard Goal: Mitigate the impact of flooding on the City of Columbiana	Objective FL.1: Improve the City of Columbiana's flood warning and information distribution to citizens Objective FL.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Columbiana	Objective HW.1: Improve the City of Columbiana's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Columbiana	Objective IS.1: Improve the City of Columbiana's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Columbiana	Objective WF7.1: Improve the City of Columbiana's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from Wild-land Fire events
Illegal Drug Lab Hazard Goal: Mitigate the impact of Illegal Drug Laboratories the City of Columbiana	Objective ID.1: Improve the City of Columbiana's Illegal Drug Laboratories warning and information distribution to citizens Objective ID.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to Illegal Drug Laboratories Objective ID.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from Illegal Drug Laboratories existence
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Columbiana	Objective UF.1: Improve the City of Columbiana's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Columbiana's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Columbiana's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified

hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire

Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1aa	Update waste water treatment plant and raise berm to mitigate future flooding and overtopping of retention ponds	City Govt.	Grant/local funds	325,000 1,250,000	2022 2027	92
AH1f	Assist citizens to develop emergency preparedness, response and recovery plans.	Fire Svc., City Govt	Local Funds	2,207 110,350	2022 2027	88
HW1b	Educate the public on High Wind weather preparedness, response and recovery	Fire Svc. NWS EMA	Local Funds	2,207 110,350	2022 2027	87
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	Fire Svc. NWS EMA	Local Funds	2,207 110,350	2022 2027	87
HW1c	Distribute High Wind preparedness information to special needs/school/local populations	NWS Fire Svc. EMA	Local Funds	2,207 110,350	2022 2027	87
UF1a	Educate school/special needs/local populations on fire safety and response	Fire Svc. BOE	Grant Local Funds	5,518 110,350	2022 2027	85
UF1b	Educate school, special needs and the community population on fire extinguisher use	Fire Svc.	Local Funds	2,207 110,350	2022 2027	85
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA Fire Svc.	Local Funds	2,207 110,350	2022 2027	85
AH1e	Distribute safe room/shelter in place information to schools/special needs/local populations	Fire Svc. Police Dept. BOE	Local Funds	2,207 110,350	2022 2027	84
UF3d	Develop fire plans for all major businesses and critical facilities	Fire Svc.	Local Funds	2,207 551,750	2022 2027	84
AH3b	Obtain and continually update 911 technology and capabilities	911, PD	Local Funds Grant	22,070 110,350	2022 2027	83
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	2,207 110,350	2022 2027	83
TR1b	Educate school/special needs/government officials on procedures to handle suspicious mail	BOE Police Dept	Local Funds	2,207 110,350	2022 2027	83
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant Local Funds	110,350 1,103,500	2022 2027	82

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW2a	Ensure Hurricane watch and warning procedures are in place to early alert 1st responders	EMA, 1st responders	Local Funds	2,207 110,350	2022 2027	82
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt Fire Svc.	Local Funds	2,207 110,350	2022 2027	82
AH1h	Develop a media warning program to warn the public of hazard event	City Govt	Local Funds	2,207 110,350	2022 2027	81
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	2,207 110,350	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt Fire Svc.	Grant Local Funds	27,588 331,050	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	2,207 110,350	2022 2027	81
UF2c	Obtain/maintain fire fighting supplies at all fire departments	Fire Svc.	Grant Local Funds	55,175 165,525	2022 2027	81
AH3l	Assist schools in implementing an emergency phone line	City Govt BOE	Local Funds	2,207 110,350	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	Fire Svc.	Grant Local Funds	27,588 165,525	2022 2027	80
FL2b	Train all 1st responders on repetitive flooding areas and structures	Fire Svc.	Grant Local Funds	11,035 110,350	2022 2027	80
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	City Govt	Grant Local Funds	11,035 110,350	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	2,207 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	2,207 110,350	2022 2027	79
AH3u	Ensure all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt ADPH ADHR EMA	Local Funds	2,207 110,350	2022 2027	79
TR3m	Encourage special needs facilities to implement a security system	Police Dept	Local Funds	2,207 110,350	2022 2027	79
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	Fire Svc.	Local Funds	2,207 551,750	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept	Local Funds	12,207 220,700	2022 2027	78
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	12,207 110,350	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	2,207 110,350	2022 2027	78
IL3a	Join/participate in local state and federal drug task forces	Police Dept	HLS Grant Local Funds	1,104 110,350	2022 2027	78
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	Fire Svc. Police Dept	Local Funds	2,207 551,750	2022 2027	78

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1b	Educate business/school/local population on the causes of wild land fires	AFC Fire Svc.	Local Funds	2,207 110,350	2022 2027	78
WF1c	Educate school/business/local populations on preparedness for and response to a Wildland fire	AFC Fire Svc. BOE	Local Funds	2,207 110,350	2022 2027	78
WF1f	Publish outdoor burn ban info in area newspapers during Wildland fire seasons.	City Govt	Local Funds	2,207 110,350	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	2,207 110,350	2022 2027	77
FL3h	Request a study of the feasibility of flood control measures along the Coosa Rivers.	City Govt	Grant Local Funds	27,588 165,525	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	Police Dept Fire Svc.	Grant Local Funds	27,588 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt Police Dept	Local Funds	2,207 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt Fire Svc. Police	Grant Local Funds	5,518 165,525	2022 2027	76
AH3s1	Assist businesses to develop Business Continuity Plans	City Govt	Local Funds	2,207 110,350	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	2,207 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	Fire Svc. Police Dept	Grant Local Funds	27,588 110,350	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	Fire Svc.	Grant Local Funds	85,518 220,700	2022 2027	76
UF2d	Train all fire responders in fire combat techniques annually	Fire Svc.	Grant Local Funds	5,518 220,700	2022 2027	76
UF3a	Ensure that NFPA standards and codes are followed.	City Govt Fire Svc.	Local Funds	2,207 110,350	2022 2027	76
FL1a	Distribute flood awareness/preparedness info to schools/special needs/local populations	Fire Svc.	Local Funds	2,207 110,350	2022 2027	75
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC Fire Svc.	Local Funds	2,207 110,350	2022 2027	75
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC Fire Svc.	Local Funds	2,207 110,350	2022 2027	75
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC Fire Svc.	Local Funds	2,207 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	Fire Svc.	Local Funds	5,518 55,175	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt Police Dept Fire Svc.	DHL Grant Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt, Fire Svc Police Dept	Local Funds	5,518 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt Fire Svc. EMA	Local Funds	5,518 110,350	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	EMA City Govt	Grant Local Funds	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt Fire Svc. BOE	Grant Local Funds	16,553 165,525	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	Fire Svc. BOE	Grant Local Funds	33,105 220,700	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	Fire Svc. City Govt	Local funds Grant	55,175 165,525	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt EMA Co Engr	Grant Local Funds	11,035 110,350	2022 2027	74
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	Fire Svc.	Grant Local Funds	16,553 110,350	2022 2027	74
WF2g	Identify Private 1st responders and contractors to assist in Wildland fire response	Fire Svc.	Local Funds	2,207 110,350	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant	55,175 551,750	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	Fire Svc.	Grant Local Funds	55,175 220,700	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	Fire Svc. Police Dept	DHL Grants Local funds	5,518 110,350	2022 2027	73
AH3b1	Develop redundancy capabilities for 911 services and equipment	911, PD	Local Funds Grants	52,207 331,050	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	2,207 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt Fire Svc. Police	Local Funds	2,207 110,350	2022 2027	73
UF2b	Train firefighters to obtain for state and national certifications	Fire Svc.	Grant Local Funds	33,105 110,350	2022 2027	73
UF3e	Adopt/enforce sprinkler and smoke alarm legislation for commercial/special needs facilities	City Govt Fire Svc.	Local Funds	2,207 220,700	2022 2027	73
WF1a	Educate school/local/business populations on wildfire fuels reduction	AFC Fire Svc.	Local Funds	2,207 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (3 locations)	City Govt	Grant Local Funds	66,210 551,750	2022 2027	72
AH1g	Obtain/install an automated wide area rapid notification system.	City Govt	Grant Local Funds	110,350 551,750	2022 2027	72
AH3e1	Assist nongovernmental critical facilities to obtain emergency generators/pigtails	City Govt	Grant Local Funds	55,175 220,700	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt Fire Svc. Police	Grant Local Funds	11,035 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	2,207 110,350	2022 2027	72
FL3m	Acquire signage to indicate water depth at flooding points	City Govt Fire Svc.	Grant Local Funds	11,035 165,525	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS Fire Svc. EMA	Local Funds	2,207 110,350	2022 2027	72
UF3i	Adopt/enforce housing code legislation to limit number of citizens in substandard housing	City Govt	Local Funds	2,207 110,350	2022 2027	72
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt Fire Svc.	Grant Local Funds	11,035 110,350	2022 2027	72
AH3b2	Develop redundancy capabilities for emergency radio communications	1st responder Depts	Local Funds Grants	22,070 110,350	2022 2027	71
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	12,207 110,350	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt Fire Svc.	Grant Local Funds	11,035 110,350	2022 2027	71
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH Police Dept	Local Funds	2,207 110,350	2022 2027	71
WF3i	Adopt/enforce wildfire legislation that includes burning bans	City Govt Fire Svc.	Local Funds	2,207 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	Fire Svc. Police Dept	Local Funds	11,035 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & add necessary shelters	ARC City Govt EMA ADPH	Local Funds Grants	2,207 1,103,500	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Local Funds	2,207 551,750	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Local Funds	2,207 110,350	2022 2027	70
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	2,207 110,350	2022 2027	70
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood plains	City Govt	Local Funds	2,207 110,350	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges (Barricades, cones)	Fire Svc. Police Dept	Grant Local Funds	16,553 165,525	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant Local Funds	27,588 331,050	2022 2027	68
UF1d	Obtain a fire education-training trailer for the jurisdiction.	Fire Svc.	Grant Local Funds	110,350 220,700	2022 2027	68

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3f	Obtain fire equipment to combat fires where water hydrants are nonexistent	Fire Svc.	Grant Local Funds	220,700 1,103,500	2022 2027	68
WF2c	Train fire 1st responders in Wildland fire response techniques	Fire Svc. AFC	Local Funds	2,207 110,350	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	2,207 165,525	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	2,207 441,400	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt EMA	Grant Local Funds	275,875 551,750	2022 2027	67
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt Fire Svc.	Grant Local funds	33,105 331,050	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	City Govt Fire Svc. Police Dept	Grant Local Funds	110,350 551,750	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grant Local Funds	551,750 1,103,500	2022 2027	66
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	2,207 110,350	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	11,035 165,525	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	Fire Svc.	Local Funds	2,207 110,350	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	2,207 331,050	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	2,207 110,350	2022 2027	63
WF2b	Obtain specialized equipment to combat Wildland fires.	Fire Svc.	Grant Local funds	11,035 220,700 `	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant Local Funds	110,350 551,750	2022 2027	61
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt ADPH EMA	Grant Local Funds	33,105 165,525	2022 2027	61
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant Local Funds	220,700 551,750	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant Local Funds	55,175 220,700	2022 2027	59
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	2,207 110,350	2022 2027	57
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	2,207 110,350	2022 2027	56

“STAPLEE” Mitigation Actions Prioritization Table

	Social				Technical			Administrative			Political			Legal			Economic				Environmental			Prioritization
Action/Project Description	**High Community Acceptance**	**High effect on Loss of Life-WF=3**	**High Effect on Property Loss**	**High Effect on Economic Loss**	**Is Technical Feasibility**	**Is a Long-Term Solution**	**No Secondary Impacts**	**Little Staffing required**	**Funding Potential is High**	**Low Maintenance/Operations**	**High Political Support**	**Has a Local Champion**	**Has Public Support**	**State Authorized**	**Local Authority Exists**	**Potential Legal Challenge is High**	**Action Benefit is High WF=2**	**Action Cost is Low WF=2**	**High Economic Goal Contribution**	**Outside Funding Not Required**	**Land/Water Effect is Low**	**Low Endangered Species Effect**	**Hazmat Waste Site Effects**	**Environmental Effect is low**	**Federal law Compliant is High**	**Total Priority Score**
Update waste water treatment plant and raise berm to mitigate future flooding and overtopping of retention ponds	3	9	6	9	3	3	3	3	3	3	3	3	3	3	3	3	6	2	4	2	2	3	3	3	3	92
Assist citizens to develop emergency preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate the public on High Wind weather preparedness, response and recovery	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information to special needs/school/local populations	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Assist nongovernmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Evaluate shelter requirements annually & add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Educate school/special needs/local populations on fire safety and response	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Educate school, special needs and the community population on fire extinguisher use	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Assist fire departments in obtaining fire prevention program materials	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Distribute safe room/shelter in place information to schools/special needs/local populations	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84

Develop a community shelter program for mobile home parks	3	6	6	9	2	2	3	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Develop fire plans for all major businesses and critical facilities	2	6	6	7	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	84
Obtain and continually update 911 technology and capabilities	2	9	6	9	3	3	3	2	3	1	2	2	3	3	3	3	4	2	4	1	3	3	3	3	3	83
Insure building code compliance Inspections are conducted on construction projects	2	9	0	9	3	3	2	2	3	2	2	2	2	3	3	3	6	6	6	2	2	3	3	2	3	83
Educate school/special needs/government officials on procedures to handle suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Ensure Hurricane watch and warning procedures are in place to early alert 1st responders	2	6	6	8	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	3	3	3	3	3	82
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	7	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Develop a media warning program to warn the public of hazard event	3	6	4	9	3	3	3	2	3	2	3	2	3	3	3	3	3	2	4	2	3	3	3	3	3	81
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	7	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	81
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Train all 1st responders on repetitive flooding areas and structures	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	5	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Encourage special needs facilities to implement a security system	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	7	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	79

Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Develop strategies to prevent loss of public records	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	7	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Educate business/school/local population on the causes of wild land fires	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Educate school/business/local populations on preparedness for and response to a Wildland fire	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Publish outdoor burn ban info in area newspapers during Wildland fire seasons.	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Request a study of the feasibility of flood control measures along the Coosa Rivers.	2	6	6	5	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Assist businesses to develop Business Continuity Plans	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train all fire responders in fire combat techniques annually	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Ensure that NFPA standards and codes are followed.	2	0	4	7	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Distribute flood awareness/preparedness info to schools/special needs/local populations	2	6	6	5	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	75
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	75
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	75

Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	2	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	74
Identify Private 1st responders and contractors to assist in Wildland fire response	2	3	2	2	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Develop redundancy capabilities for 911 services and equipment	2	6	4	9	3	3	3	3	2	2	2	1	2	3	3	3	2	2	2	1	3	3	3	3	3	73
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train firefighters to obtain for state and national certifications	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Adopt/enforce sprinkler and smoke alarm legislation for commercial/special needs facilities	2	6	4	7	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	73
Educate school/local/business populations on wildfire fuels reduction	2	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	73

Obtain and/or expand warning sirens to for all uncovered areas (3 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain/install an automated wide area rapid notification system.	2	9	4	9	3	3	3	1	1	1	2	1	2	3	3	3	1	1	4	1	3	3	3	3	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce housing code legislation to limit number of citizens in substandard housing	2	6	0	7	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	72
Obtain smoke detectors and provide free to residents in need.	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Develop redundancy capabilities for emergency radio communications	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Maintain contact with state and federal agencies regarding biological and disease threats.	2	6	0	5	3	3	3	3	3	3	2	1	2	3	3	3	2	3	3	3	3	3	3	3	3	71
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	2	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update City Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Educate developers, builders and the public on the location of NFIP designated flood plains	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges (Barricades, cones)	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68

Obtain a fire education-training trailer for the jurisdiction.	2	6	4	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	68
Obtain fire equipment to combat fires where water hydrants are nonexistent	2	6	2	7	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	68
Train fire 1st responders in Wildland fire response techniques	2	6	2	2	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Acquire and install six inch water mains/hydrants city wide	2	9	6	7	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	66
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Exercise fire response regularly for residences, businesses and industry	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	64
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Obtain specialized equipment to combat Wildland fires.	2	6	2	2	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	63
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	5	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4		3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	57
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2		3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	56

TOWN OF HARPERSVILLE INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

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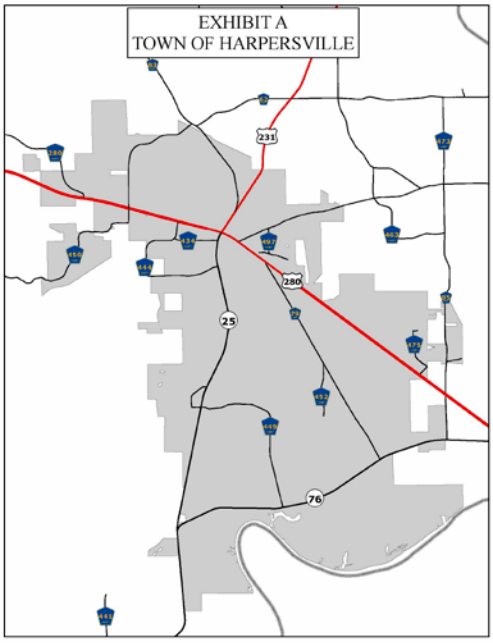
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TOWN OF HARPERSVILLE MITIGATION ACTION PLAN

Geography/History

The Town of Harpersville is located on the east central border of Shelby County along the Coosa River and U.S. Highway 280 approximately 28 miles southeast of Birmingham.

Harpersville is one of Shelby County's oldest communities. It precedes Shelby County and the State of Alabama. Big Springs, as it was originally called was settled around 1815. Soon after the first settlers, others from North and South Carolina, Alabama, Virginia and Georgia took up residency establishing a store, blacksmith shop, a steam driven cotton gin and a variety of other businesses. Mail delivery soon followed and community prosperity soon led to a regular stagecoach stop.



A few years later a school was organized and a teacher was solicited from the Carolinas, a man by the name of Harper [William Webb Harper]. He proved to be a good and faithful teacher, and grew to be admired and respected by all who knew him. Mr. Harper grew so very fond of this beautiful little place that he made it his home. The community was named after him by 1820.

Early settlers made one-room schools characteristic of the area. These led to the construction of Elmhill Academy, which attracted both of Town and out of State students who boarded in the community. Harpersville soon became well known for its educational facilities and cultural activities. The railroad, which was laid in 1908, runs north of the town. It also has a good ferry, east of the town.

In 1926 a modern up-to-date school building was constructed. Along the business line there are two large brick stores. In the 1927 a plant store [cotton gin] was built. Harpersville has one of the best gins in the county, and also a good gristmill. In 1925 Highway 280 was constructed and became known as the Florida Short Route. In 1928 the people began using electricity furnished by the Alabama Power Company. This has helped to increase the worth of the town. In 1945, Harpersville officially incorporated and shortly after purchased the old Harpersville School converting it into the Town Hall and municipal complex.

On January 24, 1964, a devastating tornado destroyed most of the oldest grave markers and killed ten citizens, including five members of the same Kelly family. Thousands of Shelby County's earliest settlers and area residents are buried here. This is the final resting place of American Revolutionary War Patriot William Jennings and the professed burial site of the Last Creek Indian Chief of the Kewahatchie Tribe. One of its native son's Henry B. Wathal was a stage & silent film actor and a pioneer in Hollywood.

The Town has produced two NBA stars George McGinnis (Philadelphia 76ers and Indiana Pacers) and Warren Kidd (Philadelphia 76ers).

Special Characteristics

Harpersville has a public library and a public park. Water characteristics in Harpersville include Moores Pond, Old Glade Swamp, and streams East Fork Tanyard Branch, Walthall Branch and West Fork Tanyard Branch.

Population and Demographics

As of the 2020 Census, the Town covers 21.3 square miles and there were 1,730 people. The population density was 81.2 people per square mile. The racial makeup of the Town was 78.56% White, 20.9% Black or African American, 0% Native American, 0% Asian, 0% Pacific Islander, 0% from other races, and 0.54% from two or more races. 0% of the population was Hispanic or Latino of any race. 98.53% of town residents speak English while Spanish is spoken by 0.7% of the population.

According to the 2019 American Community Survey, there were 562 households out of which 107 had children under the age of 18 living with them, 339 were married couples living together, 70 had a female householder with no spouse present, and 129 were non-families. 21.9% of all householders were made up of individuals and 11.9% had someone living alone who was 65 years of age or older. The average household size was 2.64 and the average family size was 3.02. Mobile homes made up 25.4% of structures.

In the Town the population was spread out with 22.2% under the age of 18, 6.7% from 18 to 24, 29.3% from 15 to 44, 31.6% from 45 to 64, and 20.2% who were 65 years of age or older. The median age was 46.1 years. For every 100 females there were 100.1 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 7.1% of the city's population had a hearing difficulty, 3.8% vision difficulty, 8.8% cognitive difficulty, 11% ambulatory difficulty, 3.8% self-care difficulty, and 7.4% an independent living difficulty. 21.3% of the population had some type of disability.

Year	2010	2020	Change
Population	1,637	1,730	5.68
Source: US Bureau of the Census			

Economy

The median income for a household in the Town was $57,639.00 and the median income for a family was $68,083.00. Males had a median income of $45,500.00 versus $40,729.00 for females. The per capita income for the Town was $41667. About 17.94% of the population were below the poverty line, including 16.06% of females and 19.81% of males.

Single-family new house construction building permits in Harpersville included:

- 2002: 2 buildings, average cost: $196,500.00
- 2003: 4 buildings, average cost: $212,500.00
- 2004: 5 buildings, average cost: $120,200.00
- 2005: 21 buildings, average cost: $101,300.00

- 2006: 16 buildings, average cost: $107,400.00
- 2007: 15 buildings, average cost: $106,500.00
- 2008: buildings, average cost:
- 2009: buildings, average cost:
- 2010: buildings, average cost:
- 2011: buildings, average cost:
- 2012: buildings, average cost:
- 2013: buildings, average cost:
- 2014: buildings, average cost:
- 2015: buildings, average cost:
- 2016: buildings, average cost:
- 2017: buildings, average cost:
- 2018: 1 building, average cost: $107,740.00
- 2019: 11 buildings, average cost: $261,000.00
- 2020: 27 buildings, average cost: $169,000.00
- 2021: 8 buildings, average cost: $187,000.00

The most common occupations for males includes: Management Occupations (100%), Law Enforcement (100%), Natural Resources, construction, and maintenance (100%), Production, transportation, and material moving (89.6%)/The most common occupations for females includes: Sales and Office Occupations (83.2%), Management, business, science and arts (61.1%), Education, legal, community service, arts, and media occupations (85.7 Sales and Office Occupations 83.2% Management, business, science and arts 61.1 Education, legal, community service, arts, and media occupations (85.7%) Infrastructure.

With an authorized level of 8 sworn officers Harpersville enjoys one of the highest protection ratios for this size town.

The Fire Department enjoys a Class 4 rating. Together the departments provide high quality firefighting, paramedic, fire prevention and law enforcement to the area.

The Harpersville water system serves 1944 and has some of the lowest water rates in the state.

Harpersville public school students attend the Vincent Alabama schools; however, there is one private school.

School	Type	Enrollment
Coosa Valley Academy	K - 12	200

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation

activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Town of Harpersville Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited Higher Authority**		**Electronic Copy Available**
Building Codes	International Building Codes	2018	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2009		**N**	**N**	**N**
Comprehensive Plan	Resolution	2006		**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2006		**N**	**N**	**Y**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2007		**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2007		**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2007		**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2007		**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	2007		**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Town of Harpersville Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	1	1	1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	13	13	13
Fire Personnel	Professional(s)	Fire Dept.	14	14	14
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	0	0	0
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	31	31	31
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	8	8	8
Medical Practitioners	Professional(s)	Medical Facilities	3	3	3
Public Works	Directors/Engineers	Public Works	2	2	2
Public Communication	911 specialists	E-911	C43	C43	C43
Public Utilities	Professionals	Public Utilities	4	4	4
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

Town of Harpersville Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**Y**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**N**
	PDM for disaster resistant universities		**X**		**N**
	PDM Grants for communities	**X**			**Y**
	Department of Health Grants		**X**		**N**
	Department of Justice Grants	**X**			**Y**
	Department of Agriculture Grants		**X**		**Y**

	Department of Energy Grants		**X**		**N**
	Department of Education Grants		**X**		**N**
	Fire department grants	**X**			**Y**
	Flood Management Grants (FMA)	**X**			**N**
	Homeland Security Grant Program (HSGP)	**X**			**Y**
	Repetitive Flood Claims Grants (RFC)	**X**			**N**
	Severe Repetitive Loss Grants (SRL)	**X**			**N**
	Private foundation grants	**X**			**Y**
	Private business/industry grants	**X**			**Y**
Debt Procurement	Incur debt through special tax/revenue bonds	**X**			**N**
Dept Procurement	Incur debt through private activity bonds		**X**		**N**
Impact Fees	Developer fees for new developments	**X**			**Y**
Jurisdiction Bonds	Incur debt through general obligation bonds	**X**			**Y**
Project Funding	Capital improvement	**X**			**Y**
Spending Restrictions	Withhold spending in hazard-prone areas	**X**			**N**
Special Taxes	Authority to levy taxes for specific purposes	**X**			**Y**
Utility Fees	Fees for water, sewer, gas, or electric service	**X**			**Y**

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in Town of Harpersville. The following goal statements represent a broad target for Town of Harpersville and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on Town of Harpersville	Objective AH.1: Improve Town of Harpersville's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on Town of Harpersville	Objective FL.1: Improve Town of Harpersville's flood warning and information distribution to citizens Objective FL.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on Town of Harpersville	Objective HW.1: Improve Town of Harpersville's High Winds warning and information distribution to citizens Objective HW.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from High Winds events

Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on Town of Harpersville	Objective IS.1: Improve Town of Harpersville's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on Town of Harpersville	Objective WF7.1: Improve Town of Harpersville's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on Town of Harpersville	Objective UF.1: Improve Town of Harpersville's Urban Fire warning and information distribution to citizens Objective UF.2: Improve Town of Harpersville's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve Town of Harpersville's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders

Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Encouraged citizens to develop emergency preparedness, response and recovery plans.	Fire Svc. SCSO, Town Govt	Local Funds	3,311 110,350	2022 2021	88
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	NWS, EMA	Local Funds	3,311 110,350	2022 2021	87
AH1e	Distribute safe room/shelter in place information to schools, special needs and the public	Fire Svc. SCSO, EMA	Local Funds	3,311 110,350	2022 2021	84
UF1a	Educate school, special needs and the community populations on fire safety and response	Fire Svc	Grant, Local Funds	3,311 110,350	2022 2027	84

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1b	Educate school, special needs and the community population on fire extinguisher use	Fire Svc.	Local Funds	3,311 110,350	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA, Fire Svc.	Local Funds	3,311 11,035	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt. EMA	Grant Local Funds	110,350 1,103,500	2022 2027	83
TR1b	Educate schools/special needs/government officials on procedures to handle suspicious mail	SCSO	Local Funds	3,311 110,350	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities	Fire Svc.	Local Funds	25,381 331,050	2022 2027	83
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 11,035	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt. Fire Svc.	Grant, Local Funds	27,588 331,050	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	3,311 110,350	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt. Fire Svc.	Local Funds	3,311 110,350	2022 2027	81
AH3l	Assist schools in implementing an emergency phone line	City Govt.	Local Funds	1,104 11,035	2022 2027	80
FL1a	Distribute flood awareness and preparedness literature at events	Fire Svc.	Local Funds	3,311 110,350	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	Fire Svc.	Grant Local Funds	25,381 110,350	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	Fire Svc.	Grant Local Funds	55,175 2,758,750	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	3,311 110,350	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	3,311 110,350	2022 2027	79
TR3m	Assist special needs facilities to implement a security system	SCSO	Local Funds	3,311 110,350	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept, 911	Local Funds	3,311 110,350	2022 2027	78
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	Fire Svc.	Local Funds	3,311 110,350	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	3,311 110,350	2022 2027	77
FL3h	Request a study of the feasibility of flood control measures along the Coosa River.	City Govt	Grant, Local Funds	25,381 110,350	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	3,311 110,350	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
IL3a	Join/participate in local state and federal drug task forces	SCSO, FD	HLS Grant Local Funds	3,311 110,350	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	Fire Svc. SCSO	Local Funds	3,311 110,350	2022 2027	77
WF1b	Educate business/school/local populations on the causes of wild land fires	AFC, Fire Svc.	Local Funds	3,311 110,350	2022 2027	77
WF1c	Educate school/special needs/local populations on preparedness for and response to a wild-land fire	AFC, Fire Svc. BOE	Local Funds	3,311 110,350	2022 2027	77
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt	Local Funds	3,311 110,350	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	SCSO, Fire Svc.	Grant Local Funds	25,381 110,350	2022 2027	76
AH3o	Encourage business, schools, special needs and government facilities to post evacuation routes	City Govt. LE. Fire Svc. SCSO	Local Funds	1,104 11,035	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt. Fire Svc. SCSO	Grant Local Funds	3,311 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records to include offsite data storage.	City Govt	Local Funds	3,311 110,350	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	3,311 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	Fire Svc. SCSO, LE, NWS, EMA	Grant, Local Funds	27,588 110,350	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	Fire Svc.	Grant Local Funds	110,350 367,466	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually	Fire Svc.	Grant Local Funds	8,828 110,350	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt. Fire Svc.	Local Funds	3,311 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	Fire Svc.	Local Funds	3,311 11,035	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt, SCSO, Fire Svc.	DHL Grant Local Funds	3,311 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Operations and the EOP	City Govt, SCSO, Fire Svc.	Local Funds	3,311 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt, Fire Svc. EMA	Local Funds	3,311 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt, Fire Svc.	Grant Local Funds	14,346 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	Fire Svc.	Grant Local Funds	33,105 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	Fire Svc. Town Govt	HLS Grant	58,486 110,350	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	3,311 110,350	2022 2027	74
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC, Fire Svc.	Local Funds	3,311 110,350	2022 2027	74
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC, Fire Svc.	Local Funds	3,311 110,350	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, Fire Svc.	Local Funds	3,311 11,035	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant	55,175 331,050	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	Fire Svc. SCSO	Grant Local Funds	55,175 551,750	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	Fire Svc. SCSO	Grants DHL Grants	3,311 110,350	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt. Fire Svc. SCSO	Local Funds	14,346 110,350	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	Fire Svc.	Grant Local Funds	11,035 110,350	2022 2027	73
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	Fire Svc.	Local Funds	3,311 11,035	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (4 locations)	City Govt	Grant Local Funds	80,556 331,050	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt. Fire Svc. SCSO	Grant Local Funds	14,346 110,350	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt, FD	Local Funds	3,311 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS, Fire Svc. EMA	Local Funds	5,518 110,350	2022 2027	72
UF2b	Train firefighters to obtain for state and national certifications	Fire Svc.	Grant Local Funds	33,105 110,350	2022 2027	72
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt. Fire Svc.	Local Funds	3,311 110,350	2022 2027	72
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, Fire Svc.	Local Funds	3,311 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	36,416 110,350	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Gov. Fire Svc.	Grant Local Funds	7,725 110,350	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	3,311 110,350	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt. Fire Svc.	Grant Local Funds	8,828 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	Fire Svc. SCSO	Local Funds	3,311 110,350	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Local Funds	3,311 441,400	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Local Funds	3,311 110,350	2022 2027	70
FL3g	Update Town Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	3,311 110,350	2022 2027	70
FL3m	Acquire signage to indicate water depth at flooding points	City Govt. SCSO, Fire Svc.	Grant, Local Funds	3,311 110,350	2022 2027	70
WF3i	Adopt/enforce wildfire legislation that includes burning bans	City Govt. Fire Svc.	Local Funds	3,311 110,350	2022 2027	70
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood plains	City Govt	Local Funds	3,311 110,350	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	Fire Svc. SCSO	HLS Grant, Local Funds	25,381 110,350	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant Local Funds	36,416 882,800	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	3,311 110,350	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	3,311 110,350	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt. EMA	Grant Local Funds	275,875 1,103,500	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction.	Fire Svc.	Grant, Local Funds	110,350 331,050	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	Fire Svc.	Grant, Local Funds	220,700 1,103,500	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques	Fire Svc. AFC	Local Funds	11,035 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	City Govt Fire Svc. SCSO	Grant Local Funds	110,350 441,400	2022 2027	66

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt. Fire Svc. SCSO	HLS Grant	33,105 110,350	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants Town wide	City Govt	Grant Local Funds	551,750 1,103,500	2022 2027	65
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	3,311 110,350	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	14,346 110,350	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	3,311 110,350	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	3,311 110,350	2022 2027	63
WF2f	Exercise fire response regularly for residences, businesses and industry	Fire Svc.	Local Funds	14,346 110,350	2022 2027	63
WF2b	Obtain specialized equipment to combat wild-land fires.	Fire Svc.	Grant State Grant	27,588 110,350	2022 2027	62
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt, Streets	Grant, Local Funds	113,661 551,750	2022 2027	61
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant, Local Funds	110,350 551,750	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant Local Funds	58,486 220,700	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table

Action/Project Description	Social				Technical			Administrative			Political		Legal			Economic				Environmental				Prioritization
	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Loss of Property-WF=3	High Effect on Economic Loss-WF=3	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	Low Adverse Effect on Water	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Encouraged citizens to develop emergency preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88

Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute safe room/shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate schools/special needs/government officials on procedures to handle suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79

Assist special needs facilities to implement a security system	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Request a study of the feasibility of flood control measures along the Coosa River.	2	6	6	5	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Join/participate in local state and federal drug task forces	3	3	2	2	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Educate business/school/local populations on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Educate school/special needs/local populations on preparedness for and response to a wild-land fire	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Encourage business, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74

Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Operations and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for all uncovered areas (4 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	2	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72

Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update Town Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Acquire signage to indicate water depth at flooding points	2	6	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	70
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Educate developers, builders and the public on the location of NFIP designated flood plains	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67

Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Acquire and install six inch water mains/hydrants Town wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59

CITY OF HELENA INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

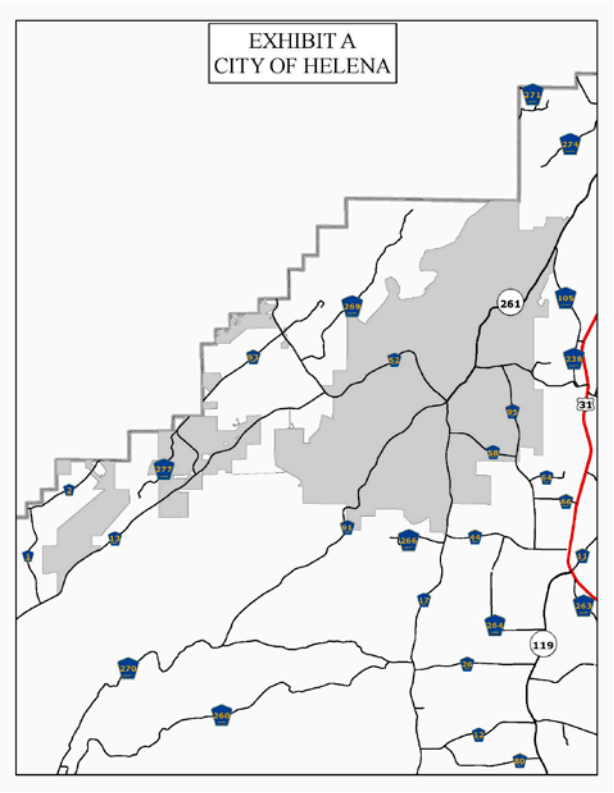
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CITY OF HELENA MITIGATION ACTION PLAN

Geography/History

Helena is located in northwest Shelby County approximately 20 miles south of Birmingham. The town of Helena began as a crossroads stage stop with the first white settlers coming around 1835 headed by Colonel Griffin. Among the early settlers were the Acton's, Davidson's, Lees and Roy's. Records show that two old gristmills were located along Buck Creek.



Post office records from 1849 refer to the town of Cove, thought to be little more than a crossroads stage stop. The name changed to Hillsboro in 1856. One of the earliest churches established in Helena was the Presbyterian, known as Old Harmony. This was around the year of 1850. With the discovery of coal, the coming railroads, and the steel mills, the community centered around the rolling mill, which was built around 1862. The rolling mill was built to manufacture material for the confederate war effort. Classified as "top secret", it continued to operate throughout the civil war. Near the end of the war in 1865, federal troops known as "Wilson's Raiders" razed the plant, burning it to the ground.

Pete Boyle headed the construction of the S. N. and A. Railroad and it was through his influence that the Railroad Station was named Helena in 1872. During the reconstruction period following the war, railroads began contributing to the growth in the area. One of the railroads completed a new train station named "Helena Station". The area around the station began to develop and grow, eventually absorbing Hillsboro and officially incorporating as the city of Helena. It was during this period when the steel mill was reopened

The town was first incorporated about 1877. In 1878, J.W. Davidson, who then owned nearly all the land comprising the site of Helena, donated a school lot.

Helena played a vital role in the Birmingham steel industry and growth. Helena had several prosperous coalmines, a variety of retail stores, a couple of hotels and boarding houses as well as a school. Also operating was a large railroad yard, a gristmill powered by Buck Creek and a cotton gin next to the train station. In 1916, it was learned certain errors made in filing papers for incorporation caused it to be invalid. As a result, the city was reincorporated in 1917.

Hard times hit the city around 1920. The coalmines were almost depleted and closed their operations. The town declined rapidly. Without local employment, many townspeople had little choice but to move elsewhere for work. Helena went to sleep for a period of time after the depression and devastating tornadoes of 1933.

Special Characteristics

Helena is highly regarded as a place to live and raise children. It has the eighth lowest crime rate per population in the U.S., and the city was ranked in Money Magazine's 2007 list of "Best Places to Live: Top 100" in the U.S., placing at number 91.

Helena's Outdoor Amphitheater located in Old Town Helena, is an outdoor concert hall, festival grounds, movie theater, wedding destination and special event location all wrapped up in one.

Major annual community events largely reflect traditional small town American life and include the Easter Egg Hunt, Buck Creek Festival, 4th of July Picnic, concert and fireworks, Fall Carnival, Spring Fling, and the Christmas Parade.

Major points of interest include the Cahaba River, Old Town Amphitheater, and the Old Town district, which includes the 1800s jail and railroad freight depot as well as commercial structures from the 1800s. Numerous parks are provided within Helena by the city and Shelby County. These parks feature open green spaces, playground equipment, a fishing pond, and a baseball field complex often used for tournaments as well as recreational leagues. The Old Town Helena Amphitheater along the banks of Buck Creek features a stage and grass seating area where numerous productions are staged, including the popular Summer Sundown Cinemas (free movie) and 4th of July celebration.

Water characteristics include the Cahaba River and its tributary Buck Creek, Prairie Brook, Beaverdam Creek and Lee Brook. Buck Creek is dammed upstream of Alabama Highway 261 in the Old Town area to form Lake Davidson. Fishing, wading, and canoeing are popular uses of both waterways

Population and Demographics

As of the 2020 Census, the city covers 20.4 square miles and there were 20,987 people. The population density was 1,030 people per square mile. The racial makeup of the city was 75.69% White, 17.08% Black or African American, 0.15% Native American, 1.39% Asian, 0.06% Pacific Islander, 2.41% from other races, and 3.22% from two or more races. 2.7% of the population was Hispanic or Latino of any race. 94.58% of town residents speak English while Spanish is spoken by 3.55% of the population.

According to the 2019 American Community Survey, there were 6,718 households out of which 2,436 had children under the age of 18 living with them, 4,272 were married couples living together, 588 had a female householder with no spouse present, and 1,599 were non-families. 21.8% of all householders were made up of individuals and 8.1% had someone living alone who was 65 years of age or older. The average household size was 2.75 and the average family size was 3.21. Mobile homes made up 1.5% of structures.

In the city the population was spread out with 25.7% under the age of 18, 5.8% from 18 to 24, 38.6% from 15 to 44, 27.6% from 45 to 64, and 13.1% who were 65 years of age or older. The median age was 39.2 years. For every 100 females there were 97.7 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 2.2% of the city’s population had a hearing difficulty, 1.6% vision difficulty, 3.8% cognitive difficulty, 5% ambulatory difficulty, 2.6% self-care difficulty, and 5% an independent living difficulty. 8.2% of the population had some type of disability.

Year	2010	2020	Change
Population	16,793	20,987	24.97
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $87,781.00 and the median income for a family was $97,728.00. Males had a median income of $57,125.00 versus $40,918.00 for females. The per capita income for the city was $50,218.00. About 3.88% of the population were below the poverty line, including 5.48% of females and 2.24% of males.

Single-family new house construction building permits in Helena include:

- 2000: 187 buildings, average cost: $111,400.00
- 2001: 204 buildings, average cost: $133,000.00
- 2002: 202 buildings, average cost: $141,000.00
- 2003: 157 buildings, average cost: $161,600.00
- 2004: 353 buildings, average cost: $151,900.00
- 2005: 242 buildings, average cost: $172,700.00
- 2006: 177 buildings, average cost: $193,000.00
- 2007: 169 buildings, average cost: $211,900.00
- 2008: 53 buildings, average cost: $675,700.00
- 2009: 29 buildings, average cost: $372,327.00
- 2010: 26 buildings, average cost: $206,322.00
- 2011: 17 buildings, average cost: $186,344.00
- 2012: 67 buildings, average cost: $204,578.00
- 2013: 125 buildings, average cost: $209,552.00
- 2014: 181 buildings, average cost: $212,783.00
- 2015: 182 buildings, average cost: $208,955.00
- 2016: 143 buildings, average cost: $213,074.00
- 2017: 169 buildings, average cost: $221,251.00
- 2018: 129 buildings, average cost: $267,836.00
- 2019: 171 buildings, average cost: $486,933.00
- 2020: 205 buildings, average cost: $336,554.00
- 2021: 153 buildings, average cost: $380,063.00

The local economy is broadly diversified among professional, service, and manufacturing jobs. Many of the residents of Helena commute to work in other communities within the greater Birmingham area. Well-known local industries include the Vulcan Materials Company construction aggregate quarry and the Plantation Pipeline depot and tank farm. A developed industrial park includes a wide variety of manufacturers.

Infrastructure

A Mayor-Council form of government governs the City of Helena. The five-member City Council and Mayor are each elected to four-year terms on an at-large basis.

The Helena Fire Department has three fire stations and also includes volunteer firefighters in addition to the paid staff. The Helena Fire Department is a combination of paid and volunteer status with 12 paid and 12 volunteers.

The Helena Police Department is a community-oriented organization, which strives to promote good working relationships with the citizens and businesses located in our city. The Helena Police Department has 26 (21 officers) full time employees and a K-9 unit.

The Water Department manages residential and commercial accounts. The Water Works section handles the maintenance and repair of water lines. The Wastewater Treatment Plant & Collection System collects and treats city sewage.

The Shelby County School System provides kindergarten through 12th Grade public education. Helena Elementary School and Helena Middle School lie within the city limits, high school students attend Pelham High School in the neighboring city of Pelham, Alabama.

School	Type	Enrollment
Helena Elementary School	K - 2	893
Helena Intermediate School	3 - 5	943
Helena Middle School	6-8	1062
Helena High School	9-12	1388

Helena is conveniently located to two major interstates. I-459 is located 9 miles to the north which joins major east-west interstates I-20 and I-59; north-south oriented I-65 is 3 miles to the east of Old Town Helena. CSX Transportation provides rail service on two separate lines, the S&NA South subdivision between Birmingham and Montgomery, and the Lineville subdivision between Birmingham and Atlanta, Georgia. General aviation and private jet service is available at the nearby Bessemer Airport (EKY) about 8 miles north of Old Town. Extensive commercial flights are available at the Birmingham-Shuttlesworth International Airport (BHM) approximately 25 miles to the northeast. Intercity rail service is available on the Amtrak Crescent 19 miles to the north

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Helena Legal And Regulatory Capability						
Regulatory Tools/Plans	Regulatory Type: Ordinance Resolution Codes Plans Etc.	Year Adopted or Updated	Authority	Prohibited	Authority	copy Available
Building Codes	International Bldg Codes	2012	Y	N	Y	Y
Capital Improvements Plan	Annual Budget	2009		N	N	N
Comprehensive Plan	Resolution	2005		N	N	Y
Continuity of Operations Plan				N	N	N
Community Rating System		2005		N	Y	N
Economic Development Plan	Comprehensive Plan Resolution			N	N	Y
EMAP Certified				N	Y	N
Emergency Response Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Flood Management, Plan	Resolution	2004		N	Y	Y
Growth Control Ordinance				N	N	N
Hazard Setback Regulations				N	N	N
Hillside Ordinance				N	N	N
Historic Ordinance				N	N	N
NFIP Participant	Resolution	2004		N	Y	Y
Post-disaster Ordinance				N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission	1960	N	N	Y	N
Site Plan Requirements	Zoning Ordinance	1999		N	N	Y
Subdivision Regulations	Zoning Ordinance	1999		N	N	Y
Wildfire Ordinance				N	N	N
Zoning Ordinances	Ordinance	1999		N	N	N

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Helena Administrative And Technical Capabilities
C=County Provides, S=State Provides, F=Federal Provides

Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	10	10	10
Fire Personnel	Professional(s)	Fire Dept.	14	14	14
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	0	0	0
Government Elected	Elected Officials	Mayor/Commission	6	6	6
Government Administration	Employees	Jurisdiction	18	18	18
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	C6	C6	C6
Information Systems	Certified Professional	IT department	2	2	2
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	21	21	26
Medical Practioners	Professional(s)	Medical Facilities	12	12	12
Public Works	Directors/Engineers	Public Works	2	2	2
Public Communication	911 specialists	E-911	C11	C11	C11
Public Utilities	Professionals	Public Utilities	21	21	21
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Helena Fiscal Capabilities					
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			X
	Hazard Mitigation Planning Grants (HMPG)	X			X
	PDM for disaster resistant universities		X		
	PDM Grants for communities	X			X
	Department of Health Grants		X		
	Department of Justice Grants	X			X
	Department of Agriculture Grants		X		
	Department of Energy Grants		X		
	Department of Education Grants		X		
	Fire department grants	X			X
	Flood Management Grants (FMA)	X			X
	Homeland Security Grant Program (HSGP)	X			X

	Repetitive Flood Claims Grants (RFC)	X			
	Severe Repetitive Loss Grants (SRL)	X			
	Private foundation grants	X			X
	Private business/industry grants	X			X
Debt Procurement	Incur debt through special tax/revenue bonds	X			
Dept Procurement	Incur debt through private activity bonds		X		
Impact Fees	Developer fees for new developments	X			X
Jurisdiction Bonds	Incur debt through general obligation bonds	X			X
Project Funding	Capital improvement	X			X
Spending Restrictions	Withhold spending in hazard-prone areas			X	
Special Taxes	Authority to levy taxes for specific purposes	X			X
Utility Fees	Fees for water, sewer, gas, or electric service	X			X

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Helena. The following goal statements represent a broad target for City of Helena and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Helena	Objective AH.1: Improve the City of Helena's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Helena's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the City of Helena	Objective FL.1: Improve the City of Helena's flood warning and information distribution to citizens Objective FL.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Helena's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Helena	Objective HW.1: Improve the City of Helena's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Helena's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Helena	Objective IS.1: Improve the City of Helena's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Helena's capability to prepare for, respond to and recover from Ice/Snow events

Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Helena	Objective WF7.1: Improve the City of Helena's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Helena's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Helena	Objective UF.1: Improve the City of Helena's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Helena's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Helena's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs

High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals

Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW1b	Educate school/special needs/local populations on high wind preparedness/response. Annual Storm Spotter class	NWS EMA	Grant	3,311 82,763	2022 2027	86
HW1c	Distribute High Wind preparedness information to special needs/school/local populations. Annual Storm Spotter class	NWS EMA	Grant	3,311 82,763	2022 2027	86
AH1e	Distribute safe room/shelter in place information to schools/special needs/local populations. Annual Storm Spotter class	PD BOE\ City Govt	Grant Local Funds	165.525 551,750	2022 2027	84
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris as needed on a regular basis	City Govt	Grant Local Funds	27,588 220,700	2022 2027	84
UF1a	Educate school/special needs/local populations on fire safety and response yearly	FD BOE	Grant Local Funds	5,518 82,763	2022 2027	84
UF1b	Educate school, special needs and the community population on fire extinguisher use yearly	FD	Local Funds	3,311 193,113	2022 2027	84

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA	Local Funds	3,311 193,113	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant	110,350 551,750	2022 2027	83
FL1a	Distribute flood awareness and preparedness literature at events as part of MS4	City Govt	Local Funds	2,207 55,175	2022 2027	83
FL2a	Obtain PPE for all personnel responding to flood events, partial capability as Grant funds were available	FD	Grant	55,175 220,700	2022 2027	83
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding. Regular monitoring as needed at Water Treatment Plant	City Govt	Grant Local Funds	11,035 110,350	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities. Review annually	FD	Local Funds	3,311 193,113	2022 2027	83
TR1b	Educate school/special needs/government officials on procedures to handle suspicious mail. PD did not complete this task. No resources to train. Would cost approx $500 to purchase training materials to achieve.	BOE PD	Grant	3,311 82,763	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	ADECA	Local Funds	3,311 82,763	2022 2027	81
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH SCSO	Local Funds	3,311 82,763	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested per Helena Fire Code	FD	Local Funds	3,311 82,763	2022 2027	81
AH3l	Assist schools in implementing an emergency phone line	BOE	Local Funds	3,311 82,763	2022 2027	80
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	3,311 82,763	2022 2027	80
FL3h	Request a study of the feasibility of flood control measures along the Cahaba River.	City Govt	Grant Local Funds	27,588 220,700	2022 2027	80
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	3,311 82,763	2022 2027	80

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
IL1a	Educate school and local populations on Meth Lab awareness	BOE PD SCSO This should be the repsonsibillity of the Shelby Co Narcotics Task force. They are the primary narcotics agency in the county and deal with meth labs on a regular basis. They have the training and materials to accomplish.	Local Funds	3,311 82,763	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	FD	Grant Local Funds	55,175 165.525	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	3,311 82,763	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	3,311 82,763	2022 2027	79
AH3u	Ensure all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt ADPH ADHR EMA	Local Funds	3,311 82,763	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	66,210 1,103,500	2022 2027	79
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	3,311 82,763	2022 2027	79
IL3a	Join/participate in local state and federal drug task forces	SCSO PD This is accomplished We have an officer assigned to the joint Shelby CO Narcotics Task force.	Grant Local Funds	110,350 220,700	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept 911	Local Funds	3,311 110,350	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	3,311 82,763	2022 2027	78

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
TR3m	Encourage special needs facilities to implement a security system	PD Accomplished. All schools and special needs facilities have updated security plans	Local Funds	3,311 82,763	2022 2027	78
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	FD	Local Funds	3,311 413,813	2022 2027	78
IL3b	Maintain/publicize a hotline to report suspected meth labs	SCSO PD Not accomplished. No dedicated line for people to call. Currently, all calls are forwarded to the Narcotics Task Force. This should be the responsibility of the Narcotics Task force.	Local Funds	5,518 55,175	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations. PD works closely with FD to achieve this.	FD PD accomplished.	Local Funds	3,311 413,813	2022 2027	77
WF1b	Educate business/school/local populations on the causes of wild land fires	AFC FD	Local Funds	3,311 82,763	2022 2027	77
WF1f	Publish outdoor burn ban info during Wild-land fire seasons.	City Govt	Local Funds	3,311 82,763	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	PD FD Not accomplished. No training resources available to use. This would require under a year to accomplish and an unknown amount of money to arrange to secure training for each officer.	Grant Local Funds	27,588 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt FD PD Accomplished	Local Funds	3,311 82,763	2022 2027	76

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3p	Develop/implement/maintain the city's Mitigation Action Plan	City Govt FD PD Accomplished.	Grant Local Funds	22,070 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	3,311 82,763	2022 2027	76
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	3,311 193,113	2022 2027	76
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	3,311 82,763	2022 2027	76
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	3,311 82,763	2022 2027	75
FL3m	Acquire signage to indicate water depth at flooding points	City Govt Not accomplished..	Grant Local Funds	11,035 220,700	2022 2027	75
HW2c	Train 1st responders to respond to High Wind events	FD PD Not accomplished. Would require under a year and an unknown amount of funding to secure training for each officer.	Grant	27,588 110,350	2022 2027	75
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grant	93,798 220,700	2022 2027	75
UF2d	Train all fire responders in fire combat techniques anually	FD	Grant Local Funds	5,518 82,763	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt FD	Local Funds	3,311 82,763	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD PD PW Accomplished.	Local Funds	5,518 5,518	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt PD FDAccomplished.	Grant Local Funds	11,035 82,763	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt PD FD Accomplished	Local Funds	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt FD EMA	Local Funds	3,311 82,763	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	EMA City Govt	Grant Local Funds	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt BOE	Grant Local Funds	7,725 82,763	2022 2027	74
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	3,311 82,763	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1c	Educate school/special needs/local populations on preparedness for and response to a wild-land fire	AFC BOE	Local Funds	3,311 82,763	2022 2027	74
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC	Local Funds	3,311 82,763	2022 2027	74
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC	Local Funds	3,311 82,763	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC FD	Local Funds	3,311 82,763	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant	55,175 220,700	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD PD PW Not accomplished. No funding to allow this. Would require a large amount of funding to achieve. Approx. $75,000-$100,000.	Grant Local Funds	55,175 110,350	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD PD Accomplished.	Grants Local Funds	5,518 55,175	2022 2027	73
AH3b2	Develop redundancy capabilities for emergency radio communications	911 PD Accomplished.	Local Funds	25,381 82,763	2022 2027	73
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Local Funds	3,311 303,463	2022 2027	73
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Local Funds	3,311 82,763	2022 2027	73
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	3,311 82,763	2022 2027	73
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	FD BOE	Grant Local Funds	33,105 165.525	2022 2027	73
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD City Govt	Grant Local funds	55,175 220,700	2022 2027	73
HW3d	Develop a debris clearance program that can be utilized city wide	City Govt EMA Co Engr	Grant Local Funds	22,070 110,350	2022 2027	73
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	3,311 82,763	2022 2027	73
IS3d	Establish snow and ice removal methods	FD PD City Govt Accomplished.	Local Funds	3,311 82,763	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grant Local Funds	16,553 110,350	2022 2027	73

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	AFC	Local Funds	3,311 82,763	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas	City Govt	Grant Local Funds	82,763 551,750	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt	Grant Local Funds	55,175 220,700	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt PD Not accomplished. Would require under 1 year and approximately $2,000 to obtain necessary signage.	Grant Local Funds	22,000 110,350	2022 2027	72
FL2b	Train all 1st responders on repetitive flooding areas and structures	City Govt	Grant Local Funds	27,588	2022 2027	72
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood plains	City Govt	Grant Local Funds	3,311 82,763	2022 2027	72
FL3c	Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood plains	City Govt	Grant Local Funds	551,750 1,103,500	2022 2027	72
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	FD PD In process. We have a small amount of barricades, but not as many as needed. Would talke under 1 year and approximately $3,000 to purchase the needed barricades.	Grant Local Funds	27,588 110,350	2022 2027	72
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt FD PD Not accomplished. Would be willing to participate in any training event.	Local Funds	14,346 193,113	2022 2027	72
IL2c	Provide Meth Lab training to all personnel responding to Meth Labs	SCSO PD FD Accomplished.	Grant	11,035 55,175	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF2b	Train firefighters to obtain for state and national certifications	FD	Grant Local Funds	33,105 110,350	2022 2027	72
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt FD	Local Funds	3,311 575,000	2022 2027	72
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC	Local Funds	3,311 82,763	2022 2027	72
AH3a1	Develop/maintain a countywide NIMS resource inventory software	City Govt FD PD Not accomplished. Would be willing to inventory all equipment and aid as needed.	Grant Local Funds	3,311 82,763	2022 2027	71
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS FD EMA	Local Funds	5,518 82,763	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	3,311 82,763	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt FD	Grant Local Funds	11,035 220,700	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	FD PD Not accomplished. Would require large scale planning. But cost should be minimal.	Grant Local Funds	2,207 55,175	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	ARC City Govt EMA ADPH	Local Funds	14,346 303,463	2022 2027	70
FL2f1	Train appropriate 1st responders for a swift water rescue team	FD EMA	HLS Grant Local funds	27,588 110,350	2022 2027	70
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	3,311 82,763	2022 2027	70
FL3a2	Adopt/enforce floodplain legislation to require structures to be built above the NFIP BSE	City Govt	Local Funds	3,311 413,813	2022 2027	70
HW1g	Develop a plan to provide weather radios to low income residents	City Govt FD	Grant Local Funds	11,035 82,763	2022 2027	70
IL2a	Obtain PPE for all personnel that respond to Meth Labs	SCSO EMA PD FD Accompished.	Grant Local Funds	82,763 220,700	2022 2027	70
WF3i	Adopt/enforce wildfire legislation that includes burning bans	City Govt FD	Local Funds	3,311 82,763	2022 2027	70
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant Local Funds	5,518 55,175	2022 2027	68

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	3,311 193,113	2022 2027	67
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	11,035 110,350	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction.	FD	Grant Local Funds	110,350 220,700	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grant Local Funds	220,700 551,750	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques	FD AFC	Local Funds	3,311 82,763	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities (City Hall, FS# 1, FS# 2 FS # 3, Pump Stations, Shelters, Etc.	City Govt FD PD Accomplished. But still require funding for a generator for our largest Red Cross certitifed shelter. Would require approximately $18,000 and could be installed in under one year.	Grant Local Funds	165.525 551,750	2022 2027	66
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	3,311 193,113	2022 2027	66
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	3,311 82,763	2022 2027	66
HW3e	Obtain funding to build mobile home community storm shelters	City Govt EMA	Grant Local Funds	275,875 551,750	2022 2027	66
WF2e	Obtain radios for interoperable communications.	City Govt FD PD Not accomplished. Re currently rely on coordination with EMA to make this happen. Would require a large sum of funding to accomplish.	Grant Local funds	33,105 110,350	2022 2027	66
AH3s1	Assist businesses to develop Business Continuity Plans	City Govt	Local Funds	3,311 82,763	2022 2027	65
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grant Local Funds	551,750 1,103,500	2022 2027	65

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL2f	Obtain equipment to develop a swift water rescue team	FD EMA	HLS Grant Local funds	99,315 331,050	2022 2027	64
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant Local Funds	110,350 331,050	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	FD	Local Funds	3,311 82,763	2022 2027	63
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant Local Funds	110,350 551,750	2022 2027	62
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant Local Funds	55,175 110,350	2022 2027	62
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	Grant Local funds	174,000– 500,000`	2022 2027	62
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt ADPH EMA	Grant Local Funds	33,105 220,700	2022 2027	60

"STAPLEE" Mitigation Actions Prioritization Table

Action/Project Description	Social				Technical			Administrative			Political			Legal			Economic				Environmental				Prioritization
	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss	High Effect on Economic Loss	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effects	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Obtain/install emergency generators or "pigtails" for critical government facilities (City Hall, FS# 1, FS# 2 FS # 3, Pump Stations	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Educate school/special needs/local populations on high wind preparedness/response	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	86

Distribute High Wind preparedness information to special needs/school/local populations	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	86
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Distribute safe room/shelter in place information to schools/special needs/local populations	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	8	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	84
Educate school/special needs/local populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Distribute flood awareness and preparedness literature at events	2	6	2	8	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Obtain PPE for all personnel responding to flood events	2	6	4	8	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	83
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	8	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	83
Educate school/special needs/government officials on procedures to handle suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Participate in the National Flood Insurance Program (NFIP)	3	0	4	8	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Adopt/enforce comprehensive Building Code legislation	2	6	6	7	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	80
Educate school and local populations on Meth Lab awareness	3	6	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	80
Ensure all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79

Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	8	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Join/participate in local state and federal drug task forces	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Encourage special needs facilities to implement a security system	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Maintain/publicize a hotline to report suspected meth labs	3	3	2	4	3	3	3	3	3	3	3	3	3	3	2	6	4	2	3	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Educate business/school/local populations on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the city's Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Participate in the NFIP Community Rating System	3	0	0	8	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	76
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	7	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	76
Identify alternative access points for single access neighborhoods	2	3	0	8	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	75
Acquire signage to indicate water depth at flooding points	2	3	0	8	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	75
Train 1st responders to respond to High Wind events	3	6	0	7	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74

Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	74
Educate school/special needs/local populations on preparedness for and response to a wild-land fire	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Develop redundancy capabilities for emergency radio communications	2	6	2	9	3	3	3	2	3	2	2	2	2	2	3	3	3	2	2	2	3	3	3	3	3	73
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	73
Identify roadways, culverts and bridges damaged by flooding	3	0	2	8	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	73
Update City Land Use Plan to identify areas where development should be restrictive	2	3	6	8	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	73
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	7	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	73
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	7	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Develop a debris clearance program that can be utilized city wide	3	0	2	7	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	73
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	7	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	73
Establish snow and ice removal methods	2	6	2	4	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	73

Train fire 1st responders to the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for all uncovered areas (4 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Train all 1st responders on repetitive flooding areas and structures	2	3	2	8	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Educate developers, builders and the public on the location of NFIP designated flood plains	2	3	4	8	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	72
Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood plains	2	6	6	8	3	2	2	2	1	2	1	1	2	3	3	1	4	6	1	1	3	3	3	3	3	72
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	8	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	72
Exercise a High Wind event with 1st responders at least annually	3	6	0	7	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	72
Provide Meth Lab training to all personnel responding to Meth Labs	3	6	0	4	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Develop/maintain a countywide NIMS resource inventory software	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Train appropriate 1st responders for a swift water rescue team	2	6	0	8	3	3	3	1	2	2	2	2	2	3	3	3	2	4	4	0	3	3	3	3	3	70
Adopt/enforce an NFIP flood plain management plan	2	0	4	8	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	70

Adopt/enforce floodplain legislation to require structures to be built above the NFIP BSE	2	3	6	8	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	70
Develop a plan to provide weather radios to low income residents	2	6	0	7	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	70
Obtain PPE for all personnel that respond to Meth Labs	2	6	0	4	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	70
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	8	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	67
Develop a storm water management plan for the jurisdiction	2	3	2	8	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	67
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	8	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	66
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	8	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	66
Obtain funding to build mobile home community storm shelters	2	6	0	7	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	66
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Assist businesses to develop Business Continuity Plans	2	0	2	9	3	3	3	2	1	3	1	1	2	3	3	2	3	2	4	1	3	3	3	3	3	65
Acquire and install six inch water mains/hydrants city wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Obtain equipment to develop a swift water rescue team	2	6	0	8	3	3	3	2	1	1	2	2	2	3	3	3	1	2	2	0	3	3	3	3	3	64
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	8	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	64
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	8	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	62
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	8	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	62
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62

Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	60

INDIAN SPRINGS VILLAGE INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL MULTI HAZARDS MITIGATION PLAN 2022

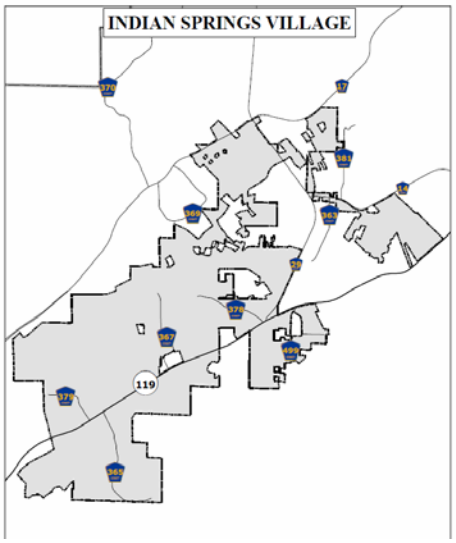
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INDIAN SPRINGS VILLAGE MITIGATION ACTION PLAN

Geography/History

The Town of Indian Springs Village is located in northern Shelby County approximately 12 miles south of the City of Birmingham. Indian Springs Village is located at 33°22′5″N 86°44′28″W / 33.36806°N 86.74111°W / 33.36806, -86.74111 (33.368021, -86.741176)[1]. According to the U.S. Census Bureau, the town has a total area of 3.6 square miles (9.4 km²), all of it land.



Indian Springs Village was incorporated on Oct. 16, 1990. A total of 911 people signed a petition to allow residents to vote on incorporating as Indian Springs Village. It is widely accepted that the Town was created not so much as a revenue base as it was as a protective measure for residents who didn't want to see their area encompassed by development.

Today the village functions largely as a rural bedroom community for the Birmingham Metropolitan area, providing a high quality of life for its residents and a rural oasis to the surrounding urbanizing areas

Special Characteristics

The Town Pavilion is located behind the Town Hall. It is a large, covered picnic area with seating for 140 and a multipurpose building with seating up to 35. Water characteristics include Dry Brook creek.

Population and Demographics

As of the 2020 Census, the city covers 3.9 square miles and there were 2,559 people. The population density was 660.9 people per square mile. The racial makeup of the city was 88.74% White, 3.33% Black or African American, 0% Native American, 5.61% Asian, 0% Pacific Islander, 0% from other races, and 2.31% from two or more races. 0.75% of the population was Hispanic or Latino of any race. 93.12% of town residents speak English while Spanish is spoken by 0.7% of the population.

According to the 2019 American Community Survey, there were 876 households out of which 267 had children under the age of 18 living with them, 722 were married couples living together, 15 had a female householder with no spouse present, and 128 were non-families. 12% of all householders were made up of individuals and 8.3% had someone living alone who was 65 years of age or older. The average household size was 2.83% and the average family size was 3.08. Mobile homes made up 0% of structures.

In the city the population was spread out with 22.6% under the age of 18, 6.4% from 18 to 24, 29.4% from 15 to 44, 32.2% from 45 to 64, and 20.6% who were 65 years of age or older. The median age was 46.9 years. For every 100 females there were 108.4 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 3.8% of the city's population had a hearing difficulty, 1.7% vision difficulty, 2.3% cognitive difficulty, 5.1% ambulatory difficulty, 1.3% self-care difficulty, and 5% an independent living difficulty. 9% of the population had some type of disability.

Year	2010	2020	Change
Population	2,363	2,559	8.29
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $119,091.00 and the median income for a family was $127,500.00. Males had a median income of $78,125.00 versus $47,353.00 for females. The per capita income for the city was $65,119.00. About 6.67% of the population were below the poverty line, including 6.21% of females and 7.09% of males.

Single-family new house construction building permits in Indian Springs Village include:

- 2008: 5 buildings, average cost: $384,000.00
- 2009: 4 buildings, average cost: $275,000.00
- 2010: 2 buildings, average cost: $391,000.00
- 2011: 3 buildings, average cost: $463,000.00
- 2012: 3 buildings, average cost: $335,000.00
- 2013: 3 buildings, average cost: $617,000.00
- 2014: 5 buildings, average cost: $504,000.00
- 2015: 8 buildings, average cost: $256,000.00
- 2016: 6 buildings, average cost: $583,000.00
- 2017: 4 buildings, average cost: $580,000.00
- 2018: 4 buildings, average cost: $501,000.00
- 2019: 1 building, average cost: $772,000.00
- 2020: 4 buildings, average cost: $680,000.00
- 2021: 2 buildings, average cost: $573,000.00

Infrastructure

The village prides itself on its ability to be self-sustaining with a volunteer city government.

Birmingham Water Works or the City of Pelham along with Southwest Water Company provides community water systems. Law Enforcement is contracted from the Shelby County Sheriffs Office and fire service is contracted with the North Shelby Fire District.

Indian Springs utilizes the Shelby County elementary and high school system as well as a large private school, Indian Springs School and several smaller private schools, OLV elementary and Bruno Montessori.

School	Type	Enrollment
Indian Springs School	8 - 12	300
Oak Mountain High School	9 - 12	1516
Oak Mountain Middle School	6 - 8	1048
Oak Mountain Intermediate School	4 - 5	630
Oak Mountain Elementary	K - 3	662

Indian Springs School is a proud hallmark of the village and was the brainchild of Harvey G. Woodward, a Birmingham industrialist who had attended M.I.T. and wanted to establish a school in his home state that would train young men for a lifetime of learning. Mr. Woodward left a sizeable estate and a detailed description of his program when he died in 1930. The first soccer program in the state was initiated at Indian Springs and the school's choir has a tradition of presenting concerts all over the globe.

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Indian Springs Village Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited**	**Higher Authority**	**Electronic copy Available**
Building Codes	International Building Codes	2005	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2021	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2005	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2005	**Y**	**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2021	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance	Resolution	2018	**Y**	**N**	**N**	**N**
Hazard Setback Regulations		2014	**Y**	**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2015	**Y**	**N**	**Y**	**Y**

Post-disaster Ordinance	County			N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission		N	N	Y	N
Site Plan Requirements	Zoning Ordinance	2014	Y	N	N	Y
Subdivision Regulations	Zoning Ordinance	2015	Y	N	N	Y
Wildfire Ordinance				N	N	N
Zoning Ordinances	Ordinance	2014	Y	N	N	N

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Indian Springs Village Administrative And Technical Capabilities

C=County Provides, S=State Provides, F=Federal Provides

Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	37	37	37
Fire Personnel	Professional(s)	Fire Dept.	37	37	37
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	0	0	0
Government Elected	Elected Officials	Mayor/ Council	6	6	6
Government Administration	Employees	Jurisdiction	2	2	2
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	C5	C5	C5
Medical Practioners	Professional(s)	Medical Facilities	12	12	12
Public Works	Directors/Engineers	Public Works	1	1	1
Public Communication	911 specialists	E-911	C15	C15	C15
Public Utilities	Professionals	Public Utilities	0	0	0

Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

Indian Springs Village Fiscal Capabilities					
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			N
	Hazard Mitigation Planning Grants (HMPG)	X			Y
	PDM for disaster resistant universities		X		N
	PDM Grants for communities	X			N
	Department of Health Grants		X		N
	Department of Justice Grants	X			N
	Department of Agriculture Grants		X		N
	Department of Energy Grants		X		N
	Department of Education Grants		X		N
	Fire department grants	X			Y
	Flood Management Grants (FMA)	X			N
	Homeland Security Grant Program (HSGP)	X			N
	Repetitive Flood Claims Grants (RFC)	X			N
	Severe Repetitive Loss Grants (SRL)	X			N
	Private foundation grants	X			N
	Private business/industry grants	X			N
Debt Procurement	Incur debt through special tax/revenue bonds	Y			N
Dept Procurement	Incur debt through private activity bonds	Y			N
Impact Fees	Developer fees for new developments	Y			Y
Jurisdiction Bonds	Incur debt through general obligation bonds	Y			N
Project Funding	Capital improvement	Y			Y
Spending Restrictions	Withhold spending in hazard-prone areas	Y			N
Special Taxes	Authority to levy taxes for specific purposes	Y			Y
Utility Fees	Fees for water, sewer, gas, or electric service	Y			N

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Indian Springs Village. The following goal statements represent a broad target for City of Indian Springs Village and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES

All Hazards Goal: Mitigate the impact of all hazards on Indian Springs Village	Objective AH.1: Improve Indian Springs Village's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on Indian Springs Village	Objective FL.1: Improve Indian Springs Village's flood warning and information distribution to citizens Objective FL.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on Indian Springs Village	Objective HW.1: Improve Indian Springs Village's High Winds warning and information distribution to citizens Objective HW.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on Indian Springs Village	Objective IS.1: Improve Indian Springs Village's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on Indian Springs Village	Objective WF7.1: Improve Indian Springs Village's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on Indian Springs Village	Objective UF.1: Improve Indian Springs Village's Urban Fire warning and information distribution to citizens Objective UF.2: Improve Indian Springs Village's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve Indian Springs Village's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire

Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	1,104 110,350	2022 2027	69
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	1,104 110,350	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures built to be elevated above the NFIP BSE	City Govt	Local Funds	5,518 110,350	2022 2027	67
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	5,518 110,350	2022 2027	54
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain. Mobile homes no longer allowed.	City Govt	Local Funds	1,104 110,350	2022 2027	53
AH1f	Assist schools/special needs/local populations to develop emergency preparedness/response plans.	FD, City Govt, BOE	Local Funds	1,104 110,350	2022 2027	88
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	BOE, SC	Local Funds	1,104 110,350	2022 2027	87
HW1c	Distribute High Wind preparedness information to all populations	SCSO	Local Funds	1,104 110,350	2022 2027	87
UF1a	Educate school, special needs and the community populations on fire safety and response	FD	Grant, Local Funds	5,518 110,350	2022 2027	85
UF1b	Educate special needs and the community population on fire extinguisher use	FD	Local Funds	1,104 110,350	2022 2027	85
UF3d	Develop fire plans for all major businesses and critical facilities	FD	Local Funds	1,104 110,350	2022 2027	84
TR1b	Educate government officials on procedures for handling suspicious mail	SCSO	Local Funds	3,311 55,175	2022 2027	83
AH3v	Require critical sites to develop and provide to EMA an emergency plan	City Govt. EMA, LEPC	Local Funds	5,518 110,350	2022 2027	82

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt. FD	Local Funds	1,104 110,350	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 55,175	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 110,350	2022 2027	81
UF2c	Obtain/maintain firefighting supplies at all fire departments	FD	Grant, Local Funds	33,105 331,050	2022 2027	81
AH3l	Encourage schools to implement an emergency phone line safety plan	City Govt. BOE	Local Funds	1,104 11,035	2022 2027	80
FL1a	Distribute flood awareness and preparedness literature at events	NWS	Local Funds	5,518 110,350	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	FD	Grant, Local Funds	27,588 110,350	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt SCSO	Local Funds	1,104 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors		Local Funds	1,104 110,350	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt. FD, SCSO, EMA	Local Funds	1,104 110,350	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	1,104 110,350	2022 2027	79
TR3m	Assist special needs facilities to implement a security system	SCSO	Local Funds	1,104 110,350	2022 2027	79
UF3c	Encourage fire inspections to be regularly conducted at businesses and industry	FD	Local Funds	1,104 110,350	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept, City Govt	Local Funds	1,104 110,350	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 11,035	2022 2027	78
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	FD, SCSO,	Local Funds	1,104 110,350	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 110,350	2022 2027	77
WF1b	Educate business/school/local populations on the causes of wild land fires	AFC, FD	Local Funds	1,104 110,350	2022 2027	77
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt, FD	Local Funds	2,207 110,350	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	SCSO, FD	Grant, Local Funds	11,035 110,350	2022 2027	76
AH3o	Encourage all businesses, schools, special needs and government facilities to post evacuation routes	City Govt. BOE SCSO	Local Funds	1,104 55,175	2022 2027	76

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt. FD, SCSO, EMA	Grant, Local Funds	In-Kind Service	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records; back up on carbonite	City Govt	Local Funds	5,518 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	FD, SCSO	Grant Local Funds	27,588 110,350	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grant, Local Funds	85,518 551,750	2022 2027	76
UF2d	Train all fire responders in fire combat techniques annually	FD	Grant Local Funds	5,518 110,350	2022 2027	76
UF3a	Ensure that NFPA standards and codes are followed.	City Govt. FD	Local Funds	1,104 110,350	2022 2027	76
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD	Local Funds	5000 110,350	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt, SCSO, FD	DHL Grant Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt. SCSO, FD	Local Funds	1,104 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	EMA	Local Funds	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	BOE	Grant Local Funds	15,518 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	FD, BOE	Grant, Local Funds	33,105 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD, City Govt	HLS Grant	55,175 110,350	2022 2027	74
IS3d	Establish snow and ice removal methods	County	Local Funds	1,104 110,350	2022 2027	74
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grant, Local Funds	11,035 110,350	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, FD	Local Funds	1,104 11,035	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices – battery operated	City Govt	Grant	1,104 110,350	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD	Grant, Local Funds	5000 110,350	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD, SCSO	Grants	11,035 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders	City Govt. FD, SCSO	Local Funds	11,035 110,350	2022 2027	73
UF2b	Train firefighters to obtain state and national certifications. 2015 current , review annually	FD	Grant, Local Funds	33,105 110,350	2022 2027	73

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt. FD	Local Funds	1,104 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (3 locations)	City Govt	Grant, Local Funds	40,000 441,400	2016 2021	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS, FD, EMA	Local Funds	1,104 11,035	2022 2027	72
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt. FD	Grant, Local Funds	11,035 110,350	2022 2027	72
HW1g	Develop a plan to provide weather radios to low income residents	City Govt. FD	Grant, Local Funds	11,035 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans	FD, SCSO, EMA	Local Funds	15000 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	ARC, City Govt. EMA, ADPH	Local Funds Grants	5,518 200,000	2022 2027	70
WF3i	Adopt/enforce wildfire legislation that includes burn ban	City Govt. FD ADEM	Local Funds	1,104 110,350	2022 2027	70
FL2b	Train all 1st responders on repetitive flooding areas and structures	FD	Grant, Local Funds	5,518 110,350	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt/County	Local Funds	2,207 110,350	2022 2027	69
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt. EMA, Co Engr	Grant Local Funds	11,035 110,350	2022 2027	69
UF1d	Obtain a fire education-training trailer for the jurisdiction.	FD	Grant, Local Funds	110,350 1,104,414	2022 2027	68
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grant, Local Funds	11,035 110,350	2022 2027	68
WF2c	Train fire 1st responders in wild-land fire response techniques	FD, AFC	Local Funds	11,035 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS 1, 2 & 3)	City Govt., FD, EMA	Grant, Local Funds	155,175 441,400	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants city wide, completed project	City Govt	Grant, Local Funds	551,750 1,104,414	2022 2027	66
WF2e	Obtain DNR, NIFOG, compatible radios for interoperable communications.	City Govt. FD	Grant	33,105 110,350	2022 2027	66
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 110,350	2022 2027	65
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	2,207 110,350	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	FD	Local Funds	5,518 110,350	2022 2027	63

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	County	Grant, Local Funds	27,588 2110,350	2022 2027	62
FL3h	Request a study of the feasibility of flood control measures along the Cahaba tributaries.	County	Grant, Local Funds	27,588 110,350	2022 2027	62
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	Grant, Local Funds	55,175 110,350	2022 2027	62
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Local Funds	4,414 110,350	2022 2027	60
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	St/Co	Grant, Local Funds	110,350 331,050	2022 2027	60
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt County	Local Funds	11,035 110,350	2022 2027	57
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt, County	Local Funds	1,104 110,350	2022 2027	54
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	1,104 110,350	2022 2027	54
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	22,070 110,350	2022 2027	52
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt- ,County	Local Funds	1,104 110,350	2022 2027	49
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	Co. / St.	Grant, Local Funds	51,104 110,350	N/A	42

"STAPLEE" Mitigation Actions Prioritization Table

Action/Project Description	Social				Technical			Administrative			Political			Legal			Economic				Environmental				Prioritization
	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss	High Effect on Economic Loss	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	Hazmat Waste Site Effects	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78

Obtain and/or expand warning sirens to for all uncovered areas (2 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Distribute safe room/shelter in place information to schools/special needs/local populations	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Assist schools/special needs/local populations to develop emergency preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS 1, 2 & 3)	3	3	4	9	3	3	2	2	2	1	2	2	3	3	3	2	2	2	2	1	2	2	2	3	3	66
Assist non-governmental critical facilities to obtain emergency generators/pigtails	2	3	4	9	3	2	3	2	2	2	3	2	2	3	3	2	4	2	4	1	2	3	3	3	3	72
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	0	9	3	3	2	2	1	2	3	2	3	3	3	2	4	2	2	1	2	2	2	2	3	70
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Encourage schools to implement an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Encourage all businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76

Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Require critical sites to develop and provide to EMA an emergency plan	2	6	4	9	2	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures built to be elevated above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4		3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	57
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4		3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	53
Participate in the NFIP Community Rating System	3	0	0		3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	65

Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4		3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	49
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6		2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	62
Develop a storm water management plan for the jurisdiction	2	3	2		3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	52
Identify roadways, culverts and bridges damaged by flooding	3	0	2		3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	60
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	3	0	2		3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	60
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4		3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	42
Obtain/Install barriers to block flooding roadways and bridges	2	6	4		3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	42
Update City Land Use Plan to identify areas where development should be restrictive	2	6	2		3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	54
Adopt/enforce storm water legislation to reduce runoff from developments.	2	3	6		3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	54
Educate developers on Watershed, Floodplain and wetland development restrictions	2	0	2		3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	54
Request a study of the feasibility of flood control measures along the Cahaba tributaries.	2	3	4		3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	62
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6		3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	58
Identify alternative access points for single access neighborhoods	2	6	6		3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	42
Acquire signage to indicate water depth at flooding points	2	6	6		3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	61
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information to all populations	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76

Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Develop a debris clearance program that can be utilized citywide	3	0	2	3	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	69
Obtain funding to build mobile home community storm shelters	2	6	0	3	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	62
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	3	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	3	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	69
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Establish snow and ice removal methods	2	6	2	5	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	5	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	61
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Assist special needs facilities to implement a security system	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Educate school, special needs and the community populations on fire safety and response	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Educate school, special needs and the community population on fire extinguisher use	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	68
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train firefighters to obtain for state and national certifications	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	7	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	81
Train all fire responders in fire combat techniques annually	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	74
Ensure that NFPA standards and codes are followed.	2	0	4	7	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	7	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78

Encourage fire inspections to be regularly conducted at businesses and industry	2	6	6	7	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	79
Develop fire plans for all major businesses and critical facilities	2	6	6	7	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	84
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	7	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	73
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	7	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	68
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	7	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Acquire and install six inch water mains/hydrants city wide	2	9	6	7	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	66
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	7	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	72
Obtain smoke detectors and provide free to residents in need.	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Educate homeowners/businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Educate business/school/local populations on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Educate school/special needs/local populations on preparedness and response to a wild-land fire	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70

CITY OF MONTEVALLO INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN 2022

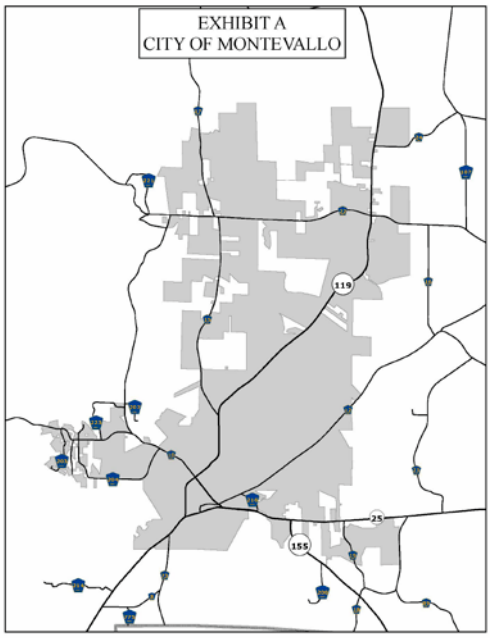
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CITY OF MONTEVALLO MITIGATION ACTION PLAN

Geography/History

Montevallo is located in the southwestern section of the County and approximately 30 miles south of Birmingham. Montevallo is located at 33°6′18″N 86°51′46″W / 33.105°N 86.86278°W / 33.105, -86.86278 (33.104927, -86.862817)[1].



According to the U.S. Census Bureau, the city has a total area of 7.7 square miles (20 km²), of which, 7.6 square miles (20 km²) of it is land and 0.1 square miles (0.26 km²) of it (0.66%) is water. Montevallo is within five miles of the geographical center of the State of Alabama. It came within one vote of being selected as the capital of the State when it was determined to remove the capital from Cahawba. No site could be found for a town, large or small, more admirably suited. The natural drainage is perfect. One or more perennial and swift-flowing streams run near it, sufficient to supply outlet for sewerage. Water is abundant and of the best kind. The agricultural lands in easy reach are very fertile. The climate is unsurpassed. The panorama is delightful and the wealth in coal and iron and limestone and timber, extends with limitless profusion

The first settlers built a brick store and traded with Indians. The Creek Indians lived here and cultivated rich spots. Even now arrowheads can be picked up in those fields, known as the "Indian Field." Indian pipes and other curiosities could be found there up to time of war; also foot race tracks could be seen there.

Montevallo was originally called Wilson's Hill. It took its name from its first citizen arrived here from Georgia and settled at this place where he built a log house on top of the hill near the large spring on Shoal creek.

In 1855 the Alabama & Tennessee River railroad laid its first rail, and for several years this was the terminus. The original charter of the North & South Railroad required it to intersect the Alabama and Tennessee Rivers at Montevallo. About the time the railroad came, the town got on what is now known as a "boom."

Montevallo was incorporated in 1887, and gets its name from a Spanish word meaning "Limestone". Before its incorporate, the town was know as "Lime Kiln Station", because of its location in the heart of the great lime producing section of Alabama. This area is one of the largest chemical lime producing areas in the United States. Lime produced here is shipped all over the southeastern U.S. and into some foreign ports

A female college was erected. The college was built by general subscription. When it was changed to a female/male college the citizens got up money and built what is now known as Lyman's Hall where a male and female school has been taught ever since.

Special Characteristics

With the state's only public liberal arts university, the University of Montevallo, located in the heart of the city, cultural and athletic events are abundant. There is rarely a week without a concert, a play, an art exhibit, or a collegiate-level athletic event at the UM Athletic Events

The American Village is one of Alabama's best-kept secrets. It is a nationally pioneering civic education center and historical village. Exact replicas of colonial buildings offer visitors the opportunity to step back to a time when our country was founded. Interpreters dressed in period costumes offer insight into historical events from the past.

Montevallo has a variety of recreation opportunities available to residents and visitors with local and state parks easily accessible including the Montevallo Golf Club, Brierfield Ironworks Park, City Ball Fields, Oak Mountain State Park and Stephens Park, Orr Park Aldrich Coal Mine Museum. The Montevallo ArtsFest is an annual event in Montevallo.

Orr Park, located in Montevallo along Shoal Creek offers residents and visitors a natural recreational environment. Orr Park features a walking and bicycle trail, picnic tables (some of which are covered), restrooms, and a playground. Orr Park features many carvings by local artist Tim Tingle. Dragons, old men, and various creatures are carved into the trees around the walking trail.

Water characteristics include College Lake (A) and streams Spring Creek, Dry Creek, Davis Creek and King Creek

Population and Demographics

As of the 2020 Census, the city covers 12.8 square miles and there were 6,984 people. The population density was 545.2 people per square mile. The racial makeup of the city was 69.1% White, 24.4% Black or African American, 0.24% Native American, 1.08% Asian, 0.07% Pacific Islander, 2.87% from other races, and 2.33% from two or more races. 5.1% of the population was Hispanic or Latino of any race. 92.98% of town residents speak English while Spanish is spoken by 4.22% of the population.

According to the 2019 American Community Survey, there were 2,249 households out of which 409 had children under the age of 18 living with them, 879 were married couples living together, 263 had a female householder with no spouse present, and 1015 were non-families. 32.8% of all householders were made up of individuals and 11.5% had someone living alone who was 65 years of age or older. The average household size was 2.39% and the average family size was 3.14. Mobile homes made up 6.2% of structures.

In the city the population was spread out with 12.8% under the age of 18, 34.5% from 18 to 24, 57.1% from 15 to 44, 20.6% from 45 to 64, and 12.4% who were 65 years of age or older. The median age was 28.4 years. For every 100 females there were 82.8 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 3.3% of the city's population had a hearing difficulty, 2.9% vision difficulty, 5.1% cognitive difficulty, 7.5% ambulatory difficulty, 1.8% self-care difficulty, and 4.4% an independent living difficulty. 14.9% of the population had some type of disability.

Year	2010	2020	Change
Population	6323	6984	10.45
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $49,650.00 and the median income for a family was $71,579.00. Males had a median income of $44,063.00 versus $23,914.00 for females. The per capita income for the city was $33,480.00. About 16.87% of the population were below the poverty line, including 17.39% of females and 16.33% of males.

Single-family new house construction building permits include:

- 2000: 11 buildings, average cost: $75,800.00
- 2001: 20 buildings, average cost: $125,367.00
- 2002: 20 buildings, average cost: $86,500.00
- 2003: 16 buildings, average cost: $79,300.00
- 2004: 21 buildings, average cost: $96,100.00
- 2005: 57 buildings, average cost: $135,000.00
- 2006: 110 buildings, average cost: $129,700.00
- 2007: 78 buildings, average cost: $120,900.00
- 2008: 0 buildings were constructed
- 2009: 0 buildings were constructed
- 2010: 3 buildings, average cost: $125,333.00
- 2011: 14 buildings, average cost: $157,571.00
- 2012: 10 buildings, average cost: $140,000.00
- 2013: 113 buildings, average cost: $157,846.00
- 2014: 16 buildings, average cost: $157,562.00
- 2015: 21 buildings, average cost: $176,000.00
- 2016: 24 buildings, average cost: $178,000.00
- 2017: 27 buildings, average cost: $178,000.00
- 2018: 46 buildings, average cost: $132,000.00
- 2019: 105 buildings, average cost: $185,000.00
- 2020: 131 buildings, average cost: $222,000.00
- 2021: 59 buildings, average cost: $256,000.00

Infrastructure

Montevallo has one of the best fire departments in the state of Alabama. 40 volunteers staff the fire department with 2 full time Paramedics/EMT's. 6 part time Paramedic/EMT's.

The Montevallo Police Department employs 17 full-time officers. The University of Montevallo provides services on the UM Campus.

Montevallo Water & Sewer Board: A separate and incorporated Water and Sewer Board provide water and sewer service in the City. Water is obtained from two wells and a slow sand filtration system using water from a local spring. System capacity is in excess of 2 million gallons per day

with storage capacity of over 3 million gallons. Water lines extend from Montevallo into the Dry Valley, Aldridge, Almont, and Pea Ridge communities.

The City Street Department maintains traffic signs and lights, repairs damage to City road surfaces, repaves on a regular schedule, and cuts grass and brush along road right of ways.

Transportation consists of roadways Interstate I-65, AL Highway 25 and AL Highway 119, railroads CSX Transportation, Norfolk Southern. Airports include Shelby County Airport 10 miles from Montevallo and Birmingham International Airport 46 miles north of Montevallo.

Montevallo utilizes the Shelby County School system. Montevallo also is home to the University of Montevallo.

School	Type	Enrollment
Montevallo Elementary School	K - 5	691
Montevallo Middle School	6 -8	369
Montevallo High School	9 - 12	460

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Montevallo Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited**	**Higher Authority**	**Electronic copy Available**
Building, Plumbing, Gas and Mechanical Codes	International Building Codes	2018	**Y**	**N**	**Y**	**Y**
Electrical Code	International Building Codes	2020	**Y**	**N**	**Y**	**Y**
Residential Energy Codes	International Building Codes	2015	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2021	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2012	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2010	**Y**	**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Damage Prevention Ordinance	Resolution	2021		**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**

Hillside Ordinance				N	N	N
Historic Ordinance				N	N	N
NFIP Participant	Resolution	2013	N	N	Y	Y
Post-disaster Ordinance				N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	N	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission	1960	N	N	Y	N
Site Plan Requirements	Zoning Ordinance	2019	Y	N	N	Y
Subdivision Regulations	Zoning Ordinance	2021	Y	N	N	Y
Wildfire Ordinance	Ordinance	2012	Y	N	N	N
Zoning Ordinances	Ordinance	2019	Y	N	N	N

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so, identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Montevallo Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	1	1	1
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	8	8	8
Fire Personnel	Professional(s)	Fire Dept.	40	40	40
Floodplain Manager	Engineer(s)	Engineering/Public Works	1	1	1
GIS Specialist	Professional(s)	Property Assessor/IT	C1	C1	C1
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	100	100	100
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	6	6	6
Information Systems	Certified Professional	IT department	2	2	2
Land Use/Management	Engineer(s)/Planners	State/Local Planning	1	1	1
Law Enforcement	Police	Police Department	17	17	17

Medical Practioners	Professional(s)	Medical Facilities	6	6	6
Public Works	Directors/Engineers	Public Works	10	10	10
Public Communication	911 specialists	E-911-County	0	0	0
Public Utilities	Professionals	Public Utilities	10	10	10
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Montevallo Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**X**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**X**
	PDM for disaster resistant universities		**X**		
	PDM Grants for communities	**X**			**X**
	Department of Health Grants		**X**		
	Department of Justice Grants	**X**			**X**
	Department of Agriculture Grants	**X**		**X**	
	Department of Energy Grants		**X**		
	Department of Education Grants		**X**		
	Fire department grants	**X**			**X**
	Flood Management Grants (FMA)	**X**			**X**
	Homeland Security Grant Program (HSGP)	**X**			**X**
	Repetitive Flood Claims Grants (RFC)	**X**			
	Severe Repetitive Loss Grants (SRL)	**X**			
	Private foundation grants	**X**			**X**
	Private business/industry grants	**X**			**X**
Debt Procurement	Incur debt through special tax/revenue bonds	**X**			
Dept Procurement	Incur debt through private activity bonds	**X**			
Impact Fees	Developer fees for new developments	**X**			**X**
Jurisdiction Bonds	Incur debt through general obligation bonds	**X**			
Project Funding	Capital improvement	**X**			**X**
Spending Restrictions	Withhold spending in hazard-prone areas	**X**		**X**	
Special Taxes	Authority to levy taxes for specific purposes	**X**			**X**
Utility Fees	Fees for water, sewer, gas, or electric service	**X**			**X**

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Montevallo. The following goal statements represent a broad target for City of Montevallo and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Montevallo	Objective AH.1: Improve the City of Montevallo's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the City of Montevallo	Objective FL.1: Improve the City of Montevallo's flood warning and information distribution to citizens Objective FL.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Montevallo	Objective HW.1: Improve the City of Montevallo's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Montevallo	Objective IS.1: Improve the City of Montevallo's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Montevallo	Objective WF7.1: Improve the City of Montevallo's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Montevallo	Objective UF.1: Improve the City of Montevallo's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Montevallo's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Montevallo's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for pressurization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire

Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3e	Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots Generators for Fire St#1,2, City Hall, Police Dept, Water Plant & City Shop	MPD/ MFRS, City Govt	Grant, Local Funds	71,728 331,050	2022 2027	89
AH1f	Assist schools/special needs/local populations to develop emergency preparedness/response plans.	City Govt, BOE, EMA	Local Funds	5,518 110,350	2022 2027	88
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	BOE, NWS, EMA	Local Funds	2,207 55,175	2022 2027	87
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant Funds	5,518 110,350	2022 2027	86
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt	Grant, Local Funds	55,175 551,750	2022 2027	86
UF1b	Educate school, special needs and the community population on fire extinguisher use	MFRS	Local Funds	3,311 110,350	2022 2027	85
UF1a	Educate school, special needs and the community populations on fire safety and response	MFRS, BOE	Local Funds	3,311 110,350	2022 2027	85
UF3d	Develop fire plans for all major businesses and critical facilities	MFRS	Local Funds	5,518 110,350	2022 2027	85
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	City Govt. ARC, ADHR	Local Funds	5,518 220,700	2022 2027	84
AH1e	Distribute safe room/shelter in place information to schools, special needs and the public	MFRS, BOE	Local Funds	5,518 110,350	2022 2027	84
TR1b	Educate schools/special needs/government officials on procedures to handle suspicious mail	MPD, BOE	Local Funds	1,104 11,035	2022 2027	83
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt. FRS	Local Funds	1,104 110,350	2022 2027	82

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3v	Require critical sites to develop and provide to EMA an emergency plan, Tier II	City Govt. EMA	Local Funds	5,518 110,350	2022 2027	82
UF2c	Obtain/maintain fire fighting supplies at all fire departments	MFRS	Local Funds	27,588 110,350	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 110,350	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt	Grant, Local Funds	5,518 110,350	2022 2027	81
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 55,175	2022 2027	81
FL2a	Obtain PPE for all personnel responding to flood events	City Govt. MFRS, MPD	Grant, Local Funds	27,588 110,350	2022 2027	80
FL1a	Distribute flood awareness and preparedness literature at events	ARC, NWS, EMA	Local Funds	4,414 110,350	2022 2027	80
AH1h	Develop a media warning program to warn the public of hazard event	City Govt, MFRS, EMA	Local Funds	5,518 110,350	2022 2027	80
UF3c	Ensure fire inspections are regularly conducted at businesses and industry	MFRS. City Govt	Local Funds	5,518 551,750	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	2,207 11,035	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt. ARC, ADHR	Local Funds	1,104 11,035	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 11,035	2022 2027	79
AH3a1	Develop/maintain a citywide NIMS resource inventory	City Govt	Local Funds	3,311 55,175	2022 2027	79
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	City Govt. MFRS	Local Funds	5,518 551,750	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 11,035	2022 2027	78
AH1b	Schedule regular maintenance and testing of hazard warning units	MFRS	Local Funds	5,518 110,350	2022 2027	78
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	MFRS, AFC	Local Funds	1,104 110,350	2022 2027	77
WF1c	Educate school/special needs/local populations on wild land fire preparedness and response	MFRS, AFC	Local Funds	1,104 110,350	2022 2027	77
WF1b	Educate business/schools/local populations on the causes of wild land fires	MFRS, AFC	Local Funds	2,207 110,350	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	1,104 110,350	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3h	Request a study of the feasibility of flood control measures along the Cahaba River tributaries.	City Govt	Grant, Local Funds	16,533 110,350	2022 2027	77
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 110,350	2022 2027	77
UF3a	Ensure that NFPA standards and codes are followed.	MFRS	Local Funds	1,104 11,035	2022 2027	76
UF2d	Train all fire responders in fire combat techniques annually	MFRS	Local Funds	27,588 551,750	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	MFRS	Grant, Local Funds	49,658 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	MFRS, MPD, NWS, EMA	Local Funds	5,518 110,350	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	5,518 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	5,518 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt	Grant, Local Funds	5,518 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt	Local Funds	16,533 55,175	2022 2027	76
AH2c	Train 1st responders in search and rescue techniques	MPD/MFRS		16,533 110,350	2022 2027	76
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, MFRS	Local Funds	1,104 110,350	2022 2027	74
WF1d	Distribute wildfire awareness and prevention information	AFC, MFRS	Local Funds	5,518 110,350	2022 2027	74
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	MFRS	Local Funds	22,070 110,350	2022 2027	74
IS3d	Establish snow and ice removal methods	City Govt.	Local Funds	1,104 55,175	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city	City Govt.	Local Funds	1,104 110,350	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt. EMA	Grant, Local Funds	5,518 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	MFRS, MPD	Grant Local Funds	27,588 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	City Govt	Grant, Local Funds	16,533 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	BOE	Grant, Local Funds	27,588 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	1,104 11,035	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	NWS, EMA	Grant, Local Funds	5,518 11,035	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt.	Grant, Local Funds	5,518 110,350	2022 2027	74
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	MFRS, City Govt.	Local	1,104 110,350	2022 2027	73
UF2b	Train firefighters to obtain for state and national certifications	MFRS		66,210 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders.	MFRS, MPD, EMA	Local Funds	16,533 110,350	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt.	Local Funds	1,104 11,035	2022 2027	73
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	MPD/MFD	EMA	5,518 110,350	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	EMA City Govt.	Grant Local Funds	27,588 110,350	2022 2027	73
AH1d	Obtain backup power systems for audible warning devices	City Govt.	Grant Local Funds	22,070 110,350	2022 2027	73
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC	Local Funds	2,207 110,350	2022 2027	72
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt.	Local Funds	1,104 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service	NWS, EMA	Local Funds	5,518 110,350	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	2,207 110,350	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt	Grant, Local Funds	5,518 110,350	2022 2027	72
AH1c	Obtain and/or expand warning sirens for all uncovered areas	City Govt	Grant, Local Funds	6,621 441,400	2022 2027	72
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	16,533 110,350	2022 2027	71
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	MPD/ MFRS, City Govt.	Grant, Local Funds	16,533 110,350	2022 2027	71
WF3i	Adopt/enforce wildfire legislation that includes burning bans	City Govt	Local Funds	1,104 110,350	2022 2027	70
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	5,518 110,350	2022 2027	70

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3f	Identify roadways, culverts and bridges damaged by flooding (Various locations)	City Govt	Local Funds	2,207 110,350	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots in the flood plain.	City Govt	Local Funds	1,104 110,350	2022 2027	70
AH2e	Train 1st responders on responding to mass casualty events	MPD/MFD, EMA	EMA	33,105 110,350	2022 2027	70
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	MPD, MFRS, City Govt.	Grant, Local Funds	5,518 110,350	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood plains	City Govt	Local Funds	2,207 110,350	2022 2027	69
FL2b	Train all 1st responders on repetitive flooding areas and structures	City Govt	Local Funds	5,518 110,350	2022 2027	69
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	MFRS, City Govt	Grant, Local Fund	275,875 1,103,500	2022 2027	68
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt, EMA	Grant, Local Funds	55,175 551,750	2022 2027	68
WF2c	Train fire 1st responders in wild-land fire response techniques	AFC, MFRS	Local Funds	16,533 110,350	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt	Grant, Local Funds	275,875 1,103,500	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	3,311 110,350	2022 2027	67
FL3a1	Adopt/enforce an NFIP flood plain management plan. Adopted 2013	City Govt	Local Funds	5,518 110,350	2022 2027	67
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grant, Local Funds	1,655,250 5,627,850	2022 2027	66
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant, Local Funds	55,175 1,104,000	2022 2027	64
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	2,207 110,350	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	MFRS	Local Funds	16,533 110,350	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 110,350	2022 2027	63
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	1,104 110,350	2022 2027	63
WF2b	Obtain specialized equipment to combat wild-land fires.	MFRS, EMA	Grant, Local Funds	55,175 441,400	2022 2027	62
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant, Local Funds	165,525 551,750	2022 2027	61

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant, Local Funds	275,875 772,450	2022 2027	59
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding (Various locations)	City Govt	Grant, Local Funds	110,350 551,750	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table

	Social				Technical			Administrative			Political			Legal			Economic				Environmental				Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=1-9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots Generators for Fire St#1,2, City Hall, Water Plant, Police Dept, City Shop	3	9	6	9	3	3	3	3	3	3	2	2	2	3	3	3	6	2	4	2	3	3	3	3	3	89
Assist schools/special needs/local populations to develop emergency preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	3	3	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	86
Educate school, special needs and the community populations on fire safety and response	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85
Educate school, special needs and the community population on fire extinguisher use	3	6	4	7	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	85

Distribute safe room/shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	6	9	3	3	2	3	3	2	3	2	3	3	3	2	6	2	2	1	2	3	3	3	3	84
Develop fire plans for all major businesses and critical facilities	2	6	6	7	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	84
Educate schools/special needs/government officials on procedures to handle suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Require critical sites to develop and provide to EMA an emergency plan	2	6	4	9	2	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	7	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	7	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	81
Develop a media warning program to warn the public of hazard event	3	9	6	9	3	3	3	2	2	1	2	1	2	3	3	3	3	2	3	2	3	3	3	3	3	80
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	2	2	2	3	2	2	3	3	2	6	2	4	2	3	3	3	3	3	80
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	5	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	80
Require businesses to refuse large quantity sales of precursors	3	3	2	5	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	80
Develop/maintain a citywide NIMS resource inventory	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79

Assist special needs facilities in implementing a security system	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure fire inspections are regularly conducted at businesses and industry	2	6	6	7	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	7	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Request a study of the feasibility of flood control measures along the Cahaba River tributaries.	2	6	6	5	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Educate business/schools/local populations on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Educate school/special needs/local populations on wild land fire preparedness and response	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Train all fire responders in fire combat techniques annually	2	6	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Ensure that NFPA standards and codes are followed.	2	0	4	7	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76

Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Establish snow and ice removal methods	2	6	2	5	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	74
Distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders and officials on the National Incident Management System (NIMS)	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train firefighters to obtain for state and national certifications	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	7	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	73
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for all uncovered areas	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72

Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	7	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	72
Obtain smoke detectors and provide free to residents in need.	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72
Obtain additional Emergency Operations Center equipment and crisis management software	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce mobile home legislation to restrict development of lots in the flood plain.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Identify roadways, culverts and bridges damaged by flooding (Various locations)	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update City Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Adopt/enforce wildfire legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Educate developers, builders and the public on the location of NFIP designated flood plains	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	68

Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	7	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Acquire and install six inch water mains/hydrants city wide	2	9	6	7	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	66
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Assist businesses to develop Business Continuity Plans	2	0	2	9	3	3	3	3	3	1	1	1	2	3	3	2	2	2	2	1	3	3	3	3	3	63
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Obtain specialized equipment to combat wild-land fires.	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding (Various locations)	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59

CITY OF PELHAM
INDIVIDUAL MITIGATION ACTION PLAN



SHELBY COUNTY
ALABAMA
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
2022

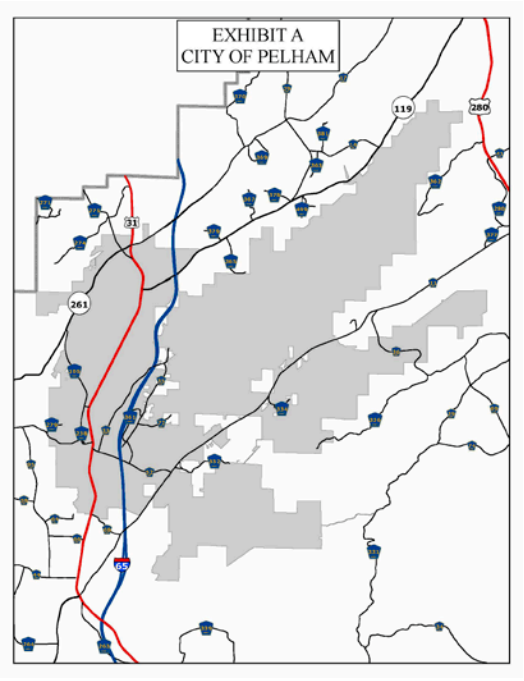
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CITY OF PELHAM MITIGATION ACTION PLAN

Geography/History

Pelham is located at 33°18′16″N 86°47′5″W / 33.30444°N 86.78472°W / 33.30444, -86.78472 (33.304581, -86.784620)[1]. According to the U.S. Census Bureau, the city has a total area of 38.3 square miles (99.3 km²), of which, 38.0 square miles (98.4 km²) of it is land and 0.3 square miles (0.9 km²) of it (0.89%) is water



Three months after Shelby County was formed, county court was established in what is today the City of Pelham. At that time the settlement was called Shelbyville and some historians have referred to it as Middleton (supposedly because it was near the middle of what was considered Shelby County at that time). In 1820, the first courthouse was built in Shelbyville. This structure was intended to be only a temporary court and in 1826, the courthouse was moved to Columbiana.

Sometime after the Civil War the settlement of Shelbyville was renamed Pelham in honor of Major John Pelham. Major Pelham, a Civil War hero, fought in more than 60 battles. His greatest battle was at Fredericksburg where he confused a federal army of 120,000 men with his brilliant one-gun barrage from their flank. His contribution to the Confederate victory that day was major and General Robert E. Lee cited the part played by "the gallant Pelham" in his official report. Major Pelham was killed at the Battle of Kelly's Ford in 1863. He was promoted to Lt. Colonel after his death. According to his biographers, John Pelham "was among the most illustrious of Alabama's sons that supported the Confederate cause."

The first city hall was located in the old Pelham school, a wooden building built by the WPA. In 1975, this building was demolished and the present city hall was built on the site. The City of Pelham was incorporated on July 10, 1964 with a population of 654.

Special Characteristics

Oak Mountain State Park, the largest state park in Alabama, is in Pelham's backyard. Scenic hiking trails, horseback riding, a petting farm for youngsters, fishing, boating and golf are just a few of the activities offered at this beautiful park located on 11,035 acres. The Oak Mountain Amphitheater schedules concerts May – September.

The Pelham city park offers a wonderful playground for children, a walking track and picnic areas. The Pelham Civic Complex and Ice Area provides ice-skating, hockey and banquet facilities. Ballantrae Golf Club opened June 1, 2004 with eighteen beautiful holes, designed by Bob Cupp. Pelham Racquet Club is home to 20 clay courts, 5 hard courts with above tournament grade lighting.

Population and Demographics

As of the 2020 Census, the city covers 38.8 square miles and there were 24,559 people. The population density was 632.7 people per square mile. The racial makeup of the city was 80.25% White, 11.99% Black or African American, 0.44% Native American, 1.28% Asian, 0% Pacific Islander, 5.13% from other races, and 0.92% from two or more races. 11.98% of the population was Hispanic or Latino of any race. 85.27% of town residents speak English while Spanish is spoken by 11.62% of the population.

According to the 2019 American Community Survey, there were 9,074 households out of which 2,600 had children under the age of 18 living with them, 5,380 were married couples living together, 705 had a female householder with no spouse present, and 2,788 were non-families. 25.9% of all householders were made up of individuals and 9.3% had someone living alone who was 65 years of age or older. The average household size was 2.58% and the average family size was 3.13. Mobile homes made up 6.2% of structures.

In the city the population was spread out with 22.8% under the age of 18, 7% from 18 to 24, 38.7% from 15 to 44, 28.3% from 45 to 64, and 14.4% who were 65 years of age or older. The median age was 40.5 years. For every 100 females there were 90.3 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 2.7% of the city's population had a hearing difficulty, 2.2% vision difficulty, 2.4% cognitive difficulty, 4.6% ambulatory difficulty, 1.5% self-care difficulty, and 3.4% an independent living difficulty. 9% of the population had some type of disability.

Year	2010	2020	Change
Population	21352	24559	15.02
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $80,510.00 and the median income for a family was $96,109.00. Males had a median income of $58,343.00 versus $38,651.00 for females. The per capita income for the city was $47,414.00. About 5.22% of the population were below the poverty line, including 5.16% of females and 5.29% of males.

Single-family new house construction building permits in Pelham:

- 2008: 91 buildings, average cost: $181,435.00
- 2009: 80 buildings, average cost: $180,064.00
- 2010: 55 buildings, average cost: $151,454.00
- 2011: 64 buildings, average cost: $189,389.00
- 2012: 78 buildings, average cost: $215,551.00
- 2013: 121 buildings, average cost: $216,985.00
- 2014: 91 buildings, average cost: $226,188.00
- 2015: 106 buildings, average cost: $216,758.00
- 2016: 136 buildings, average cost: $228,073.46
- 2017: 115 buildings, average cost: $257,611.83

- 2018: 110 buildings, average cost: $268,093.28
- 2019: 99 buildings, average cost: $328,414.08
- 2020: 124 buildings, average cost: $295,349.01

Comparative employment by occupation in Pelham and Shelby County are even at 42.9 percent of their labor force being in management, professional and related occupations, and they are both ahead of the Birmingham MSA at 34.4 percent and the State of Alabama at 29.5 percent.

Labor Force Distribution	Pelham		Birmingham MSA	Shelby County	Alabama
	Total	% Of Total	% Of Total	% Of Total	% Of total
Management, professional, and related occupations	3,336	42.9%	34.4%	42.9%	29.5%
Service occupations	854	11.0%	12.7%	9.5%	13.5%
Sales and office occupations	2,207	28.4%	29.8%	28.8%	25.9%
Farming, fishing, and forestry occupations	19	0.2%	0.2%	0.3%	0.8%
Construction, extraction, and maintenance occupations	685	8.8%	9.9%	9.7%	11.3%
Production, transportation, and material moving occupations	680	8.7%	12.9%	8.9%	19.0%
TOTAL	**7,781**	**100%**	**100%**	**100%**	**100%**
Source: US Bureau of the Census, SF3, 2003 City of Pelham Comprehensive Plan					

Water Characteristics in Pelham include Streams: Peavine Branch, Peavine Creek, Johnson Brook, Brown Branch, Beech Branch, Cahaba Valley Creek, Lee Branch, Hogpen Creek and Big Sucker Brook

The City of Pelham enjoys a thriving economy. Pelham is a pro-growth community that has welcomed commercial developments over the years because a solid tax base enables the City to provide essential city services such as police and fire protection. The economic vitality of a community relies on the ability to attract and maintain business and industry. The existing businesses and industries in Pelham create a substantial amount of professional and service sector jobs. Since 1990, the city budget has increased from $2.5 million to over $52 million in Fiscal Year 2014. Projected revenues for Fiscal Year 2015 are over $55 million.

Infrastructure

The City of Pelham operates under the Mayor/Council Act. The Mayor serves as the city's chief executive and the City Council much like a board of directors. The city also has a city manager, chief of police, fire chief, building inspector, permits clerk, city clerk, finance director, parks manager, waterworks superintendent, librarian, and departments thereof.

All schools located in the City of Pelham are under the jurisdiction of the Pelham city school system with the exception of Linda Nolen Learning Center which falls under the Shelby County school system.

Category	Pelham High School	Riverchase Middle School	Valley Intermediate School	Valley Elementary School
Grades Taught	9-12	6-8	3-5	K-2

# Of Students	938	747	755	726
Source: Pelham City Schools Board of Education, 02-02-2015.				

Pelham has an excellent transportation system that includes Interstate 65, U.S. Highway 31, State Highway 119, State Highway 261 and County Roads 11, 33, 35, and 52.

Pelham has access to other modes of transportation, such as air, rail and water, located within the Birmingham metropolitan area. Passenger and cargo services are available at the Birmingham-Shuttlesworth International Airport located approximately 20 miles from Pelham. Also, local, regional and air courier service is available at the Bessemer Airport and the Shelby County Airport.

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Pelham Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Local Authority**	**State Prohibited Higher Authority**	**Electronic copy Available**	
Building Codes	International Building Code	2015	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2021	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2020	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**N**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2018	**Y**	**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2021	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2002		**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2007	**Y**	**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2020	**Y**	**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**

Zoning Ordinances	Ordinance	2021	**Y**	**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Pelham Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	2	2	2
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C2	C2	C2
Emergency Medical Personnel	Professional(s)	Fire/Rescue	79	79	79
Fire Personnel	Professional(s)	Fire Dept.	79	79	79
Floodplain Manager	Engineer(s)	Engineering/Public Works	1	1	1
GIS Specialist	Professional(s)	Property Assessor/IT	1	1	1
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	9	9	9
Grant writer	Professional(s)	Contract	1	1	1
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	1	1	1
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	1	1	1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	72	72	72
Medical Practioners	Professional(s)	Medical Facilities	54	54	54
Public Works	Directors/Engineers	Public Works	18	18	18

Public Communication	911 specialists	E-911	13	13	13
Public Utilities	Professionals	Public Utilities	9	9	9
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Pelham Fiscal Capabilities					
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			Y
	Hazard Mitigation Planning Grants (HMPG)	X			Y
	PDM for disaster resistant universities		X		N
	PDM Grants for communities	X			N
	Department of Health Grants	X			Y
	Department of Justice Grants	X			Y
	Department of Agriculture Grants		X		N
	Department of Energy Grants		X		N
	Department of Education Grants		X		N
	Fire department grants	X			Y
	Flood Management Grants (FMA)	X			Y
	Homeland Security Grant Program (HSGP)	X			Y
	Repetitive Flood Claims Grants (RFC)	X			N
	Severe Repetitive Loss Grants (SRL)	X			N
	Private foundation grants	X			N
	Private business/industry grants	X			N
Debt Procurement	Incur debt through special tax/revenue bonds			X	N
Dept Procurement	Incur debt through private activity bonds			X	N
Impact Fees	Developer fees for new developments	X			Y
Jurisdiction Bonds	Incur debt through general obligation bonds	X			Y
Project Funding	Capital improvement	X			Y
Spending Restrictions	Withhold spending in hazard-prone areas			X	N
Special Taxes	Authority to levy taxes for specific purposes	X			Y
Utility Fees	Fees for water, sewer, gas, or electric service	X			Y

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Pelham. The following goal statements represent a broad target for City of Pelham and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES

All Hazards Goal: Mitigate the impact of all hazards on City of Pelham	Objective AH.1: Improve City of Pelham's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve City of Pelham's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on City of Pelham	Objective FL.1: Improve City of Pelham's flood warning and information distribution to citizens Objective FL.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve City of Pelham's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on City of Pelham	Objective HW.1: Improve City of Pelham's High Winds warning and information distribution to citizens Objective HW.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve City of Pelham's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on City of Pelham	Objective IS.1: Improve City of Pelham's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve City of Pelham's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on City of Pelham	Objective WF7.1: Improve City of Pelham's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve City of Pelham's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on City of Pelham	Objective UF.1: Improve City of Pelham's Urban Fire warning and information distribution to citizens Objective UF.2: Improve City of Pelham's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve City of Pelham's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the

broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance

Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Assist schools/special needs/local populations in developing disaster preparedness/response plans. Conducted on regular basis and will continue in future.	City Gov. FD, EMA	Local Funds	3,311 110,350	2022 2027	88
HW1c	Educate special needs/school/local populations on High Wind preparedness and response. Conducted on regular basis and will continue in future.	NWS, EMA	Local Funds	3,311 110,350	2022 2027	87
HW1c	Educate and distribute High Wind preparedness information. Conduct annual storm spotter class.	NWS, EMA	Local Funds	3,311 110,350	2022 2027	87
AH1e	Distribute safe room/Shelter in place information to schools, special needs and the public. Conduct annual storm spotter class.	FD, BOE	Local Funds	5,518 110,350	2022 2027	84
FL3e	Develop a program to inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt	Grant, Local Funds	22,070 110,350	2022 2027	83
UF1a	Educate school, special needs and the community populations on fire safety and response	Fire Dept.	City Budget, Grant	5,518 110,350	2022 2027	83
UF1b	Educate school, special needs and the community population on fire extinguisher use	Fire Dept.	City Budget, Grant	5,518 110,350	2022 2027	83
UF1c	Assist fire departments in obtaining fire prevention program materials	Fire Dept.	City Budget	5,518 110,350	2022 2027	83
AH1h	Develop a media warning program to warn the public of hazard event. Use facebook, and twitter to warn.	City Govt. PD, FD	Local Funds	3,311 110,350	2022 2027	82
AH3v	Require critical sites to develop and provide to EMA an emergency plan.	City Govt. LEPC, FD, EMA	Local Funds	1,104 110,350	2022 2027	82
FL1a	Distribute flood awareness and preparedness literature at events.	City Govt, NWS, EMA	Local Funds	5,518 110,350	2022 2027	82
FL2a	Obtain PPE for all personnel responding to flood events.	Fire Dept.	City Budget Grant	11,035 110,350	2022 2027	82
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding.	City Govt	Grant, Local Funds	55,175 110,350	2022 2027	82
TR1b	Educate schools, special needs and government officials on procedures for handling suspicious mail.	BOE	Local Funds	3,311 110,350	2022 2027	82
UF3d	Develop fire plans for all major businesses and critical facilities. Plan every Monday.	Fire Dept.	City Budget	5,518 110,350	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP).	City Govt	Local Funds	1,104 11,035	2022 2027	81

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW3a	Adopt/enforce comprehensive Building Code legislation. Review annually	City Govt	Local Funds	1,104 110,350	2022 2027	81
AH3l	Assist schools in implementing emergency radio communications. Implementing a new radio communication system.	City Govt. BOE	Grant, Local Funds	22,070 110,350	2022 2027	80
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	Fire Dept. City Govt	City Budget	1,104 110,350	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS). Bring all new employees to correct NIMS level.	City Govt.	City Budget	1,104 11,035	2022 2027	79
AH3b	Obtain and continually update 911 technology and capabilities. Update annually.	PD	City Budget	11,035 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 11,035	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt. ARC, ADPH	Local Funds	1,104 55,175	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt. FD	Local Funds	5,518 110,350	2022 2027	79
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 110,350	2022 2027	79
FL3h	Request a study of the feasibility of flood control measures along the Cahaba River.	City Govt	Grant, Local Funds	27,588 110,350	2022 2027	79
UF2c	Obtain/maintain fire fighting supplies at all fire departments	Fire Dept.	City Budget	5,518 110,350	2022 2027	79
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions. Part of the planning process.	City Govt. Public Works	Local Funds	2,207 55,175	2022 2027	78
IL3a	Join/participate in local state and federal drug task forces	Police Dept	Grant, Local Funds	142,352 220,700	2022 2027	78
TR3m	Assist special needs facilities in implementing a security system	PD	Local Funds, Grants	1,104 110,350	2022 2027	78
AH1g	Obtain/install an automated wide area rapid notification system. Twitter and Facebook notifications.	PD	Grant, Local Funds	13,242 220,700	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks. New mobile homes no longer allowed in city.	City Govt	Local Funds	5,518 110,350	2022 2027	77
UF3c	Assist fire inspections to be regularly conducted at businesses and industry	Fire Dept.	City Budget	5,518 110,350	2022 2027	77
WF1b	Educate business/schools/local populations on the causes of wild land fires	Fire Dept. AFC	Grant	5,518 110,350	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons. Published on the website.	Fire Dept. AFC	City Budget	5,518 110,350	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	Fire Dept.	City Budget	27,588 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt. Police Dept	Local Funds	1,104 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt	Local Funds	5,518 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records. Use backup servers off site.	City Govt	Local Funds	5,518 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events.	Fire Dept., NWS	City Budget	16,553 110,350	2022 2027	76
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	City Govt. PD, ADPH	Local Funds	5,518 11,035	2022 2027	76
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	Fire Dept, City Govt	City Budget	5,518 110,350	2022 2027	76
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually. Grant funds needed to complete this.	FD, PD	Local Funds, Grant	11,035 110,350	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS).	Fire Dept.	City Budget	5,518 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP.	Fire Dept., EMA	City Budget	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	EMA, City Govt	Local Funds`	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities.	BOE	Local Funds	22,070 110,350	2022 2027	74
FL3l	Identify alternative access points for single access neighborhoods. No longer allow single access neighborhoods.	Public Works	Local Funds	3,311 110,350	2022 2027	74
FL3m	Acquire signage to indicate water depth at flooding points.	Public Works	Grant, Local Funds	11,035 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities.	Fire Dept., City Govt.	City Budget, Grant	27,588 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response.	Fire Dept.	City Budget	16,553 110,350	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide.	EMA, Co Eng, City Govt	Grant, Local Funds	1,104 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the county.	City Govt	Local Funds	5,518 110,350	2022 2027	74
UF2a	Obtain fire PPE for all personnel responding to fire incidents.	Fire Dept.	City Budget	27,588 110,350	2022 2027	74
UF2d	Train all fire responders in fire combat techniques annually.	Fire Dept.	City Budget	16,553 110,350	2022 2027	74
UF3a	Ensure that NFPA standards and codes are followed.	Fire Dept.	City Budget	1,104 11,035	2022 2027	74
WF1c	Educate school/special needs/local populations on wild land fire preparedness and response	Fire Dept. AFC, BOE	Grant	5,518 110,350	2022 2027	74
WF1d	Develop a plan to distribute wildfire awareness and prevention information	Fire Dept. AFC	Grant	5,518 110,350	2022 2027	74
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.) Grant dependent.	Fire Dept. AFC	Grant	5,518 110,350	2022 2027	74
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	Fire Dept. AFC	City Budget	1,104 110,350	2022 2027	74
AH2a	Obtain/distribute interoperable radios for all 1st responders	Fire Dept. Police Dept	Grant	55,175 110,350	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	Fire Dept.	City Budget	16,553 110,350	2022 2027	73
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	16,553 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt	City Budget	11,035 110,350	2022 2027	73
IS3d	Establish snow and ice removal methods. Use sand and salt mixture.	City Govt. FD, PD	Local Funds	5,518 110,350	2022 2027	73
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	FD, AFC	Local Funds	1,104 11,035	2022 2027	73
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt	Grant Local Funds	110,350 551,750	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	PD	City Budget	4,414 110,350	2022 2027	72
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Local Funds	5,518 110,350	2022 2027	72
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt. Public Works	Local Funds	5,518 110,350	2022 2027	72
FL3g	Update County Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	5,518 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS). NWS & EMA hold annual Storm Spotter classes.	NWS, EMA	Local Funds	5,518 110,350	2022 2027	72
UF2e	Obtain fire equipment to combat fires in high rise buildings	Fire Dept.	City Budget	165,525 441,400	2022 2027	72
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	Fire Dept.	City Budget	16,553 110,350	2022 2027	72
WF1a	Educate homeowners and businesses on wildfire fuels reduction	Fire Dept. AFC	Grant	5,518 110,350	2022 2027	72
AH3a1	Develop/maintain a City wide NIMS resource inventory. Not complete yet.	City Govt	City Budget	5,518 11,035	2022 2027	71
AH3b1	Develop redundancy capabilities for 911 services and equipment	PD, FD	City Budget	27,588 110,350	2022 2027	71
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	PD	Grant local Funds	38,623 110,350	2022 2027	71
FL2b	Train all 1st responders on repetitive flooding areas and structures	Fire Dept. Police Dept	City Budget	2,207 11,035	2022 2027	71
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt	Local Funds	2,207 110,350	2022 2027	71
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	City Govt. FD, PD	Local Funds	3,311 110,350	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt.	Grants	16,553 110,350	2022 2027	71
UF2b	Train firefighters to obtain for state and national certifications	Fire Dept.	City Budget	16,553 110,350	2022 2027	71
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	Fire Dept. City Govt	City Budget	1,104 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans annually.	Fire Dept.	City Budget, Grant	6,621 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	City Govt. ARC, ADPH, ADHR	Local Funds	5,518 110,350	2022 2027	70
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	1,104 110,350	2022 2027	70
UF3k	Obtain smoke detectors and provide free to residents in need. Need grant funding for this project.	Fire Dept.	Grant	11,035 110,350	2022 2027	70
WF3h	Adopt/enforce wildfire and burning restriction legislation that includes burning bans	Fire Dept. City Govt	City Budget	1,104 110,350	2022 2027	70
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	5,518 110,350	2022 2027	69

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a2	Adopt/enforce floodplain legislation to require structures to be built above the NFIP BSE	City Govt	Local Funds	1,104 110,350	2022 2027	69
FL3c	Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood plains	City Govt. Public Works	Grant, Local Funds	2,758,750 5,517,500	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Local Funds	55,175 551,750	2022 2027	68
HW3e	Obtain funding to build mobile home community storm shelters	City Govt	Grant, Local Funds	331,050 1,103,500	2022 2027	67
WF2c	Train fire 1st responders in wild-land fire response techniques	Fire Dept. AFC	City Budget	16,553 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or "pigtails" for (All FS, PD, City Hall). All currently have generators, in case of future disaster, may need replacements.	Fire Dept.	City Budget, Grant	165,525 551,750	2022 2027	66
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP).	City Govt	Local Funds	2,207 110,350	2022 2027	66
FL3f	Develop a storm water management plan for the jurisdiction. Just implemented a Storm Water Management Committee.	City Govt	Grant, Local Funds	27,588 110,350	2022 2027	66
UF1d	Obtain a fire education-training trailer for the jurisdiction.	Fire Dept.	Cnty Budget	5,518 110,350	2022 2027	66
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	Fire Dept. City Govt	City Budget Grant	165,525 1,103,500	2022 2027	66
WF2e	Obtain DNR compatible radios for interoperable communications.	Fire Dept.	City Budget	27,588 110,350	2022 2027	66
AH3b2	Develop redundancy capabilities for emergency radio communications	City Govt	City Budget	16,553 110,350	2022 2027	65
AH3s1	Assist businesses in developing Business Continuity Plans	City Govt	Local Funds	5,518 110,350	2022 2027	65
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	5,518 110,350	2022 2027	65
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt. Public Works	Local Funds	2,207 110,350	2022 2027	65
UF3h	Acquire and install six inch water mains/hydrants city wide	Public Works	Grant, Local Funds	165,525 551,750	2022 2027	64
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	Public Works	Grant, Local Funds	220,700 800,000	2022 2027	63
WF2f	Exercise fire response regularly for residences, businesses and industry	Fire Dept.	City Budget	16,553 110,350	2022 2027	63
FL2f	Obtain equipment to develop a swift water rescue team	Fire Dept.	Grant, City Budget	55,175 220,700	2022 2027	62
FL2f1	Train appropriate 1st responders for a swift water rescue team	Fire Dept.	City Budget	16,553 110,350	2022 2027	62

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
TR3n	Train and fund a position for school or workplace hostage negotiation	PD	Grant Funds	55,175 110,350	2022 2027	62
WF2b	Obtain specialized equipment to combat wild-land fires (i.e. 4-wheel drive brush truck).	Fire Dept. AFC	Grant, City Budget	165,525 441,400	2022 2027	62
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding: Extended Detention Pond (Aaron Rd), Construct new Detention Pond (Cottage Circle), Replace Culvert (McCain parkway), Replace Culvert (Chandalar)	Public Works	Grant Local Funds	5,186,450 9,931,500	2022 2027	61
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt. Public Works	Grant Local Funds	220,700 662.100	2022 2027	61
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	ADPH, City Govt	Grant, Local Funds	5,518 110,350	2022 2027	60
IL2d	Obtain, maintain and train an Illegal drug canine unit	Police Dept	Grant, City Budget	22,070 110,350	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table

Action/Project Description	Social				Technical			Administrative			Political			Legal			Economic				Environmental				Prioritization
	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss	High Effect on Economic Loss	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effects	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Schedule regular maintenance and testing of hazard warning units	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Obtain and/or expand warning sirens to for all uncovered areas	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Distribute safe room/Shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84

Assist schools/special needs/local populations in developing disaster preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install an automated wide area rapid notification system.	2	9	6	9	3	3	3	1	3	1	2	1	3	3	3	3	2	1	3	1	3	3	3	3	3	77
Develop a media warning program to warn the public of hazard event	2	9	6	9	3	3	3	2	2	2	2	1	3	3	3	3	3	3	3	2	3	3	3	3	3	82
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Develop/maintain a City wide NIMS resource inventory	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Obtain and continually update 911 technology and capabilities	2	9	6	9	3	3	3	1	1	2	3	3	3	3	3	3	2	1	3	1	3	3	3	3	3	79
Develop redundancy capabilities for 911 services and equipment	2	6	4	9	3	3	3	2	2	1	2	2	2	3	3	3	2	1	2	1	3	3	3	3	3	71
Develop redundancy capabilities for emergency radio communications	2	3	2	9	3	3	3	2	2	1	1	2	2	3	3	3	1	2	2	1	3	3	3	3	3	65
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	1	1	1	1	1	2	3	3	3	4	2	4	1	3	3	3	3	3	71
Obtain/install emergency generators or “pigtails” for (All FS; PD Station; City Hall).	3	3	4	9	3	3	2	2	2	1	2	2	3	3	3	2	2	2	2	1	2	2	2	3	3	66
Assist non-governmental critical facilities to obtain emergency generators/pigtails	2	3	4	9	3	2	3	2	2	2	3	2	2	3	3	2	4	2	4	1	2	3	3	3	3	72
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	0	9	3	3	2	2	1	2	3	2	3	3	3	2	4	2	2	1	2	2	2	2	3	70
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79

Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Assist businesses in developing Business Continuity Plans	2	0	2	9	3	3	3	3	1	3	1	1	1	3	3	3	3	2	3	1	3	3	3	3	3	65
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Require critical sites to develop and provide to EMA an emergency plan	2	6	4	9	2	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	82
Develop a community shelter program for mobile home parks	2	9	0	9	3	3	2	2	3	2	2	2	2	3	3	3	6	6	6	2	2	3	3	2	3	83
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Distribute flood awareness and preparedness literature at events	2	6	2	7	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Obtain PPE for all personnel responding to flood events	2	6	4	7	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	82
Train all 1st responders on repetitive flooding areas and structures	2	3	2	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Obtain equipment to develop a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Train appropriate 1st responders for a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Participate in the National Flood Insurance Program (NFIP)	3	0	4	7	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Adopt/enforce an NFIP flood plain management plan	2	0	4	7	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	69
Adopt/enforce floodplain legislation to require structures to be built above the NFIP BSE	2	3	6	7	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	69

Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	66
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	71
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Obtain funding to retrofit, elevate or relocate NFIP repetitive flooding structures in flood plains	2	6	6	7	3	3	3	1	2	2	1	1	2	3	3	2	2	1	3	1	3	3	3	3	3	69
Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	7	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	72
Participate in the NFIP Community Rating System	3	0	0	7	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	75
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	7	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	65
Develop a program to inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	7	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	83
Develop a storm water management plan for the jurisdiction	2	3	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	66
Identify roadways, culverts and bridges damaged by flooding	3	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	72
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding: Extended Detention Pond (Aaron Rd), Construct new Detention Pond (Cottage Circle), Replace Culvert (McCain parkway), Replace Culvert (Chandalar)	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	71
Update County Land Use Plan to identify areas where development should be restrictive	2	3	6	7	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	72
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	7	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	65
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Request a study of the feasibility of flood control measures along the Cahaba River.	2	6	6	7	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	79
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	63
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	7	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	82

Identify alternative access points for single access neighborhoods	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Acquire signage to indicate water depth at flooding points	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Educate and distribute High Wind preparedness information	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Train citizens in weather observation in conjunction with the National Weather Service (NWS)	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Obtain, maintain and train an Illegal drug canine unit	2	3	4	3	3	3	3	1	1	1	2	2	2	3	3	2	2	1	2	1	3	3	3	3	3	59
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Establish snow and ice removal methods	2	6	2	4	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	73
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	60
Maintain contact with state and federal agencies regarding biological and disease threats.	3	9	0	4	3	3	3	3	3	3	2	2	3	3	3	3	3	3	2	3	3	3	3	3	3	76
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Assist special needs facilities in implementing a security system	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78

Train and fund a position for school or workplace hostage negotiation	2	6	2	3	3	3	3	1	2	2	2	1	3	3	2	2	1	1	2	3	3	3	3	3	3	62
Educate school, special needs and the community populations on fire safety and response	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Educate school, special needs and the community population on fire extinguisher use	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Assist fire departments in obtaining fire prevention program materials	3	6	4	5	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	5	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	66
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Train firefighters to obtain for state and national certifications	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	5	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	79
Train all fire responders in fire combat techniques annually	2	6	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain fire equipment to combat fires in high rise buildings	2	6	6	5	3	3	3	2	2	2	2	2	2	3	3	3	2	2	3	1	3	3	3	3	3	72
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	72
Ensure that NFPA standards and codes are followed.	2	0	4	5	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	5	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	76
Assist fire inspections to be regularly conducted at businesses and industry	2	6	6	5	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Develop fire plans for all major businesses and critical facilities	2	6	6	5	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	5	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	71
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	5	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	66
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	5	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	80
Acquire and install six inch water mains/hydrants city wide	2	9	6	5	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	64
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	5	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	70
Obtain smoke detectors and provide free to residents in need.	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	70
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	72

Educate business/schools/local populations on the causes of wild land fires	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Educate school/special needs/local populations on wild land fire preparedness and response	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	74
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	1	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Obtain specialized equipment to combat wild-land fires (i.e. 4-wheel drive brush truck).	2	6	2	1	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	62
Train fire 1st responders in wild-land fire response techniques	2	6	2	1	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	66
Exercise fire response regularly for residences, businesses and industry	2	6	2	1	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	63
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	1	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	73
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	1	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Adopt/enforce wildfire and burning restriction legislation that includes burning bans	2	6	2	1	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	70

TOWN OF VINCENT
INDIVIDUAL MITIGATION ACTION PLAN



SHELBY COUNTY
ALABAMA
MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN
2022

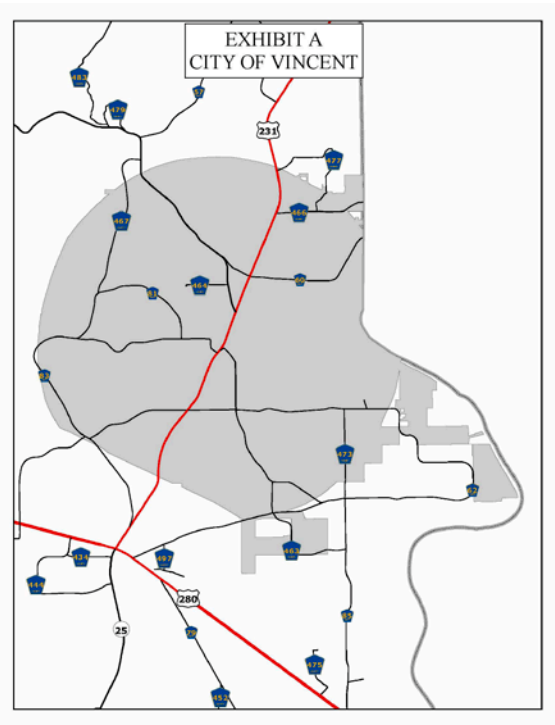
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TOWN OF VINCENT MITIGATION ACTION PLAN

Geography/History

Vincent is located at 33°23′9″N, 86°24′36″W (33.385719, -86.409919)[1]. The Town of Vincent is located in Northeastern Shelby County on the county boundary that follows the Coosa River and is approximately one mile north of U.S. Highway 280. Vincent is located approximately 30 miles southeast of Birmingham. The quaint Town of Vincent is nestled in the last foothills of the Appalachian Mountain Range, amid cotton fields and fresh water springs. Vincent's rolling hills and relatively flat terrain. According to the U.S. Census Bureau, the town has a total area of 19.1 square miles (49.4 km²), of which, 18.9 square miles (48.9 km²) of it is land and 0.2 square miles (0.5 km²) of it (1.00%) is water.



The Alabama Legislature enacted the Town of Vincent's charter on February 16, 1897 and the community was named in honor of Anna Bella Vincent. The Vincent's built a house where the present cotton gin is located

The post office was established in 1871. The name of the Post Office was Propel, and was located in the Elliott vicinity, in a small store and was renamed in 1888 in honor of the Vincent family, some of the town's earliest settlers. The name was changed from Propel to Vincent in 1888, after the Railroad came through. There was a star route from Wilsonville to Cropwell and mail was carried on horseback. The town was incorporated in 1897.

The first school was called Elliott school, operated in 1854-1888. Teacher's pay depended on how much tuition was paid in for the pupils. Some times there was not enough pay for a teacher and the children had to walk to Harpersville (3 miles).

The Railroad was built in 1888. The town site 2-1/2 miles in each direction from the railroad station was surveyed and laid off in streets and avenues, blocks and lots in 1891.

The first Baptist church was near the big spring that now supplies Vincent Waterworks. It was called Spring Creek Baptist Church and was torn down and moved in 1895 to the present location of the First Baptist Church (until 1960 it was the Vincent Baptist Church). The Methodist had to attend church at Rehobeth (about 3 miles above Vincent) or go to Harpersville until a church in Vincent was organized.

Special Characteristics

Vincent is home to the Lallouise F. Mcgraw Library and the Glovers Point Park. Water characteristics include Lake: Jackson, the Coosa River, Spring Creek and Blue Spring Branch. Mrs. R.T. McGraw organized the Vincent Study Club in 1925. The Vincent Garden Club was organized in 1949 and has added much to the beautification of the town

Population and Demographics

As of the 2020 Census, the Town covers 20.6 square miles and there were 2,228 people. The population density was 108.2 people per square mile. The racial makeup of the Town was 73.51% White, 23.93% Black or African American, 1.98% Native American, 0% Asian, 0% Pacific Islander, 0% from other races, and 0.57% from two or more races. 0.42% of the population was Hispanic or Latino of any race. 100% of town residents speak English while Spanish is spoken by 0% of the population.

According to the 2019 American Community Survey, there were 722 households out of which 199 had children under the age of 18 living with them, 284 were married couples living together, 147 had a female householder with no spouse present, and 232 were non-families. 28.5% of all householders were made up of individuals and 17.7% had someone living alone who was 65 years of age or older. The average household size was 2.66 and the average family size was 3.24. Mobile homes made up 39.6% of structures.

In the Town the population was spread out with 25.7% under the age of 18, 11.2% from 18 to 24, 34.1% from 15 to 44, 23.1% from 45 to 64, and 20.1% who were 65 years of age or older. The median age was 39.1 years. For every 100 females there were 99.4 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 8.9% of the city's population had a hearing difficulty, 6.2% vision difficulty, 13.4% cognitive difficulty, 17.3% ambulatory difficulty, 6.7% self-care difficulty, and 13.9% an independent living difficulty. 28% of the population had some type of disability.

Year	2010	2020	Change
Population	1,188	2,228	12.07
Source: US Bureau of the Census			

Economy

The median income for a household in the Town was $33,333.00 and the median income for a family was $47,339.00. Males had a median income of $30,714.00 versus $26,842.00 population density was 108.2 people per square mile. The racial makeup of the Town was 73.51% White, 23.93% Black or African American, 1.98% Native American, 0% Asian, 0% Pacific Islander, 0% from other races, and 0.57% from two or more races. 0.42% of the population was Hispanic or Latino of any race. 100% of town residents speak English while Spanish is spoken by 0% of the population.

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Single-family new house construction building permits in Vincent:

- 2007: 17 buildings, average cost: $158,117.65
- 2008: 3 buildings, average cost: $184,000.00
- 2009: 2 buildings, average cost: $150,000.00
- 2010: 2 buildings, average cost: $133,000.00
- 2011: 1 building, average cost: $159,000.00
- 2012: 2 buildings, average cost: $239,500.00
- 2013: 2 buildings, average cost: $ 97,500.00
- 2014: 4 buildings, average cost: $146,250.00
- 2015: 4 buildings, average cost: $213,000.00
- 2016: 1 building, average cost: $265,000.00
- 2017: 1 building, average cost: $240,000.00
- 2018: 1 building, average cost: $160,000.00
- 2019: 3 buildings, average cost: $241,000.00
- 2020: 2 buildings, average cost: $201,000.00
- 2021: 1 building, average cost: $271,000.00

Infrastructure

Vincent has their own police department consisting of 4 officers that utilize the Shelby County 911 system. Fire service is provided by the Vincent Volunteer fire department that has 12 fire personnel.

Vincent also has its own public works department that maintains the streets and the water system

Vincent school system is part of the Shelby County system and includes Vincent Middle High School and Vincent Elementary School. Vincent became the first community in the state of Alabama with a year-round school calendar in 1993.

School	Type	Enrollment
Vincent Elementary	K - 5	380
Vincent Middle High School	6 - 12	453

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Town of Vincent Legal And Regulatory Capability						
Regulatory Tools/Plans	Regulatory Type: Ordinance Resolution Codes Plans Etc.	Year Adopted or Updated	Local Authority	State Prohibited	Higher Authority	Electronic copy Available
Building Codes	International Building Codes	2018	Y	N	Y	Y
Electrical Codes	International Building Codes	2020	Y	N	Y	Y
Residential Energy Codes	International Building Codes	2015	Y	N	Y	Y
Capital Improvements Plan	Annual Budget	2021	Y	N	N	N
Comprehensive Plan	Resolution	2008	Y	N	N	Y
Continuity of Operations Plan	City Plan	2012		N	N	N
Community Rating System				N	Y	N
Economic Development Plan	Comprehensive Plan Resolution	2008	Y	N	N	Y
Emergency Response Plan	County Emergency Operations Plan	2017	N	N	Y	Y
Flood Damage Prevention Ordinance	Resolution	2021	Y	N	Y	Y
Growth Control Ordinance				N	N	N
Hazard Setback Regulations	City Plan	2010		N	N	N
Hillside Ordinance				N	N	N
Historic Ordinance				N	N	N
NFIP Participant	Resolution	2012	Y	N	Y	Y
Post-disaster Ordinance				N	N	N
Post-disaster Recovery Plan	County Emergency Operations Plan	2017	N	N	Y	Y
Real Estate Disclosure	AL Real Estate Commission	1960	N	N	Y	N
Site Plan Requirements	Zoning Ordinance	2019		N	N	Y
Subdivision Regulations	Zoning Ordinance	2021	Y	N	N	Y
Wildfire Ordinance				N	N	N
Zoning Ordinances	Ordinance	2019	Y	N	N	N

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying

outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Town of Vincent Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C2	C2	C2
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	3	3	3
Fire Personnel	Professional(s)	Fire Dept.	12	12	12
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	C1	C1	C1
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	3	3	3
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Police Department	3	3	3
Medical Practioners	Professional(s)	Medical Facilities	2	2	2
Public Works	Directors/Engineers	Public Works	1	1	1
Public Communication	911 specialists	E-911	C43	C43	C43
Public Utilities	Professionals	Public Utilities	3	3	3
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

Town of Vincent Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**Y**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**N**
	PDM for disaster resistant universities		**X**		**N**
	PDM Grants for communities	**X**			**Y**
	Department of Health Grants		**X**		**N**
	Department of Justice Grants	**X**			**Y**
	Department of Agriculture Grants		**X**		**N**
	Department of Energy Grants		**X**		**N**

	Department of Education Grants		X		N
	Fire department grants	X			Y
	Flood Management Grants (FMA)	X			N
	Homeland Security Grant Program (HSGP)	X			Y
	Repetitive Flood Claims Grants (RFC)	X			N
	Severe Repetitive Loss Grants (SRL)	X			N
	Private foundation grants	X			Y
	Private business/industry grants	X			Y
Debt Procurement	Incur debt through special tax/revenue bonds	Y			Y
Dept Procurement	Incur debt through private activity bonds	Y			Y
Impact Fees	Developer fees for new developments	Y			N
Jurisdiction Bonds	Incur debt through general obligation bonds	Y			N
Project Funding	Capital improvement	Y			Y
Spending Restrictions	Withhold spending in hazard-prone areas	Y			N
Special Taxes	Authority to levy taxes for specific purposes	Y			Y
Utility Fees	Fees for water, sewer, gas, or electric service	Y			Y

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in Town of Vincent. The following goal statements represent a broad target for Town of Vincent and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the Town of Vincent	Objective AH.1: Improve the Town of Vincent's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the Town of Vincent	Objective FL.1: Improve the Town of Vincent's flood warning and information distribution to citizens Objective FL.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the Town of Vincent	Objective HW.1: Improve the Town of Vincent's High Winds warning and information distribution to citizens Objective HW.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from High Winds events

Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the Town of Vincent	Objective IS.1: Improve the Town of Vincent's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the Town of Vincent	Objective WF7.1: Improve the Town of Vincent's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the Town of Vincent	Objective UF.1: Improve the Town of Vincent's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the Town of Vincent's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the Town of Vincent's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders

Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Assist schools/special needs/local populations in developing disaster preparedness/response plans. SRO assists yearly with updates.	FD PD Town Govt	Grant, Local Funds	3,311 110,350	2022 2027	88
HW1c	Educate the special needs, education and the public on High Wind preparedness and response	FD NWS EMA	Grant, Local Funds	3,311 110,350	2022 2027	87
HW1c	Educate and distribute High Wind preparedness information	NWS FD EMA	Grant, Local Funds	3,311 110,350	2022 2027	87
AH1e	Distribute safe room and Shelter in place information to schools, special needs and the public	FD PD BOE	Grant, Local Funds	3,311 110,350	2022 2027	84

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1a	Educate school, special needs and the community populations on fire safety and response	FD BOE	Grant, Local Funds	5,518 110,350	2022 2027	84
UF1b	Educate school, special needs and the community population on fire extinguisher use	FD	Grant, Local Funds	3,311 110,350	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA FD	Grant, Local Funds	3,311 110,350	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant, Local Funds	110,350 551,750	2022 2027	83
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	County	Grant, Local Funds	25,518 110,350	2022 2027	83
TR1b	Educate schools, special needs and government officials on procedures for handling suspicious mail	BOE, PD	Grant, Local Funds	3,311 11,035	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities	FD	Grant, Local Funds	3,311 110,350	2022 2027	83
FL1a	Distribute flood awareness and preparedness literature at events	NWS, EMA	Grant, Local Funds	3,311 110,350	2022 2027	82
FL2a	Obtain PPE for all personnel responding to flood events	FD	Grant, Local Funds	25,518 110,350	2022 2027	82
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict Grant, Local flooding. Handled through the water board for the spring.	City Govt	Grant, Local Funds	11,035 110,350	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, FD	Grant, Local Funds	3,311 110,350	2022 2027	81
UF2c	Obtain/maintain fire fighting supplies at all fire departments	FD	Grant, Local Funds	55,175 110,350	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Grant, Local Funds	1,104 55,175	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, ADPH, ADHR, EMA	Grant, Local Funds	3,311 110,350	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt, County	Grant, Local Funds	3,311 110,350	2022 2027	79
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt, County	Grant, Local Funds	1,104 110,350	2022 2027	79

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3h	Request a study of the feasibility of flood control measures along the Cahaba River.	City Govt	Grant, Local Funds	25,518 110,350	2022 2027	79
TR3m	Assist special needs facilities in implementing a security system. Daycares have this already.	PD	Grant, Local Funds	3,311 110,350	2022 2027	79
WF1b	Educate business/schools/local populations on the causes of wild land fires	AFC FD	Grant, Local Funds	3,311 110,350	2022 2027	79
WF1c	Educate school/special needs/local populations on wild land fire preparedness and response	AFC FD BOE	Grant, Local Funds	3,311 110,350	2022 2027	79
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons. Placed on website.	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept	Grant, Local Funds	3,311 110,350	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	78
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	78
UF3c	Ensure fire inspections are regularly conducted at businesses and industry	FD	Grant, Local Funds	3,311 110,350	2022 2027	78
HW3d	Insure Town EMA participates in High Wind planning as a potential reception area for evacuees.	EMA ARC ADPH	Grant, Local Funds	3,311 110,350	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	77
IL3a	Join/participate in Grant, Local state and federal drug task forces	SCSO PD	HLS Grant, Local Funds	110,350 551,750	2022 2027	77
IL3c	Require businesses to refuse large quantity sales of precursors	City Govt PD	Grant, Local Funds	3,311 110,350	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	FD PD	Grant, Local Funds	3,311 110,350	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	PD FD	Grant, Local Funds	25,518 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt PD	Grant, Local Funds	3,311 110,350	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt FD PD	Grant, Local Funds	20,000 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	FD PD	Grant, Local Funds	25,518 110,350	2022 2027	76

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC FD	Grant, Local Funds	3,311 110,350	2022 2027	76
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC FD	Grant, Local Funds	3,311 110,350	2022 2027	76
FL3d	Participate in the NFIP Community Rating System	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	75
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grant, Local Funds	85,518 331,050	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually	FD	Grant, Local Funds	5,518 110,350	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt FD	Grant, Local Funds	3,311 110,350	2022 2027	75
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC FD	Grant, Local Funds	1,104 11,035	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD PD	Grant, Local Funds	5,518 110,350	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt PD FD	DHL Grant, Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt PD FD	Grant, Local Funds	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt FD EMA	Grant, Local Funds	14,346 110,350	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and crisis management software	EMA Town Govt	Grant, Local Funds	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt FD BOE	Grant, Local Funds	15,518 110,350	2022 2027	74
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	74
FL3m	Acquire signage to indicate water depth at flooding points	City Govt PD FD	Grant, Local Funds	11,035 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	FD BOE	Grant, Local Funds	33,105 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD Town Govt	HLS	55,175 220,700	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt EMA Co Engr	Grant, Local Funds	22,070 110,350	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
IS3d	Establish snow and ice removal methods. Most critical roads are state and county.	FD, PD, Town Govt, County/State Highway	Grant, Local Funds	3,311 110,350	2022 2027	74
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, FD	Grant, Local Funds	3,311 110,350	2022 2027	74
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	FD	Grant, Local Funds	1,104 11,035	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant, Local Funds	55,175 110,350	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD, PD	Grant, Local Funds	55,175 110,350	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD, PD	DHL Grants	5,518 110,350	2022 2027	73
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Grant, Local Funds	14,346 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt, FD PD	Grant, Local Funds	14,346 110,350	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grant, Local Funds	15,518 110,350	2022 2027	73
WF3h	Adopt/enforce wildfire and burning restriction legislation	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (West & North)	City Govt	Grant, Local Funds	75,518 110,350	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt FD PD	Grant, Local Funds	110,350 441,400	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events.	City Govt, FD, PD, County, State	Grant, Local Funds	11,035 110,350	2022 2027	72
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	72
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	72
FL3g	Update Town Land Use Plan to identify areas where development should be restrictive	City Govt	Grant, Local Funds	11,035 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS)	NWS FD EMA	Grant, Local Funds	3,311 110,350	2022 2027	72
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH SCSO	Grant, Local Funds	3,311 11,035	2022 2027	72
UF2b	Train firefighters to obtain for state and national certifications	FD	Grant, Local Funds	33,105 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt FD	Grant, Local Funds	3,311 110,350	2022 2027	72
FL2b	Train all 1st responders on repetitive flooding areas and structures	FD	Grant, Local Funds	11,035 110,350	2022 2027	71
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	71
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	FD PD	HLS Grant, Local Funds	25,518 110,350	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt FD	Grant, Local Funds	11,035 110,350	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	FD PD	Grant, Local Funds	1,104 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a program to add necessary shelters	ARC Town Govt EMA ADPH	Grant, Local Funds	55,175 220,700	2022 2027	70
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	69
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	69
WF2c	Train fire 1st responders in wild-land fire response techniques	FD AFC	Grant, Local Funds	14,346 110,350	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant, Local Funds	5,518 110,350	2022 2027	68
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt FD	Grant, Local Funds	11,035 110,350	2022 2027	68
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt FD PD	Grant Local funds	33,105 110,350	2022 2027	68
HW3e	Obtain funding to build mobile home community storm shelters	City Govt, EMA	Grant, Local Funds	275,875 1,103,500	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction. Working with neighboring jurisdictions for burn trailer.	FD	Grant, Local Funds	110,350 551,750	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grant, Local Funds	220,700 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1. Pump Stations covered in 2014.)	City Govt, FD PD	Grant, Local Funds	110,350 441,400	2022 2027	66

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	66
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant, Local Funds	110,350 110,350	2022 2027	66
WF2f	Exercise fire response regularly for residences, businesses and industry	FD	Grant, Local Funds	3,311 110,350	2022 2027	66
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Grant, Local Funds	1,104 110,350	2022 2027	65
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	65
UF3h	Acquire and install six inch water mains/hydrants Town wide	City Govt	Grant, Local Funds	551,750 110,350	2022 2027	65
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	State	11,035 110,350	2022 2027	64
WF2d	Obtain a 4 wheel drive Brush fire truck to combat wild-land fires. Have truck purchased in 2012.	FD	Grant, Local Funds	55,175 551,750	2022 2027	64
AH3s1	Assist businesses in developing Business Continuity Plans	City Govt	Grant, Local Funds	3,311 110,350	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant, Local Funds	110,350 110,350	2022 2027	63
FL2f	Obtain equipment to develop a swift water rescue team	FD, EMA	HLS Grant	55,175 110,350	2022 2027	62
FL2f1	Train appropriate 1st responders for a swift water rescue team	FD, EMA	HLS Grant	11,035 110,350	2022 2027	62
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant, Local Funds	110,350 110,350	2022 2027	61
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant, Local Funds	55,175 110,350	2022 2027	61
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt, ADPH, EMA	Grant, Local Funds	33,105 110,350	2022 2027	61

"STAPLEE" Mitigation Actions Prioritization Table								
	Social	Technical	Administrative	Political	Legal	Economic	Environmental	Prioritization

Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss	High Effect on Economic Loss	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	Hazmat Waste Site Effects	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Assist schools/special needs/local populations in developing disaster preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate the special needs, education and the public on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Evaluate shelter requirements annually & develop a program to add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Distribute safe room and Shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	7	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	83
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83

Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Distribute flood awareness and preparedness literature at events	2	6	2	7	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	82
Obtain PPE for all personnel responding to flood events	2	6	4	7	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	82
Obtain/install/maintain/monitor rainfall and stream gauges to predict Grant, Local flooding	2	6	6	7	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Participate in the National Flood Insurance Program (NFIP)	3	0	4	7	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Request a study of the feasibility of flood control measures along the Cahaba River.	2	6	6	7	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	79
Assist special needs facilities in implementing a security system	3	3	2	4	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Educate business/schools/local populations on the causes of wild land fires	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Educate school/special needs/local populations on wild land fire preparedness and response	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78

Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	7	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure fire inspections are regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Insure Town EMA participates in High Wind planning as a potential reception area for evacuees.	2	6	0	8	3	3	3	2	2	2	2	2	2	3	3	2	6	6	3	2	3	3	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Join/participate in Grant, Local state and federal drug task forces	3	3	2	2	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Require businesses to refuse large quantity sales of precursors	3	3	2	2	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	76
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	76
Participate in the NFIP Community Rating System	3	0	0	7	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	75
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	2	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74

Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and crisis management software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Identify alternative access points for single access neighborhoods	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Acquire signage to indicate water depth at flooding points	2	3	0	7	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Establish snow and ice removal methods	2	6	2	5	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	2	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Adopt/enforce wildfire and burning restriction legislation	2	6	2	4	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for all uncovered areas (West & North)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72

Adopt/enforce mobile home legislation to restrict development of lots within the flood plain.	2	6	4	7	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	72
Identify roadways, culverts and bridges damaged by flooding	3	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	72
Update Town Land Use Plan to identify areas where development should be restrictive	2	3	6	7	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service (NWS)	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Maintain contact with state and federal agencies regarding biological and disease threats.	2	9	0	5	3	3	3	2	2	2	2	1	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Train all 1st responders on repetitive flooding areas and structures	2	3	2	7	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	71
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce an NFIP flood plain management plan	2	0	4	7	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	69
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	7	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	69
Train fire 1st responders in wild-land fire response techniques	2	6	2	3	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Obtain smoke detectors and provide free to residents in need.	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Obtain DNR compatible radios for interoperable communications.	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67

Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	7	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	66
Develop a storm water management plan for the jurisdiction	2	3	2	7	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	66
Exercise fire response regularly for residences, businesses and industry	2	6	2	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	66
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	7	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	65
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	7	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	65
Acquire and install six inch water mains/hydrants Town wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Obtain specialized equipment to combat wild-land fires.	2	6	2	3	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	64
Obtain a 4 wheel drive Brush fire truck to combat wild-land fires	2	3	4	3	3	3	2	2	1	2	2	1	2	3	3	3	2	2	4	2	3	3	3	3	3	64
Assist businesses in developing Business Continuity Plans	2	0	2	9	3	3	3	3	3	1	1	1	1	3	3	3	2	2	2	1	3	3	3	3	3	63
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	63
Obtain equipment to develop a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Train appropriate 1st responders for a swift water rescue team	2	6	0	7	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	62
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	7	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	5	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	61

CITY OF WESTOVER INDIVIDUAL MITIGATION ACTION PLAN

SHELBY COUNTY, ALABAMA MULTI-JURISDICTIONAL, HAZARD MITIGATION PLAN 2022

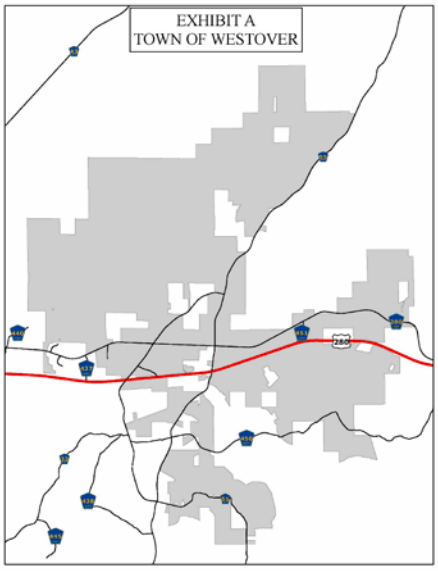
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CITY OF WESTOVER MITIGATION ACTION PLAN

Geography/History

Westover is a City in Shelby County, Alabama, United States. The City of Westover is located along the Highway 280 corridor in the Northeast quadrant of Shelby County approximately 20 miles southeast of the city of Birmingham It was officially incorporated on January 31, 2001.



Special Characteristics

The City has a Library, a City Hall City Annex and a City Park with Three Youth Soccer Fields, Playground, Swings, Lighted and Paved Walking Trail, Pavilions, Restrooms and Parking Lot that was dedicated recently. Weather Sirens are also in place to alert the citizens of severe weather conditions and others are applied for.

The Christmas Parades for the City of Westover have been tremendous successes growing each and every year to the point of over forty-five entries for the last Christmas Parade.

Population and Demographics

As of the 2020 Census, the city covers 19.4 square miles and there were 1,766 people. The population density was 90.7 people per square mile. The racial makeup of the city was 92.9% White, 1.81% Black or African American, .18% Native American, .24% Asian, .00% Pacific Islander, 3.98% from other races, and .9% from two or more races. 11.3% of the population was Hispanic or Latino of any race. 95.19% of town residents speak English while Spanish is spoken by 4.54% of the population.

According to the 2019 American Community Survey, there were 573 households out of which 205 had children under the age of 18 living with them, 363 were married couples living together, 63 had a female householder with no spouse present, and 131 were non-families. 21.5% of all householders were made up of individuals and 9.6% had someone living alone who was 65 years of age or older. The average household size was 2.88 and the average family size was 3.29. Mobile homes made up 16.1% of structures.

In the city the population was spread out with 31.3% under the age of 18, 6.1% from 18 to 24, 37.7% from 15 to 44, 21.9% from 45 to 64, and 13.8% who were 65 years of age or older. The median age was 34.2 years. For every 100 females there were 97.1 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 3% of the city's population had a hearing difficulty, 3.8% vision difficulty, 6% cognitive difficulty, 10% ambulatory difficulty, 2.7% self-care difficulty, and 7.1% an independent living difficulty. 14.2% of the population had some type of disability.

Year	2010	2020	Change
Population	1,275	1,766	38.2%
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $69,219.00 and the median income for a family was $74,375.00. Males had a median income of $54,728.00 versus $36,389.00 for females. The per capita income for the city was $47,331.00. About 9.16% of the population were below the poverty line, including 10.21% of females and 8.05% of males.

Below are the Single-family new house construction building permits in Westover:

- 2007: 206 buildings, average cost: $155,580
- 2008: 272 buildings, average cost: $144,797
- 2009: 375 buildings, average cost: $141,533
- 2010: 353 buildings, average cost: $142,142
- 2011: 20 buildings, average cost: $108,450
- 2012 18 buildings, average cost: $106,775
- 2013 20 buildings, average cost: $95,775
- 2014 16 buildings, average cost: $146,493
- 2015 25 buildings, average cost: $196,562
- 2016 30 buildings, average cost: $204,125
- 2017 10 buildings, average cost: $176,200
- 2018 5 buildings, average cost: $222,000
- 2019 12 buildings, average cost: $266,000
- 2020 6 buildings, average cost: $186,700
- 2021 11 buildings, average cost: $324,000

Infrastructure

The Westover Municipal Fire Department in operation with 24 hour, 7 day a week response to all Fire and Medical calls for help in our Municipality. Twenty-four hour, seven day a week firefighter-paramedic service available to the citizens inside the city limits. Emergency Transport is contracted with Southeast Shelby Rescue.

The City of Westover utilizes The Shelby County School System schools in Chelsea and Vincent, Alabama.

The City of Westover utilizes the Shelby County water system and a new sewer line, operated by Enviro Systems, is allowing new homes to be built and new businesses to develop

The City has prepared and planned for new growth and has adopted a Comprehensive Plan, and a zoning ordinance; set up a review process with a professional staff of engineers and planners to review new growth proposals and put together a process to manage licenses, permits and applications.

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

City of Westover Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Authority**	**Prohibited**	**Authority**	**copy Available**
Building Codes	International Building Codes	2009	**Y**	**N**	**Y**	**Y**
Building Codes-Electrical	National Electric Code	2008	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2022	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2004	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System	County			**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2004	**Y**	**N**	**N**	**Y**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2007	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance	Ordinance	2004		**N**	**N**	**N**
Hazard Setback Regulations	Ordinance	2004		**N**	**N**	**N**
Hillside Ordinance	Ordinance	2004		**N**	**N**	**N**
Historic Ordinance	Ordinance	2004		**N**	**N**	**N**
NFIP Participant	Resolution	2007	**Y**	**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2004	**Y**	**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2013	**Y**	**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	2008	**Y**	**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying

outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

City of Westover Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	3	3	3
Emergency Manager	Certified Professional	Emergency Management	C1	C1	C1
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	17	17	17
Fire Personnel	Professional(s)	Fire Dept.	40	40	40
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	C1	C1	C1
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	20	20	20
Grant writer	Professional(s)/Local	Council Member	1	1	1
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	C3	C3	C3
Medical Practioners	Professional(s)	Medical Facilities	2	2	2
Public Works	Directors/Engineers	Public Works	0	0	0
Public Communication	911 specialists	E-911	C15	C15	C15
Public Utilities	Professionals	Public Utilities	0	0	0
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

City of Westover Fiscal Capabilities					
		Eligible			
Financial Resources	**Description**	**Yes**	**No**	**TBD**	**Used**
Community Grants	Community Development Block Grants (CDBG)	**X**			**N**
	Hazard Mitigation Planning Grants (HMPG)	**X**			**Y**
	PDM for disaster resistant universities		**X**		**N**
	PDM Grants for communities	**X**			**Y**
	Department of Health Grants		**X**		**N**
	Department of Justice Grants		**X**		**N**
	Department of Agriculture Grants		**X**		**N**
	Department of Energy Grants		**X**		**N**

	Department of Education Grants		**X**		**N**
	Fire department grants	**X**			**Y**
	Flood Management Grants (FMA)	**X**			**N**
	Homeland Security Grant Program (HSGP)	**X**			**N**
	Repetitive Flood Claims Grants (RFC)	**X**			**N**
	Severe Repetitive Loss Grants (SRL)	**X**			**N**
	Private foundation grants	**X**			**N**
	Private business/industry grants	**X**			**N**
Debt Procurement	Incur debt through special tax/revenue bonds		**X**		**N**
Dept Procurement	Incur debt through private activity bonds		**X**		**N**
Impact Fees	Developer fees for new developments	**X**			**Y**
Jurisdiction Bonds	Incur debt through general obligation bonds		**X**		**N**
Project Funding	Capital improvement	**X**			**Y**
Spending Restrictions	Withhold spending in hazard-prone areas		**X**		**N**
Special Taxes	Authority to levy taxes for specific purposes	**X**			**Y**
Utility Fees	Fees for water, sewer, gas, or electric service	**X**			**Y**

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Westover. The following goal statements represent a broad target for City of Westover and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Westover	Objective AH.1: Improve the City of Westover's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Westover's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the City of Westover	Objective FL.1: Improve the City of Westover's flood warning and information distribution to citizens Objective FL.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Westover's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Westover	Objective HW.1: Improve the City of Westover's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Westover's capability to prepare for, respond to and recover from High Winds events

Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Westover	Objective IS.1: Improve the City of Westover's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Westover's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Westover	Objective WF7.1: Improve the City of Westover's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Westover's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Westover	Objective UF.1: Improve the City of Westover's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Westover's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Westover's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders

Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Assist special needs/local populations in developing disaster preparedness/response plans.	FD, City Govt	Local Funds	1,104 82,763	2022 2027	88
HW1c	Educate special needs/school/local populations on High Wind preparedness and response	FD, NWS, EMA	Local Funds	1,104 82,763	2022 2027	87
HW1c	Educate and distribute High Wind preparedness information	NWS, FD, EMA	Local Funds	1,104 82,763	2022 2027	87
AH1e	Distribute safe room and Shelter in place information to special needs and the public	FD	Local Funds	1,104 82,763	2022 2027	84

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1a	Educate special needs and the community populations on fire safety and response	FD, BOE	Grant, Local Funds	5,518 110,350	2022 2027	84
UF1b	Educate special needs and the community population on fire extinguisher use	FD	Local Funds	1,104 82,763	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA, FD	Local Funds	1,104 82,763	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant, Local Funds	165,525 551,750	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities	FD	Local Funds	1,104 82,763	2022 2027	83
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 82,763	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt, FD	Grant, Local Funds	27,588 110,350	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 82,763	2022 2027	81
TR1b	Educate special needs and government officials on procedures for handling suspicious mail	SCSO	Local Funds	1,104 82,763	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, FD	Local Funds	1,104 82,763	2022 2027	81
FL1a	Distribute flood awareness and preparedness literature at events	FD	Local Funds	1,104 82,763	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	FD	Grant, Local Funds	27,588 110,350	2022 2027	80
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	City Govt	Grant, Local Funds	11,035 110,350	2022 2027	80
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	FD	Local Funds	1,104 82,763	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	FD	Grant, Local Funds	55,175 110,350	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	1,104 82,763	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 7,725	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, ADPH, EMA	Local Funds	1,104 82,763	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	1,104 82,763	2022 2027	79
WF1b	Educate business and the public on the causes of wild land fires	AFC, FD	Local Funds	1,104 82,763	2022 2027	79
WF1c	Educate special needs/local populations on wild land fire preparedness and response	AFC, FD	Local Funds	1,104 82,763	2022 2027	79

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt	Local Funds	1,104 82,763	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept, City Govt	Local Funds	1,104 82,763	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 82,763	2022 2027	78
UF3c	Ensure fire inspections are regularly conducted at businesses and industry	FD	Local Funds	1,104 82,763	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 82,763	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	1,104 82,763	2022 2027	77
IL3a	Join/participate in local state and federal drug task forces	SCSO	HLS Grant, Local Funds	110,350 551,750	2022 2027	77
IL3c	Require businesses to refuse large quantity sales of precursors	City Govt,	Local Funds	1,104 82,763	2022 2027	77
TR3m	Assist special needs facilities in implementing a security system	SCSO	Local Funds	1,104 82,763	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	FD	Local Funds	1,104 82,763	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	SCSO, FD	Grant, Local Funds	27,588 110,350	2022 2027	76
AH3o	Assist businesses, special needs and government facilities to post evacuation routes	City Govt, SCSO	Local Funds	1,104 82,763	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt, FD, SCSO, EMA	Grant, Local Funds	5,518 110,350	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	1,104 82,763	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	1,104 82,763	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	FD	Grant, Local Funds	27,588 110,350	2022 2027	76
HW3d	Insure county EMA participates in High Wind planning as a potential reception area for evacuees.	EMA, ARC, ADPH	Local Funds	1,104 82,763	2022 2027	76
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC, FD	Local Funds	1,104 82,763	2022 2027	76
WF1e	Work with the DNR to distribute USFS fuels reduction information (Firewise.)	AFC, FD	Local Funds	1,104 82,763	2022 2027	76
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, FD	Local Funds	1,104 7,725	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grant, Local Funds	85,000 331,050	2022 2027	75

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF2d	Train all fire responders in fire combat techniques annually	FD	Grant Local Funds	5,518 110,350	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt, FD	Local Funds	1,104 82,763	2022 2027	75
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	FD	Local Funds	1,104 7,725	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD,	Local Funds	5,518 110,350	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	EMA	DHL Grant, Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	EMA	Local Funds	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt, FD, EMA	Local Funds	12,139 82,763	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment	EMA, City Govt	Grant, Local Funds	5,518 110,350	2022 2027	74
AH3k	Obtain disaster supply kits for special needs facilities	City Govt, FD	Grant, Local Funds	5,518 110,350	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD, City Govt	Grant	55,175 110,350	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt, EMA, Co Engr	Grant, Local Funds	22,070 110,350	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the county.	City Govt	Local Funds	1,104 82,763	2022 2027	74
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, FD	Local Funds	1,104 82,763	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant	22,070 110,350	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD,	Grant, Local Funds	33,105 110,350	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD, SCSO	Grants, DHL Grants	5,518 110,350	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 82,763	2022 2027	73
HW1a	Obtain NOAA weather radios for government and special needs facilities	FD	Grant, Local Funds	33,105 110,350	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt, FD, SCSO	Local Funds	1,104 82,763	2022 2027	73
IS3d	Establish snow and ice removal methods	FD, City Govt	Local Funds	1,104 82,763	2022 2027	73

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grant, Local Funds	15,000 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (2 locations)	City Govt	Grant, Local Funds	40,000 110,350	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt,	Grant, Local Funds	110,350 331,050	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt, FD, SCSO	Grant, Local Funds	11,035 110,350	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	1,104 82,763	2022 2027	72
FL3m	Acquire signage to indicate water depth at flooding points	City Govt, FD	Grant, Local Funds	11,035 110,350	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS)	NWS, FD, EMA	Local Funds	1,104 82,763	2022 2027	72
UF2b	Train firefighters to obtain for state and national certifications	FD	Grant, Local Funds	33,105 110,350	2022 2027	72
UF3e	Adopt/enforce sprinkler and smoke alarm legislation	City Govt, FD	Local Funds	1,104 82,763	2022 2027	72
WF3h	Adopt/enforce wildfire and burning restriction legislation	City Govt	Local Funds	1,104 82,763	2022 2027	72
AH3a1	Develop/maintain a citywide NIMS resource inventory software	City Govt, FD, SCSO EMA	Grant, Local Funds	1,104 82,763	2022 2027	71
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	1,104 82,763	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt, FD	Grant, Local Funds	11,035 110,350	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	1,104 82,763	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt, FD	Grant, Local Funds	11,035 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	FD, SCSO, EMA	Local Funds	1,104 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop a plan to add necessary shelters	ARC, City Govt, EMA, ADHR	Local Funds	78,349 303,63	2022 2027	70
AH3s1	Assist businesses in developing Business Continuity Plans	City Govt	Local Funds	1,104 82,763	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	City Govt	Local Funds	1,104 82,763	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	, Local Funds	1,104 82,763	2022 2027	70

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3g	Update County Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	11,035 82,763	2022 2027	70
FL2b	Train all 1st responders on repetitive flooding areas and structures	FD	Grant, Local Funds	11,035 110,350	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt	Local Funds	1,104 82,763	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	FD, SCSO, City Govt	HLS Grant, Local Funds	27,588 110,350	2022 2027	69
WF2c	Train fire 1st responders in wild-land fire response techniques	FD, AFC	Local Funds	11,035 82,763	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant, Local Funds	27,588 220,700	2022 2027	68
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt, FD,	HLS Grant	33,105 110,350	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	1,104 82,763	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	1,104 82,763	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt, EMA	Grant Local Funds	275,875 110,350	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction.	FD	Grant, Local Funds	110,350 331,050	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grant, Local Funds	220,700 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities and fuel depots. (City Hall, Water System	City Govt,	Grant, Local Funds	110,350 331,050	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grant, Local Funds	551,750 1,103,500	2022 2027	65
WF2f	Exercise fire response regularly for residences, businesses and industry	FD	Local Funds	11,035 82,763	2022 2027	65
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 82,763	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	110,350 110,350	2022 2027	64
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	Grant, State Grant	11,035 110,350	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	1,104 82,763	2022 2027	63

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 82,763	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant, Local Funds	110,350 110,350	2022 2027	61
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt, ADPH, EMA	Grant, Local Funds	33,105 110,350	2022 2027	60
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant, Local Funds	110,350 110,350	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant, Local Funds	55,175 110,350	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table																										
	Social				Technical			Administrative			Political			Legal			Economic				Environmental					Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss	High Effect on Economic Loss	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effects	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Obtain and/or expand warning sirens to for all uncovered areas (2 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Distribute safe room and Shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Assist schools/special needs/local populations in developing disaster preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74

Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Develop/maintain a citywide NIMS resource inventory software	2	3	4	9	3	2	3	1	2	1	1	2	2	3	3	3	4	2	4	2	3	3	3	3	3	71
Obtain additional Emergency Operations Center equipment	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots. (City Hall, Water System	3	3	4	9	3	3	2	2	2	1	2	2	3	3	3	2	2	2	2	1	2	2	2	3	3	66
Assist non-governmental critical facilities to obtain emergency generators/pigtails	2	3	4	9	3	2	3	2	2	2	3	2	2	3	3	2	4	2	4	1	2	3	3	3	3	72
Evaluate shelter requirements annually & develop a plan to add necessary shelters	3	9	0	9	3	3	2	2	1	2	3	2	3	3	3	2	4	2	2	1	2	2	2	2	3	70
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Assist schools in implementing an emergency phone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	76
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Assist businesses in developing Business Continuity Plans	2	0	2	9	3	3	3	2	1	3	1	1	1	3	3	3	6	6	2	1	3	3	3	3	3	70
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Develop a community shelter program for mobile home parks	2	9	0	9	3	3	2	2	3	2	2	2	2	3	3	3	6	6	6	2	2	3	3	2	3	83
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79

Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	77
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Update County Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76

Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	5	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	80
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	7	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	73
Educate special needs/school/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Educate and distribute High Wind preparedness information	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Train citizens in weather observation in conjunction with the National Weather Service (NWS)	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Insure county EMA participates in High Wind planning as a potential reception area for evacuees.	3	3	0	8	3	3	3	2	2	2	2	2	3	3	3	3	6	6	2	2	3	3	3	3	3	76
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	77
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Join/participate in local state and federal drug task forces	3	3	2	2	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Require businesses to refuse large quantity sales of precursors	3	3	2	2	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	77
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	4	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	60

Maintain contact with state and federal agencies regarding biological and disease threats.	3	9	0	4	3	3	3	2	3	2	3	2	3	3	3	3	6	6	2	2	3	3	3	3	3	80
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist special needs facilities in implementing a security system	3	3	2	2	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	77
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	77
Ensure fire inspections are regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Adopt/enforce sprinkler and smoke alarm legislation	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Acquire and install six inch water mains/hydrants city wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65

Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Educate business, schools and the public on the causes of wild land fires	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Educate school/special needs/local populations on wild land fire preparedness and response	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	76
Work with the DNR to distribute USFS fuels reduction information (Firewise.)	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	76
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Obtain specialized equipment to combat wild-land fires.	2	6	2	3	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	64
Train fire 1st responders in wild-land fire response techniques	2	6	2	3	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Obtain DNR compatible radios for interoperable communications.	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Exercise fire response regularly for residences, businesses and industry	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	65
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	3	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	3	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Adopt/enforce wildfire and burning restriction legislation	2	6	2	3	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	72

TOWN OF WILSONVILLE INDIVIDUAL MITIGATION ACTION PLANS

SHELBY COUNTY ALABAMA MULTI-JURISDICTIONAL, HAZARD MITIGATION PLAN 2022

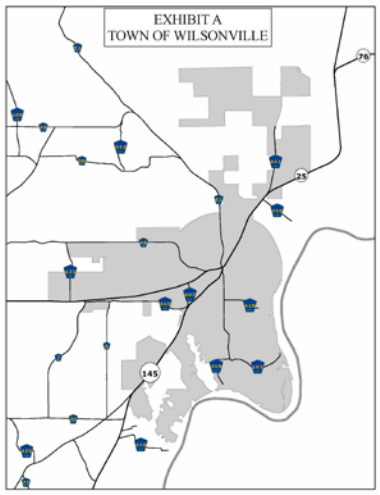
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TOWN OF WILSONVILLE MITIGATION ACTION PLAN

Geography/History

The Town of Wilsonville is located in southeast Shelby County just seven miles east of the county seat, Columbiana and 30 miles southeast of Birmingham. Wilsonville's gentle rolling terrain adjoins beautiful Lay Lake.



According to the U.S. Census Bureau, the town has a total area of 11.0 square miles (28.4 km²), of which, 9.9 square miles (25.5 km²) of it is land and 1.1 square miles (2.9 km²) of it (10.21%) is water.

The first settler in the Wilsonville area was Henry W. Robertson, who brought his family from South Carolina in 1812 and settled one thousand. Alabama became a state in 1819, and in 1822, a land office was opened in Tuscaloosa. Mr. Robertson and other settlers rode horseback to Tuscaloosa to claim their land. The Wallace plantation house still stands four miles north of Wilsonville where Highway 76 connects with Highway 25.

The town of Wilsonville was begun about the time the Indians were driven out of the northern part of Alabama. The community of Wilsonville was named for Elisha Wilson, an early settler. Incorporated in 1897. The original town limits were a circle with a two and one-half mile radius. The Railroad Depot building was the first Depot site in Shelby County.

A Dutchman, named Avehard "ran the first store" and was also the first resident. He was the first to be buried in the Wilsonville Cemetery. One of the next settlers was Jack Owens who "ran a store and a saloon" in a wooden building where the large brick one, owned by B. B. Mooney, now stands. By then, there were two more families in the community.

Wilsonville was situated on the old Montgomery stagecoach road. An elderly settler named Russell owned the mail route. The mail was carried on horseback, and there was a relay station at the Macon Field, at the old steel bridge on the W. F. Robertson place.

Later, a wide gauge railroad was built with wooden rails through Wilsonville. At first, trains ran from Selma to Talladega. Their runs were extended at a later date to Rome, Georgia. Sometime after, a depot was built. It was put together with wooden pegs. Early carload shipments from the north had to be reloaded onto cars that could be used on the wide track. In the 1880's, the track was narrowed to standard gauge, and finally, steel rails replaced the wooden ones.

Throughout the early 1900's, all travel to and from Wilsonville was by train. During the twenties and thirties, there were six trains a day. One, made up of a small engine, a baggage car, and two coaches was called "The Dude". It mad a round trip every day between Wilton and Anniston. F.

During the Civil War, forts at the Yellowleaf Creek and Coosa River bridges built by Capt. Andrew T. Smith and were overrun by the Yankees. As they passed through the area, Yankee soldiers camped at the Fourmile Creek bridge site at the fool of Batton Hill.

After the war, the town of Wilsonville grew rapidly. The Jack Owens business was located in a wooden building that was torn down and a large brick building erected in 1895. This building still stands and houses the John Deere Tractor Company.

In 1900, the population had grown to 1600 and was at that time, the largest town in the county. There was a drug store next to the railroad and across from the depot, three hotels, a bank, a Farmers Alliance store, several other general merchandise stores, several blacksmith shops, a grist and flour mill, and other businesses that are not now in existence. A general merchandise store sold schoolbooks, some of which are still in the community. Another early business, making charcoal, that was hauled to Wilsonville where it was loaded onto freight cars to ship to the Shelby Iron Works for fuel for the furnaces.

The Methodist church is the oldest church in Wilsonville. The first building stood in the old part of the cemetery. Later, the Methodists built the church, which still stands on the hill across the Fourmile Road from the cemetery. It faces the town and is adjacent to the school. The first parsonage stood between the church and the Fourmile Road. It was removed in 1961. The present parsonage stands in front of the school and faces the Post Office.

In 1946, the Methodist Church was remodeled; a kitchen and Sunday School rooms were added at the rear, and in 1966, stained glass windows were installed. Facing the Fourmile Road, in the newer part of the cemetery was a Campbellite Church. The Presbyterian church was originally about four miles north of Wilsonville on Yellowleaf Creek. This building later became the Scott's' Grove Church. Flooding, due to spring "freshets" caused the Presbyterian congregation to build elsewhere. This church building is now the Masonic Hall.

The Wilsonville Baptist Church, organized in 1879 in the depot, met for several years in the Methodist Church. Their first church building faced the Fourmile Road. In 1901, a larger building was built on the same site, but it faced south. Sunday School rooms were added from the lumber of the old Campbellite church. In 1956, a brick educational building was constructed on the west side of the church facing the Masonic Hall. The Dry Branch Baptist Church was organized in 1894, a few miles north of Wilsonville in a brush arbor. This building was blown down in 1923 and rebuilt in 1924.

A congregation of Negro Methodists built a church in what was later called "Jacksontown". The building stood somewhere behind the present home of Mrs. Tint Merrell and The Virgil Fulmers. This church did not remain active many years. The building was used later as a school. This school was closed in 1953, and its pupils transported to the consolidated school in Columbiana

In 1919, the brick school building, which still stands, was built by the citizens of Wilsonville. The final payment was made in 1952. It was deeded to the State Board of Education.

In 1932, the Wilsonville State Bank failed. The cotton economy of the entire area made the depression years a period of hardship and anxiety. The number of businesses decreased. The town library was begun in the mid-thirties

Although the population continued to decrease from its 1900 peak, the World War II years (1940-1947) brought many defense workers to survey, construct, and operate a huge DuPont powder plant in Childersburg under a "cost-plus" contract with the Federal Government. Wilsonville was "overflowing", as was every neighboring town, with two, three, or four families in nearly every house. Some of these families remained in Wilsonville when the powder plant was converted into a paper mill.

Volunteer firemen served even before the town bought a fire truck, using hose unrolled from a portable cart in 1947.

Prior to 1930, the telephone exchange was owned by the town. A few people owned acetylene light plants, and later Delco systems. In 1929, Alabama Power Company brought electricity.

The E. C. Gaston Steam Plant completed in 1929, was one of the first four Alabama Hydro-Electric Power Plants constructed on Alabama Rivers.

Special Characteristics

Wilsonville has the Wilsonville Public Library, The Wilsonville Helms Park and Smiths Camp. Water characteristics include the Coosa River, Fourmile Creek, and Dry BranchIn 1968; the water of the Coosa River was raised fourteen feet after heightening Lay Dam (near Clanton). Many riverside homes have been built, and resort areas are expected to develop in the future

Population and Demographics

As of the 2020 Census, the city covers 10.5 square miles and there were 2,068 people. The population density was 197.1 people per square mile. The racial makeup of the city was 89.2% White, 8.55% Black or African American, 0% Native American, 0% Asian, 0% Pacific Islander, 0% from other races, and 2.25% from two or more races. 4.98% of the population was Hispanic or Latino of any race. 95.61% of town residents speak English while Spanish is spoken by 4.39% of the population.

According to the 2019 American Community Survey, there were 841 households out of which 201 had children under the age of 18 living with them, 464 were married couples living together, 84 had a female householder with no spouse present, and 238 were non-families. 22.9% of all householders were made up of individuals and 11.3% had someone living alone who was 65 years of age or older. The average household size was 2.7% and the average family size was 3.24. Mobile homes made up 26% of structures.

In the city the population was spread out with 21.3% under the age of 18, 9.7% from 18 to 24, 33.3% from 15 to 44, 30.5% from 45 to 64, and 18.1% who were 65 years of age or older. The median age was 43.3 years. For every 100 females there were 105.4 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 5% of the city's population had a hearing difficulty, 4.3% vision difficulty, 5.7% cognitive difficulty, 9.3% ambulatory difficulty, 3.8% self-care difficulty, and 6.2% an independent living difficulty. 15.1% of the population had some type of disability.

Year	2010	2020	Change
Population	1827	2068	13.19
Source: US Bureau of the Census			

Economy

The median income for a household in the city was $58,375.00 and the median income for a family was $67,875.00. Males had a median income of $42,465.00 versus $31,875.00for females. The per capita income for the city was $38,935.00. About 10.19% of the population were below the poverty line, including 9.83% of females and 10.53% of males.

The largest industry in town is the E.C.Gaston Steam Plant.

Single-family new house construction building permits in Wilsonville:

- 2008: 3 buildings, average cost: $214,000.00
- 2009: 2 buildings, average cost: $180,000.00
- 2010: 6 buildings, average cost: $216,000.00
- 2011: 4 buildings, average cost: $300,000.00
- 2012: 4 buildings, average cost: $252,000.00
- 2013: 3 buildings, average cost: $269,000.00
- 2014: 3 buildings, average cost: $164,000.00
- 2015: 7 buildings, average cost: $259,000.00
- 2016: 5 buildings, average cost: $306,000.00
- 2017: 5 buildings, average cost: $255,000.00
- 2018: 2 buildings, average cost: $235,000.00
- 2019: 5 buildings, average cost: $352,000.00
- 2020: 5 buildings, average cost: $312,000.00
- 2021: 9 buildings, average cost: $310,000.00

Infrastructure

The Wilsonville government is a mayor/council system made up of a mayor and 7 councilmen.
Law Enforcement services are provided by contract from the Shelby County Sheriff's Department and Fire service is provided by the Wilsonville Volunteer Fire Department, which has 22 fully trained fire personnel.
Wilsonville is served by the Bethel Water System and a new wastewater treatment plant currently under construction along the Coosa River in Wilsonville that will serve citizens and spur growth for years to come.

The Wilsonville Elementary School is part of the Shelby County system.

School	Type	Enrollment
Wilsonville Elementary	K - 5	198

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Town of Wilsonville Legal And Regulatory Capability						
Regulatory Tools/Plans	Regulatory Type: Ordinance Resolution Codes Plans Etc.	Year Adopted or Updated	Local Authority	State Prohibited	Higher Authority	Electronic copy Available
Building, Plumbing, Gas and Mechanical Codes	International Building Codes	2018	**Y**	**N**	**Y**	**Y**
Electrical Code	International Building Codes	2020	**Y**	**N**	**Y**	**Y**
Residential Energy Codes	International Building Codes	2015	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2021	**Y**	**N**	**N**	**N**
Comprehensive Plan	Resolution	2004	**Y**	**N**	**N**	**Y**
Continuity of Operations Plan	Pandemic Only	2008	**Y**	**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan	Comprehensive Plan Resolution	2004	**Y**	**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**Y**	**N**	**Y**	**Y**
Flood Damage Prevention Ordinance	Resolution	2021	**Y**	**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant	Resolution	2004	**Y**	**N**	**Y**	**Y**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**Y**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission	1960	**Y**	**N**	**Y**	**N**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	1997		**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Jurisdiction Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	Staff/Personnel Resources	Department/Agency	Number Fully Trained	Number Fully Equipped	Total Personnel
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C2	C2	C2
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	22	22	22
Fire Personnel	Professional(s)	Fire Dept.	22	22	22
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	0	0	0
Government Elected	Elected Officials	Mayor/Commission	8	8	8
Government Administration	Employees	Jurisdiction	6	6	6
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire/Sheriff Dept	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	C3	C3	C3
Medical Practioners	Professional(s)	Medical Facilities	1	1	1
Public Works	Directors/Engineers	Public Works	3	3	3
Public Communication	911 specialists	E-911	C43	C43	C43
Public Utilities	Professionals	Public Utilities	1	1	1
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

JURISDICTION FISCAL CAPABILITIES					
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			Y
	Hazard Mitigation Planning Grants (HMPG)	X			Y
	PDM for disaster resistant universities		X		N
	PDM Grants for communities	X			N
	Department of Health Grants		X		N
	Department of Justice Grants	X			N
	Department of Agriculture Grants		X		N
	Department of Energy Grants		X		N

	Department of Education Grants		X		N
	Fire department grants	X			Y
	Flood Management Grants (FMA)	X			N
	Homeland Security Grant Program (HSGP)	X			N
	Repetitive Flood Claims Grants (RFC)	X			N
	Severe Repetitive Loss Grants (SRL)	X			N
	Private foundation grants	X			Y
	Private business/industry grants	X			Y
Debt Procurement	Incur debt through special tax/revenue bonds	X			N
Dept Procurement	Incur debt through private activity bonds	X			N
Impact Fees	Developer fees for new developments	X			Y
Jurisdiction Bonds	Incur debt through general obligation bonds	X			Y
Project Funding	Capital improvement	X			Y
Spending Restrictions	Withhold spending in hazard-prone areas	X			N
Special Taxes	Authority to levy taxes for specific purposes	X			Y
Utility Fees	Fees for water, sewer, gas, or electric service	X			Y

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in City of Wilsonville. The following goal statements represent a broad target for City of Wilsonville and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the City of Wilsonville	Objective AH.1: Improve the City of Wilsonville's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from all hazards
Flooding Hazard Goal: Mitigate the impact of flooding on the City of Wilsonville	Objective FL.1: Improve the City of Wilsonville's flood warning and information distribution to citizens Objective FL.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the City of Wilsonville	Objective HW.1: Improve the City of Wilsonville's High Winds warning and information distribution to citizens Objective HW.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from High Winds events

Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the City of Wilsonville	Objective IS.1: Improve the City of Wilsonville's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the City of Wilsonville	Objective WF7.1: Improve the City of Wilsonville's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the City of Wilsonville	Objective UF.1: Improve the City of Wilsonville's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the City of Wilsonville's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the City of Wilsonville's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment

Issue	1	2	3
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire
Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding

Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals
Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Assist schools/special needs/local populations in developing disaster preparedness/response plans.	FD, City Govt	Local Funds	3,311 110,350	2022 2027	88
HW2a	Establish high wind watch and warning procedures for early alert of 1st responders and the public	NWS, EMA	Local Funds	1,104 165,525	2022 2027	88
HW1c	Educate special needs/education/local populations on High Wind preparedness and response	FD, NWS, EMA	Local Funds	5,518 386,225	2022 2027	87
HW1c	Distribute High Wind preparedness information to all populations	NWS, FD, EMA	Local Funds	3,311 165,525	2022 2027	87
AH1e	Distribute safe room and Shelter in place information to schools, special needs and the public	FD, SCSO, BOE	Local Funds	3,311 110,350	2022 2027	84
UF1a	Educate school, special needs and the community populations on fire safety and response	FD, BOE	Grant, Local Funds	5,518 110,350	2022 2027	84
UF1b	Educate school, special needs and the community population on fire extinguisher use	FD	Local Funds	1,104 110,350	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA, FD	Local Funds	1,104 110,350	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant, Local Funds	5,518 165,525	2022 2027	83

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3d	Develop fire plans for all major businesses and critical facilities	FD	Local Funds	11,035 551,750	2022 2027	83
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 55,175	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt, FD	Grant, Local Funds	27,588 165,525	2022 2027	81
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 55,175	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, FD	Local Funds	1,104 110,350	2022 2027	81
AH3l	Assist schools to implement an emergency telephone line	City Govt, BOE	Local Funds	1,104 55,175	2022 2027	80
FL1a	Distribute flood awareness and preparedness literature at events	FD	Local Funds	2,270 55,175	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	FD	Grant, Local Funds	11,035 55,175	2022 2027	80
FL3k	Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	City Govt	Grant, Local Funds	5,518 99,315	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	FD	Grant, Local Funds	55,175 551,750	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	1,104 55,175	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 55,175	2022 2027	79
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 55,175	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, EMA, ADPH, ADHR,	Local Funds	1,104 55,175	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	1,104 55,175	2022 2027	79
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH, SCSO, FD, City Govt	Local Funds	1,104 110,350	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	Fire Dept	Local Funds	3,311 110,350	2022 2027	78
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	1,104 55,175	2022 2027	78
IL3a	Join/participate in local state and federal drug task forces	SCSO	HLS Grant, Local Funds	1,104 165,525	2022 2027	78
IL3c	Require businesses to refuse large quantity sales of precursors	City Govt,	Local Funds	1,104 55,175	2022 2027	78
UF3c	Ensure fire inspections are regularly conducted at businesses and industry	FD	Local Funds	1,104 551,750	2022 2027	78
WF1b	Educate business, school and local populations on the causes of wild land fires	AFC, FD	Local Funds	2,270 110,350	2022 2027	78

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF1c	Educate school/special needs/local populations on preparedness and response to a wild-land fire	AFC, FD, BOE	Local Funds	1,104 110,350	2022 2027	78
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt. FD	Local Funds	1,104 110,350	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 55,175	2022 2027	77
FL3h	Request a study of the feasibility of flood control measures along the Coosa River.	City Govt	Grant, Local Funds	27,588 165,525	2022 2027	77
HW3g	Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	City Govt	Local Funds	1,104 55,175	2022 2027	77
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	FD, SCSO,	Local Funds	1,104 551,750	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	SCSO, FD	Grant, Local Funds	27,588 220,700	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt, SCSO	Local Funds	1,104 55,175	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt, FD, SCSO	Grant, Local Funds	1,104 55,175	2022 2027	76
AH3s1	Assist businesses in developing Business Continuity Plans	City Govt	Local Funds	5,518 55,175	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	2,270 165,525	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	FD, SCSO	Grant, Local Funds	27,588 165,525	2022 2027	76
UF2a	Obtain fire PPE for all personnel responding to fire incidents	FD	Grant, Local Funds	85,000 551,750	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually	FD	Grant Local Funds	27,588 110,350	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt, FD	Local Funds	1,104 110,350	2022 2027	75
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC, FD	Local Funds	1,104 110,350	2022 2027	75
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, FD	Local Funds	1,104 110,350	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	FD,	Local Funds	5,518 55,175	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt, SCSO, FD	DHL Grant, Local Funds	11,035 110,350	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt, SCSO, FD	Local Funds	5,518 110,350	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt, FD, EMA	Local Funds	5,518 110,350	2022 2027	74
AH3d	Obtain additional Emergency Operations Center equipment and software	EMA, City Govt	Grant, Local Funds	5,518 55,175	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt, FD, BOE,	Grant, Local Funds	16,553 110,350	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	FD, BOE	Grant, Local Funds	33,105 165,525	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	FD, City Govt	HLS Grant, Grant	55,175 165,525	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt, EMA, Co Engr	Grant, Local Funds	5,518 165,525	2022 2027	74
IS3d	Establish snow and ice response and removal methods	FD, City Govt	Local Funds	1,104 55,175	2022 2027	74
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	FD	Local Funds	1,104 110,350	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt	Grant	55,175 220,700	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	FD, EMA, Law	Grant, Local Funds	55,175 220,700	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	FD, SCSO	Grants, DHL Grants	5,518 55,175	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt	Local Funds	1,104 55,175	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt, FD, SCSO	Local Funds	11,035 165,525	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	FD	Grant, Local Funds	16,553 110,350	2022 2027	73
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, FD	Local Funds	1,104 110,350	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (3 locations)	City Govt	Grant, Local Funds	60,000 220,700	2022 2027	72
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt, FD, SCSO	Grant, Local Funds	33,105 1,103,500	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt, FD, SCSO	Grant, Local Funds	5,518 55,175	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt	Local Funds	1,104 55,175	2022 2027	72
FL3m	Acquire signage to indicate water depth at flooding points	City Govt, FD	Grant, Local Funds	5,518 165,525	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS)	NWS, FD, EMA	Local Funds	4,000 165,525	2022 2027	72
UF2b	Train firefighters to obtain for state and national certifications	FD	Grant, Local Funds	33,105 110,350	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3e	Adopt/enforce sprinkler and smoke alarm legislation for all necessary facilities	City Govt, FD	Local Funds	1,104 1,103,500	2022 2027	72
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	11,035 165,525	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt, FD	Grant, Local Funds	11,035 110,350	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	1,104 110,350	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt, FD	Grant, Local Funds	11,035 441,400	2022 2027	71
WF3h	Adopt/enforce wildfire and burning restriction legislation	City Govt	Local Funds	1,104 551,750	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	FD, SCSO	Local Funds	11,035 110,350	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop plans to add necessary shelters	ARC, City Govt, EMA, ADPH	Grant Local Funds	33,105 165,525	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	City Govt	Local Funds	1,104 165,525	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	, Local Funds	2,270 165,525	2022 2027	70
FL3g	Update City Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	1,104 55,175	2022 2027	70
FL2b	Train all 1st responders on repetitive flooding areas and structures	FD	Grant, Local Funds	11,035 165,525	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt	Local Funds	1,104 55,175	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	FD, SCSO	HLS Grant, Local Funds	11,035 165,525	2022 2027	69
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	5,518 275,875	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant, Local Funds	20,967 165,525	2022 2027	68
WF2c	Train fire 1st responders in wild-land fire response techniques	FD, AFC	Local Funds	11,035 110,350	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	1,104 55,175	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	1,104 55,175	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt, EMA	Grant Local Funds	110,350 496,575	2022 2027	67

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF1d	Obtain a fire education-training trailer for the jurisdiction.	FD	Grant, Local Funds	110,350 1,103,500	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	FD	Grant, Local Funds	220,700 1,103,500	2022 2027	67
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt, FD,	Grant, HLS Grant	33,105 110,350	2022 2027	67
AH3e	Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	City Govt, FD, SCSO	Grant, Local Funds	110,350 331,050	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants city wide	City Govt	Grant, Local Funds	551,750 5,517,500	2022 2027	65
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 55,175	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	11,035 165,525	2022 2027	64
WF2f	Exercise fire response regularly for residences, businesses and industry	FD	Local Funds	11,035 220,700	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	1,104 55,175	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 165,525	2022 2027	63
WF2b	Obtain specialized equipment to combat wild-land fires.	FD	Grant, State Grant	110,350 551,750	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant, Local Funds	110,350 551,750	2022 2027	61
PD2d	Identify and Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt, ADPH, EMA	Grant, Local Funds	11,035 110,350	2022 2027	61
FL2f	Obtain equipment to develop a swift water rescue team	FD, EMA	HLS, Grant, Grant	55,175 165,525	2022 2027	60
FL2f1	Train appropriate 1st responders for a swift water rescue team	FD, EMA	HLS Grant, Grant	11,035 165,525	2022 2027	60
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant, Local Funds	110,350 551,750	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant, Local Funds	55,175 165,525	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table								
	Social	Technical	Administrative	Political	Legal	Economic	Environmental	Prioritization

Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=1-9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Assist schools/special needs/local populations in developing disaster preparedness/response plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Establish high wind watch and warning procedures for early alert of 1st responders and the public	3	9	4	8	3	3	3	2	3	2	2	2	2	3	3	3	6	6	4	2	3	3	3	3	3	88
Obtain/install emergency generators or "pigtails" for critical government facilities and fuel depots. (City Hall, FS# 1, Pump Station)	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate special needs/education/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Distribute High Wind preparedness information to all populations	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Evaluate shelter requirements annually & develop plans to add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Distribute safe room and Shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	4	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	83
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83

Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist schools to implement an emergency telephone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Obtain/install/maintain/monitor rainfall and stream gauges to predict local flooding	2	6	6	5	3	3	2	2	2	2	2	2	3	3	3	6	4	6	1	2	3	3	3	3	3	80
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80
Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	79
Annually review and update hazard related legislation	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	79
Maintain contact with state and federal agencies regarding biological and disease threats.	3	9	0	5	3	3	3	2	3	2	2	1	3	3	3	3	6	6	2	2	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	78
Develop strategies to prevent loss of public records	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	78
Join/participate in local state and federal drug task forces	3	3	2	3	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Require businesses to refuse large quantity sales of precursors	3	3	2	3	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	78
Ensure fire inspections are regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	78
Educate business, school and local populations on the causes of wild land fires	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Educate school/special needs/local populations on preparedness and response to a wild fire	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	78

Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	3	77
Request a study of the feasibility of flood control measures along the Coosa River.	2	6	6	5	3	3	3	2	2	2	2	1	2	3	3	3	4	4	6	1	3	2	3	3	3	3	77
Adopt/enforce tie down and skirting legislation for mobile homes and mobile home parks	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	3	76
Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	3	76
Assist businesses in developing Business Continuity Plans	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	3	76
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	3	75
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	3	75
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	2	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	3	74
Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	2	74

Establish snow and ice response and removal methods	2	6	2	5	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	2	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	2	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	73
Obtain and/or expand warning sirens to for all uncovered areas (3 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service (NWS)	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Adopt/enforce sprinkler and smoke alarm legislation for all necessary facilities	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce wildfire and burning restriction legislation	2	6	2	2	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70

Adopt/enforce mobile home legislation to restrict development of lots within flood plains.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update City Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	3	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Train fire 1st responders in wild-land fire response techniques	2	6	2	2	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67
Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Obtain DNR compatible radios for interoperable communications.	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	67
Acquire and install six inch water mains/hydrants city wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Exercise fire response regularly for residences, businesses and industry	2	6	2	2	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	64
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Obtain specialized equipment to combat wild-land fires.	2	6	2	2	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	63
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61

Identify and Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	5	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	2	2	2	3	61
Obtain equipment to develop a swift water rescue team	2	6	0	5	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	60
Train appropriate 1st responders for a swift water rescue team	2	6	0	5	3	3	3	2	1	2	2	1	2	3	3	3	2	1	1	1	2	3	3	3	3	60
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59

TOWN OF WILTON
INDIVIDUAL MITIGATION ACTION PLANS

SHELBY COUNTY
ALABAMA
MULTI-JURISDICTIONAL, HAZARD MITIGATION PLAN
2022

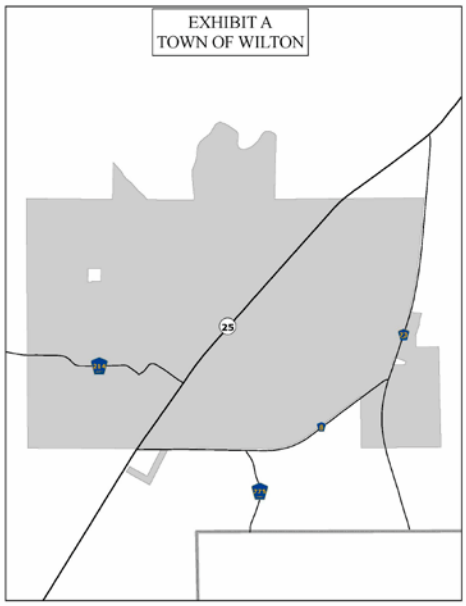
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TOWN OF WILTON MITIGATION ACTION PLAN

Geography/History

Wilton is located in the southwestern section of the County and approximately 40 miles south of Birmingham. Before Wilton received its present name around the turn of the century it had been known by seven different names since the area was first homesteaded in the early 1800's. The first settlers, who were farmers of Scotch-Irish descent, who came down from the Carolinas, called it Woodsborough. The spelling was later changed to Woodsboro. In 1818 Jonathan Ware built a forge at Thompson's Mill, located just south of the town and it was here the first iron in the county was made. Wrought iron pipes were made at the mill and water pumped through them to the nearby homes, making it the first place in the county to have running water



Known primarily as a railroad town, it is assumed the community was finally named after Wilton, England, which is also a railroad center. An 1856 timetable of the Alabama and Alabama River Railroad lists it simply as Woods. Tram lines built in 1850 enabled coal from local mines to be hauled to the railroad and loaded on cars of this time. The town became known as Junction in 1872 and was later changed to Birmingham Junction in 1889 when the tracks of the Selma, Rome and Dalton Railroad and the Brierfield, Blocton and Birmingham Railroad came through. The town was next called Bismarck after the German chancellor. During World War I the name became unpopular and was changed to Catoosa after a town in Georgia.

Repair shops were located here to fix engines, boilers, etc. A long time resident of the town said he recalled seeing as many as 12-15 engines in the shop at one time. When the shop was moved to Selma, the town lost some of its prosperity as the population declined.

The town was incorporated in 1918 and the first mayor was L. McMilian whose daughter, Mrs. Sam Vest, was postmaster for many years. The Town hall, which is still used, was built in 1934 when L. Cochran was mayor.

Special Characteristics

Wilton has a Town Park.

Population and Demographics

As of the 2020 Census, the Town covers 1 square mile and there were 675 people. The population density was 705 people per square mile. The racial makeup of the Town was 74.1% White, 24.97% Black or African American, 0% Native American, 0% Asian, 0% Pacific Islander, 0% from other races, and 0.93% from two or more races. 3.3% of the population was

Hispanic or Latino of any race. 97.51% of town residents speak English while Spanish is spoken by 2.07% of the population.

According to the 2019 American Community Survey, there were 252 households out of which 49 had children under the age of 18 living with them, 108 were married couples living together, 86 had a female householder with no spouse present, and 55 were non-families. 18.7% of all householders were made up of individuals and 6.7% had someone living alone who was 65 years of age or older. The average household size was 2.97% and the average family size was 3.45. Mobile homes made up 7.1% of structures.

In the Town the population was spread out with 22.3% under the age of 18, 11.5% from 18 to 24, 35.1% from 15 to 44, 31.4% from 45 to 64, and 15% who were 65 years of age or older. The median age was 41.7 years. For every 100 females there were 78.8 males.

Awareness of populations with access and functional needs is critical to planning. As of 2019, 3.3% of the city's population had a hearing difficulty, 4.7% vision difficulty, 9.5% cognitive difficulty, 10.4% ambulatory difficulty, 4.1% self-care difficulty, and 10.3% an independent living difficulty. 15.4% of the population had some type of disability.

Year	2010	2020	Change
Population	687	675	-1.7
Source: US Bureau of the Census			

Economy

The median income for a household in the Town was $49,028.00 and the median income for a family was $50,875.00. Males had a median income of $40,750.00 versus $31,250.00 for females. The per capita income for the Town was $37,917.00. About 34.85% of the population were below the poverty line, including 42% of females and 25.76% of males.

In addition to the Southern Railroad, the oldest principal business, located in Wilton today is the Kimberly Clark Newsprint office and pulpwood loading yard.

Single-family new house construction building permits in Wilton:

- 2008: 3 buildings, average cost: $93,000.00
- 2009: 0
- 2010: 1 building, average cost: $92,000.00
- 2011: 0
- 2012: 0
- 2013: 0
- 2014: 0
- 2015: 0
- 2016: 0
- 2017: 0
- 2018: 0
- 2019: 1 building, average cost: $245,000.00
- 2020: 1 building, average cost: $275,000.00
- 2021: 1 building, average cost: $193,000.00

Infrastructure

Wilton has a Mayor and 5-city counsel type of government. It contracts with the Shelby County Sheriff's Department for law enforcement and the Montevallo Fire Department for fire service. Wilton has its own water and streets department managed by two public employees.
Wilton utilizes the Shelby County Schools System Schools in the Town of Montevallo.

Capabilities

The Legal and Regulatory Capability survey documents authorities available to the jurisdiction and/or enabling legislation at the state level affecting planning and land management tools that support local hazard mitigation planning efforts. The identified planning and land management tools are typically used by states and local and tribal jurisdictions to implement hazard mitigation activities. If the jurisdiction does not have this capability or authority, does another entity/jurisdiction have this authority at a higher level of government (county, parish, or regional political entity), or does the state prohibit the local jurisdictions from having this authority?

Town of Wilton Legal And Regulatory Capability						
Regulatory Tools/Plans	**Regulatory Type: Ordinance Resolution Codes Plans Etc.**	**Year Adopted or Updated**	**Authority**	**Prohibited**	**Authority**	**copy Available**
Building Codes	International Building Codes	2012	**Y**	**N**	**Y**	**Y**
Capital Improvements Plan	Annual Budget	2009		**N**	**N**	**N**
Comprehensive Plan				**N**	**N**	**Y**
Continuity of Operations Plan				**N**	**N**	**N**
Community Rating System				**N**	**Y**	**N**
Economic Development Plan				**N**	**N**	**Y**
EMAP Certified				**N**	**Y**	**N**
Emergency Response Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Flood Management, Plan	Resolution	2004		**N**	**Y**	**Y**
Growth Control Ordinance				**N**	**N**	**N**
Hazard Setback Regulations				**N**	**N**	**N**
Hillside Ordinance				**N**	**N**	**N**
Historic Ordinance				**N**	**N**	**N**
NFIP Participant				**N**	**N**	**N**
Post-disaster Ordinance				**N**	**N**	**N**
Post-disaster Recovery Plan	County Emergency Operations Plan	2019	**N**	**N**	**Y**	**Y**
Real Estate Disclosure	AL Real Estate Commission		**N**	**N**	**Y**	**N**
Site Plan Requirements	Zoning Ordinance	2004		**N**	**N**	**Y**
Subdivision Regulations	Zoning Ordinance	2004		**N**	**N**	**Y**
Wildfire Ordinance				**N**	**N**	**N**
Zoning Ordinances	Ordinance	1994		**N**	**N**	**N**

The Administrative and Technical Capacity survey documents personnel employed by your jurisdiction and the public and private sector resources that may be accessed to mitigate hazards in the community. For smaller jurisdictions with limited capacities, no local staff resources may be available for many of the categories. If so identify public resources at the next higher level of government that may be able to provide technical assistance to the community.

For some hazard mitigation actions, consider federal agencies that provide technical assistance, such as the U.S. Department of Agriculture (USDA) Cooperative Extension Service, which has offices in most counties. The planning team in rural communities must be creative in identifying outside resources to augment limited local capabilities. This information will be used when evaluating alternative mitigation actions and when preparing your mitigation.

Town of Wilton Administrative And Technical Capabilities					
C=County Provides, S=State Provides, F=Federal Provides					
Position	**Staff/Personnel Resources**	**Department/Agency**	**Number Fully Trained**	**Number Fully Equipped**	**Total Personnel**
Agriculture Resource	Agent	County Extension Svc.	S1	S1	S1
Building Inspector	Professional	Zoning and Inspections	C1	C1	C1
Emergency Manager	Certified Professional	Emergency Management	C2	C2	C2
Emergency Staff	Professional(s)	Emergency Management	C5	C5	C5
Emergency Medical Personnel	Professional(s)	Fire/Rescue	M6	M6	M6
Fire Personnel	Professional(s)	Fire Dept.	M29	M29	M29
Floodplain Manager	Engineer(s)	Engineering/Public Works	C1	C1	C1
GIS Specialist	Professional(s)	Property Assessor/IT	0	0	0
Government Elected	Elected Officials	Mayor/Council	6	6	6
Government Administration	Employees	Jurisdiction	1	1	1
Grant writer	Professional(s)	Emergency Management	0	0	0
Hazards Analysis Mgr.	Professional(s)	Emergency Management	C1	C1	C1
Hazmat Team	Professional(s)	Fire	C6	C6	C6
Information Systems	Certified Professional	IT department	1	1	1
Land Use/Management	Engineer(s)/Planners	State/Local Planning	C1	C1	C1
Law Enforcement	Sheriff, Police, Trooper	Sheriff/Police Department	C1	C1	C1
Medical Practioners	Professional(s)	Medical Facilities	1	1	1
Public Works	Directors/Engineers	Public Works	3	3	3
Public Communication	911 specialists	E-911	C43	C43	C43
Public Utilities	Professionals	Public Utilities	1	1	1
Surveyor	Professional	Contracted	1	1	1

The Fiscal Capability survey identifies whether the jurisdiction has access to or is eligible to use certain financial resources for hazard mitigation.

Town of Wilton Fiscal Capabilities						
		Eligible			
Financial Resources	Description	Yes	No	TBD	Used
Community Grants	Community Development Block Grants (CDBG)	X			Y
	Hazard Mitigation Planning Grants (HMPG)	X			
	PDM for disaster resistant universities		X		
	PDM Grants for communities	X			Y
	Department of Health Grants		X		
	Department of Justice Grants	X			Y
	Department of Agriculture Grants		X		
	Department of Energy Grants		X		
	Department of Education Grants		X		
	Fire department grants		X		
	Flood Management Grants (FMA)	X			N
	Homeland Security Grant Program (HSGP)		X		
	Repetitive Flood Claims Grants (RFC)		X		
	Severe Repetitive Loss Grants (SRL)		X		
	Private foundation grants	X			N
	Private business/industry grants	X			N
Debt Procurement	Incur debt through special tax/revenue bonds		X		
Dept Procurement	Incur debt through private activity bonds		X		
Impact Fees	Developer fees for new developments	X			Y
Jurisdiction Bonds	Incur debt through general obligation bonds		X		
Project Funding	Capital improvement	X			Y
Spending Restrictions	Withhold spending in hazard-prone areas	X			N
Special Taxes	Authority to levy taxes for specific purposes	X			Y
Utility Fees	Fees for water, sewer, gas, or electric service	X			Y

Mitigation Goals and Objectives

The Mitigation Committee believes that each of the following goals, objectives, and action items is necessary to begin to address hazard issues in Town of Wilton. The following goal statements represent a broad target for Town of Wilton and its municipalities to achieve through the implementation of their own specific Mitigation Action Plans before the next Plan update.

GOALS	OBJECTIVES
All Hazards Goal: Mitigate the impact of all hazards on the Town of Wilton	Objective AH.1: Improve the Town of Wilton's information distribution and warning capabilities for all hazards to citizens Objective AH.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to all hazards Objective AH.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from all hazards

Flooding Hazard Goal: Mitigate the impact of flooding on the Town of Wilton	Objective FL.1: Improve the Town of Wilton's flood warning and information distribution to citizens Objective FL.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to flood events. Objective FL.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from flood events
High Wind Hazard Goal: Mitigate the impact of High Winds on the Town of Wilton	Objective HW.1: Improve the Town of Wilton's High Winds warning and information distribution to citizens Objective HW.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to High Winds events. Objective HW.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from High Winds events
Ice/Snow Hazard Goal: Mitigate the impact of Ice/Snow on the Town of Wilton	Objective IS.1: Improve the Town of Wilton's Ice/Snow warning and information distribution to citizens Objective IS.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to Ice/Snow events. Objective IS.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from Ice/Snow events
Wildfire Hazard Goal: Mitigate the impact of Wildfires on the Town of Wilton	Objective WF7.1: Improve the Town of Wilton's Wild-land Fire warning and information distribution to citizens Objective WF.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to Wild-land Fire events Objective WF.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from Wild-land Fire events
Urban Fire Hazard Goal: Mitigate the impact of Urban Fires on the Town of Wilton	Objective UF.1: Improve the Town of Wilton's Urban Fire warning and information distribution to citizens Objective UF.2: Improve the Town of Wilton's 1st responder capabilities to prepare for and respond to Urban Fire events Objective UF.3: Improve the Town of Wilton's capability to prepare for, respond to and recover from Urban Fire events

Multi-Jurisdictional Mitigation Actions

The actions listed in each jurisdiction's Mitigation Action Plan serve as an easily understood menu of mitigation policies and projects for local decision-makers who want to quickly review their jurisdiction's respective element of the countywide Plan. In preparing the individual MAP's, each jurisdiction considered their overall hazard risk and capability to mitigate identified hazards as recorded through the risk and capability assessment process and to meet the countywide mitigation goals and the unique needs of their community.

Each jurisdiction participating in this Plan is responsible for implementing specific mitigation actions as prescribed in the adopted Mitigation Actions. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to assign

responsibility and accountability and increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Mitigation Actions Prioritizing

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment. The original STAPLEE factors have been modified to enhance the prioritization process. The enhancements include adding life, property and economic items to the Social category and implementing weighting factors to Social and Economic categories. A weighting factor of 3 is used for loss of life and a weighting factor of 1 through nine is used for Economic impact of the hazard occurrence. A weighting factor of 2 is used for cost/benefit items. The table used for prioritization is at the end of this section.

Prioritizing mitigation actions for each jurisdiction was based on the "STAPLEE" process. "STAPLEE" uses multiple factors under the categories of Social, Technical, Administration, Legal, Economic and Environment			
Issue	**1**	**2**	**3**
Social High Community Acceptance	Potential objection from public and/or very expensive	Unknown if objectionable, or costs may be significant	Not objectionable and low/no costs
High Effect on saving lives	Life saving impact is low	Life saving impact is moderate	Life saving impact is significant
High Effect on reducing property loss	Effect on reducing property loss is low	Effect on reducing property loss is moderate	Effect on reducing property loss is significant
Effect on reducing economic loss	Effect on reducing economic loss is low (factor 1-3)	Effect on reducing economic loss is moderate (factor 4-6)	Effect on reducing economic loss is significant (factor 7-9)
Technical Is Technical Feasibility	Technology not currently existing	Emerging or untested technology or unknown	Technology readily available
Is a Long-Term Solution	No, is not effective in helping reduce losses in the long term	Potentially or unknown	Yes, is effective in helping reduce losses in the long term
No Secondary Impacts	Yes, likely to create secondary problems	Potentially or unknown	No, unlikely to create secondary problems
Administrative Little Staffing is required	Need to hire a permanent employee(s)	Potentially need to hire a temporary employee(s) or unknown.	Do not have to hire

Funding Potential is high	No obvious source of funding available and action has significant cost impact	Limited or unknown funding available	Little or no funding required or funding can be readily obtained
Low Maintenance and Operations	The action is likely to require high level of ongoing maintenance	Unknown or action has the potential for moderate ongoing maintenance	Action requires limited or no ongoing maintenance
Political High Political Support	Local Elected Official likely to be contentious	Local Elected Official may be controversial	Local Elected Official likely to be supportive
Local Champion available	Unlikely there is a Local Elected Official to support	Uncertain if there is a Local Elected Official to champion	A Local Elected Official is likely to support and champion
High Public Support	Public Political support is unlikely	Public Political support is uncertain	Public Political support is likely
Legal State Authority Exists	No legal state authority exists	Legal state authority is unclear, uncertain or adoption is in progress	Legal state authority exists
Local Authority Exists	No legal authority exists	Legal authority is unclear, uncertain or adoption is in progress	Legal authority exists
Potential Legal Challenge is high	High likelihood of legal challenge by stakeholders	Moderate likelihood of legal challenge by stakeholders	Low likelihood of legal challenge by stakeholders
Economic High Action Benefit	Low benefit to the jurisdiction from the action	Moderate benefit to the jurisdiction from the action	High benefit to the jurisdiction from the action
Low Action Cost	High cost to implement action	Moderate cost to implement action	Low cost to implement action
High Economic Contribution	Low contribution to other community economic goals	Moderate contribution to other community economic goals	High contribution to other community economic goals
Outside Funding is Required	Likely for action to be delayed pending outside sources of funding	Possible for action to be delayed pending outside sources of funding	Unlikely for action to be delayed pending outside sources of funding
Environmental Low Land/Water Effect	High likelihood of negative consequences to land/water	Moderate likelihood of negative consequences to land/water	Low likelihood of negative consequences to land/water
Low Endangered Species Effect	High likelihood of potential negative consequences to endangered species	Moderate likelihood of negative consequences to endangered species	Low likelihood of negative consequences to endangered species
Low Environmental Effect	No, project is not consistent with jurisdiction environmental goals	Possible, project is consistent with jurisdiction environmental goals	Yes, project is consistent with jurisdiction environmental goals

Federal Law Compliant	No	Uncertain	Yes

Mitigation Actions

Each jurisdiction participating in this Plan should review the specific mitigation actions as prescribed in the adopted Mitigation Action Plan. In each Mitigation Action Plan, every proposed action is assigned to a specific local department or agency in order to increase the likelihood of subsequent implementation. This approach enables individual jurisdictions to update their unique mitigation strategy as needed without altering the broader focus of the countywide Plan. The separate adoption of locally specific actions also ensures that each jurisdiction is not held responsible for monitoring and implementing the actions of other jurisdictions involved in the planning process.

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH1f	Assist citizens to develop emergency preparedness, response and recovery plans.	MFD, Town Govt	Local Funds	1,104 55,175	2022 2027	88
HW1c	Educate special needs/education/local populations on High Wind preparedness and response	MFD, NWS, EMA Town Govt	Local Funds	2,207 165,525	2022 2027	87
HW1c	Distribute High Wind preparedness information	NWS, MFD, EMA Town Govt	Local Funds	1,104 55,175	2022 2027	87
AH1e	Distribute safe room and Shelter in place information to schools, special needs and the public	City Govt. SCSO, BOE	Local Funds	1,104 55,175	2022 2027	84
UF1a	Educate school, special needs and the community populations on fire safety and response	MFD, BOE	Grant, Local Funds	2,207 55,175	2022 2027	84
UF1b	Educate school, special needs and the community population on fire extinguisher use	MFD Town Govt	Local Funds	1,104 55,175	2022 2027	84
UF1c	Assist fire departments in obtaining fire prevention program materials	EMA, MFD Town Govt	Local Funds	1,104 55,175	2022 2027	84
AH3x	Develop a community shelter program for mobile home parks	City Govt	Grant, Local Funds	2,207 55,175	2022 2027	83
UF3d	Develop fire plans for all major businesses and critical facilities	MFD Town Govt	Local Funds	5,518 220,700	2022 2027	83
TR1b	Educate schools, special needs and government officials on procedures for handling suspicious mail	BOE, SCSO, Town Govt	Local Funds, Grant	1,104 55,175	2022 2027	82
AH3r	Participate in NFIP's Cooperating Technical Partners Program (CTP)	City Govt	Local Funds	1,104 55,175	2022 2027	81
FL3e	Inspect and maintain natural drainage channels to clear beaver dams and debris	City Govt, MFD	Grant, Local Funds	5,518 55,175	2022 2027	81

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
HW3a	Adopt/enforce comprehensive Building Code legislation	City Govt	Local Funds	1,104 55,175	2022 2027	81
UF3g	Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	City Govt, MFD	Local Funds	1,104 55,175	2022 2027	81
AH3l	Assist schools in implementing an emergency telephone line	City Govt, BOE Town Govt	Local Funds	1,104 55,175	2022 2027	80
FL1a	Distribute flood awareness and preparedness literature at events	MFD, Town Govt	Local Funds	2,207 55,175	2022 2027	80
FL2a	Obtain PPE for all personnel responding to flood events	MFD, Town Govt	Grant, Local Funds	5,518 55,175	2022 2027	80
UF2c	Obtain/maintain fire fighting supplies at all fire departments	MFD	Grant, Local Funds	55,175 220,700	2022 2027	80
AH3a	Adopt the National Incident Management System (NIMS)	City Govt	Local Funds	1,104 55,175	2022 2027	79
AH3j	Maintain a supplier list of food, medicines, water and fuel vendors	City Govt	Local Funds	1,104 55,175	2022 2027	79
AH3u	Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	City Govt, EMA, ADPH, ADHR,	Local Funds	1,104 55,175	2022 2027	79
AH3y	Insure building code compliance Inspections are conducted on construction projects	City Govt	Local Funds	1,104 55,175	2022 2027	79
IL3c	Require businesses to refuse large quantity sales of precursors	City Govt	Local Funds	1,104 55,175	2022 2027	79
WF1b	Educate business/schools/local populations on the causes of wild land fires	AFC, MFD Town Govt	Local Funds	2,207 55,175	2022 2027	79
WF1c	Educate school/special needs/local populations on preparedness and response to a wild-land fire	AFC, MFD, BOE	Local Funds	1,104 55,175	2022 2027	79
WF1f	Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	City Govt. MFD	Local Funds	1,104 55,175	2022 2027	79
AH1b	Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	MFD, Town Govt	Local Funds	1,104 55,175	2022 2027	78
AH3t	Annually review and update hazard related legislation	City Govt	Local Funds	1,104 55,175	2022 2027	78
UF3c	Ensure fire inspections are regularly conducted at businesses and industry	MFD Town Govt	Local Funds	1,104 220,700	2022 2027	78
FL3a	Participate in the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 55,175	2022 2027	77
HW3g	Adopt/enforce mobile home and mobile home park tie down and skirting legislation	City Govt	Local Funds	1,104 55,175	2022 2027	77
IL3a	Join/participate in local state and federal drug task forces	SCSO	HLS Grant, Local Funds	1,104 55,175	2022 2027	77

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
UF3b	Ensure that fire codes are rigidly enforced with citations issued for violations.	MFD, SCSO, Town Govt	Local Funds	1,104 220,700	2022 2027	77
AH2c	Train 1st responders in search and rescue techniques	SCSO, MFD Town Govt	Grant, Local Funds	5,518 110,350	2022 2027	76
AH3o	Assist businesses, schools, special needs and government facilities to post evacuation routes	City Govt, SCSO	Local Funds	1,104 55,175	2022 2027	76
AH3p	Develop/implement/maintain the jurisdictions Mitigation Action Plan	City Govt, MFD, SCSO	Grant, Local Funds	1,104 55,175	2022 2027	76
AH3s2	Develop strategies to prevent loss of public records	City Govt	Local Funds	1,104 55,175	2022 2027	76
FL3h	Educate developers on Watershed, Floodplain and wetland development restrictions	City Govt	Local Funds	2,207 55,175	2022 2027	76
HW2c	Train 1st responders to respond to High Wind events	MFD, SCSO Town Govt	Grant, Local Funds	5,518 55,175	2022 2027	76
WF1d	Develop a plan to distribute wildfire awareness and prevention information	AFC, MFD Town Govt	Local Funds	1,104 55,175	2022 2027	76
WF3g	Maintain contact with the Forestry office that issues daily "fire potential" reports	AFC, MFD Town Govt	Local Funds	1,104 55,175	2022 2027	76
PD2d	Obtain supplies and materials needed to vaccinate and prophylax 1st responders	City Govt, ADPH, EMA	Grant, Local Funds	5,518 55,175	2022 2027	75
UF2a	Obtain fire PPE for all personnel responding to fire incidents	MFD	Grant, Local Funds	82,207 220,700	2022 2027	75
UF2d	Train all fire responders in fire combat techniques annually	MFD	Grant Local Funds	5,518 55,175	2022 2027	75
UF3a	Ensure that NFPA standards and codes are followed.	City Govt, MFD	Local Funds	1,104 55,175	2022 2027	75
WF2g	Identify Private 1st responders and contractors to assist in wild-land fire response	MFD Town Govt	Local Funds	1,104 55,175	2022 2027	75
AH2b	Evaluate/maintain 1st responders emergency kits annually	MFD, Town Govt	Local Funds	2,207 55,175	2022 2027	74
AH2g	Train 1st responders and officials on the National Incident Management System (NIMS)	City Govt, SCSO, MFD	DHL Grant, Local Funds	5,518 55,175	2022 2027	74
AH2h	Train 1st responders and officials in Emergency Operations Center Ops and the EOP	City Govt, SCSO, MFD	Local Funds	2,207 55,175	2022 2027	74
AH2i	Train 1st responders/officials in performing damage assessments.	City Govt, MFD, EMA	Local Funds	2,207 55,175	2022 2027	74

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3d	Obtain additional Emergency Operations Center equipment and software	EMA, Town Govt	Grant, Local Funds	2,207 55,175	2022 2027	74
AH3k	Obtain disaster supply kits for schools/special needs facilities	City Govt, MFD, BOE,	Grant, Local Funds	12,207 55,175	2022 2027	74
HW1a	Obtain NOAA weather radios for schools, government and special needs facilities	MFD, BOE Town Govt	Grant, Local Funds	12,207 55,175	2022 2027	74
HW2b	Obtain 1st responder PPE and supplies for High Wind response	MFD, Town Govt	HLS Grant, Grant	55,175 55,175	2022 2027	74
HW3d	Develop a debris clearance program that can be utilized citywide	City Govt, EMA, Co Engr	Grant, Local Funds	2,207 55,175	2022 2027	74
HW3h	Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	City Govt	Local Funds	2,207 155,175	2022 2027	74
WF1a	Educate homeowners and businesses on wildfire fuels reduction	AFC, MFD Town Govt	Local Funds	1,104 55,175	2022 2027	74
AH1d	Obtain backup power systems for audible warning devices	City Govt. EMA	Grant	22,070 110,350	2022 2027	73
AH2a	Obtain/distribute interoperable radios for all 1st responders	MFD, Town Govt	Grant, Local Funds	1,104 55,175	2022 2027	73
AH2e	Train 1st responders on responding to mass casualty events	MFD, SCSO Town Govt	Grants, DHL Grants	2,207 55,175	2022 2027	73
AH3s1	Assist businesses in developing Business Continuity Plans	City Govt	Local Funds	2,207 55,175	2022 2027	73
FL3d	Participate in the NFIP Community Rating System	City Govt.	Local Funds	1,104 55,175	2022 2027	73
HW2d	Exercise a High Wind event with 1st responders at least annually	City Govt, MFD, SCSO	Local Funds	5,518 55,175	2022 2027	73
IS3d	Establish snow and ice response and removal methods	MFD, Town Govt	Local Funds	1,104 55,175	2022 2027	73
PD3i	Maintain contact with state and federal agencies regarding biological and disease threats.	ADPH, SCSO, MFD, Town Govt	Local Funds	1,104 55,175	2022 2027	73
UF2h	Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	MFD	Grant, Local Funds	12,207 55,175	2022 2027	73
AH1c	Obtain and/or expand warning sirens to for all uncovered areas (2 locations)	City Govt, EMA	Grant, Local Funds	44,140 441,400	2022 2027	72

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
AH3e1	Assist non-governmental critical facilities to obtain emergency generators/pigtails	City Govt, MFD, SCSO	Grant, Local Funds	12,207 1,103,500	2022 2027	72
AH3o1	Obtain signage to direct the public evacuation during hazard events	City Govt, MFD, SCSO	Grant, Local Funds	2,207 55,175	2022 2027	72
FL3l	Identify alternative access points for single access neighborhoods	City Govt SCSO	Local Funds	1,104 55,175	2022 2027	72
FL3m	Acquire signage to indicate water depth at flooding points	City Govt, MFD	Grant, Local Funds	2,207 55,175	2022 2027	72
HW1g	Train citizens in weather observation in conjunction with the National Weather Service (NWS)	NWS, MFD, EMA	Local Funds	4,414 55,175	2022 2027	72
UF2b	Train firefighters to obtain for state and national certifications	MFD	Grant, Local Funds	12,207 55,175	2022 2027	72
UF3e	Adopt/enforce sprinkler and smoke alarm legislation for all necessary facilities	City Govt, MFD	Local Funds	1,104 551,750	2022 2027	72
WF3h	Adopt/enforce wildfire and burning restriction legislation	City Govt	Local Funds	1,104 551,750	2022 2027	72
FL3a5	Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	City Govt	Local Funds	5,518 55,175	2022 2027	71
HW1g	Develop a plan to provide weather radios to low income residents	City Govt, MFD	Grant, Local Funds	5,518 55,175	2022 2027	71
UF3i	Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	City Govt	Local Funds	1,104 55,175	2022 2027	71
UF3k	Obtain smoke detectors and provide free to residents in need.	City Govt, MFD	Grant, Local Funds	5,518 110,350	2022 2027	71
AH2d	Exercise 1st responder and hospital Mass Casualty plans regularly.	MFD, SCSO Town Govt	Local Funds	5,518 55,175	2022 2027	70
AH3i1	Evaluate shelter requirements annually & develop plans to add necessary shelters	ARC, Town Govt, EMA, ADPH	Grant Local Funds	12,207 55,175	2022 2027	70
FL3c3	Adopt/enforce mobile home legislation to restrict development of lots within the 100-year flood plain.	City Govt	Local Funds	1,104 55,175	2022 2027	70
FL3f	Identify roadways, culverts and bridges damaged by flooding	City Govt	, Local Funds	2,207 55,175	2022 2027	70
FL3g	Update Town Land Use Plan to identify areas where development should be restrictive	City Govt	Local Funds	1,104 55,175	2022 2027	70

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
FL2b	Train all 1st responders on repetitive flooding areas and structures	MFD, Town Govt	Grant, Local Funds	5,518 55,175	2022 2027	69
FL3a4	Educate developers, builders and the public on the location of NFIP designated flood prone areas	City Govt	Local Funds	1,104 55,175	2022 2027	69
FL3f3	Obtain/Install barriers to block flooding roadways and bridges	MFD, SCSO Town Govt	HLS Grant, Local Funds	5,518 55,175	2022 2027	69
WF2c	Train fire 1st responders in wild-land fire response techniques	MFD, AFC	Local Funds	5,518 55,175	2022 2027	69
AH3s	Obtain funds for critical government departments to develop Continuity of Operations Plans	City Govt	Grant, Local Funds	20,967 55,175	2022 2027	68
WF2e	Obtain DNR compatible radios for interoperable communications.	City Govt, MFD,	Grant, HLS Grant	12,207 55,175	2022 2027	68
FL3a1	Adopt/enforce an NFIP flood plain management plan	City Govt	Local Funds	1,104 55,175	2022 2027	67
FL3a2	Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	City Govt	Local Funds	1,104 55,175	2022 2027	67
HW3e	Obtain funding to build mobile home community storm shelters	City Govt, EMA	Grant Local Funds	55,175 165,525	2022 2027	67
UF1d	Obtain a fire education-training trailer for the jurisdiction.	MFD	Grant, Local Funds	55,175 331,050	2022 2027	67
UF3f	Obtain fire equipment to combat fires where water hydrants are non-existent	MFD Town Govt	Grant, Local Funds	110,350 551,750	2022 2027	67
AH3e	Obtain/install emergency generators or “pigtails” for critical government facilities (City Hall, Pump Station)	City Govt, MFD, SCSO	Grant, Local Funds	33,105 331,050	2022 2027	66
UF3h	Acquire and install six inch water mains/hydrants Town wide	City Govt	Grant, Local Funds	331,050 1,103,500	2022 2027	65
WF2f	Exercise fire response regularly for residences, businesses and industry	MFD	Local Funds	5,518 110,350	2022 2027	65
FL3a3	Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	City Govt	Local Funds	1,104 55,175	2022 2027	64
FL3f	Develop a storm water management plan for the jurisdiction	City Govt	Grant Local Funds	5,518 55,175	2022 2027	64

Hazard Goal & Action	Action/Project Description	Responsibility	Funding Source	Estimated Cost/ Benefit	Start/ End Date	Priority
WF2b	Obtain specialized equipment to combat wild-land fires.	MFD Town Govt	Grant, State Grant	55,175 551,750	2022 2027	64
FL3e	Adopt/enforce land use flood plain wetlands and watershed zoning	City Govt	Local Funds	1,104 55,175	2022 2027	63
FL3g	Adopt/enforce storm water legislation to reduce runoff from developments.	City Govt	Local Funds	1,104 55,175	2022 2027	63
FL3i	Obtain equipment to build water flow and water retention areas to mitigate flooding	City Govt	Grant, Local Funds	55,175 551,750	2022 2027	61
FL3f1	Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	City Govt	Grant, Local Funds	55,175 220,700	2022 2027	59
FL3f2	Obtain equipment to mitigate bridge, culverts, and roadway flooding	City Govt	Grant, Local Funds	55,175 55,175	2022 2027	59

"STAPLEE" Mitigation Actions Prioritization Table

	Social				Technical			Administrative			Political			Legal			Economic				Environmental					Prioritization
Action/Project Description	High Community Acceptance	High effect on Loss of Life-WF=3	High Effect on Property Loss WF=2	High Effect on Economic Loss WF=1-9	Is Technical Feasibility	Is a Long-Term Solution	No Secondary Impacts	Little Staffing required	Funding Potential is High	Low Maintenance/Operations	High Political Support	Has a Local Champion	Has Public Support	State Authorized	Local Authority Exists	Potential Legal Challenge is High	Action Benefit is High WF=2	Action Cost is Low WF=2	High Economic Goal Contribution	Outside Funding Not Required	Land/Water Effect is Low	Low Endangered Species Effect	HAZMAT Waste Site Effect is Low	Environmental Effect is low	Federal law Compliant is High	Total Priority Score
Assist citizens to develop emergency preparedness, response and recovery plans.	3	6	6	9	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	2	3	3	3	3	3	88
Obtain/install emergency generators or "pigtails" for critical government facilities (City Hall, Pump Station)	3	9	6	9	3	3	3	3	3	3	2	2	3	3	3	2	6	2	2	2	3	3	3	3	3	87
Educate special needs/education/local populations on High Wind preparedness and response	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87

Distribute High Wind preparedness information	3	6	4	8	3	2	3	2	3	2	3	3	3	3	3	3	6	6	3	3	3	3	3	3	3	87
Assist non-governmental critical facilities to obtain emergency generators/pigtails	3	9	6	9	3	3	3	3	3	3	3	2	2	3	3	2	4	2	4	1	3	3	3	3	3	86
Evaluate shelter requirements annually & develop plans to add necessary shelters	3	9	6	9	3	3	3	3	3	3	3	2	3	3	3	2	4	2	2	1	3	3	3	3	3	85
Distribute safe room and Shelter in place information to schools, special needs and the public	3	9	0	9	3	3	3	2	3	2	3	2	2	3	3	3	6	6	2	2	3	3	3	3	3	84
Develop a community shelter program for mobile home parks	3	9	6	9	3	3	2	2	3	2	2	2	2	3	3	3	6	2	4	2	2	3	3	2	3	84
Educate school, special needs and the community populations on fire safety and response	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Educate school, special needs and the community population on fire extinguisher use	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Assist fire departments in obtaining fire prevention program materials	3	6	4	6	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	84
Develop fire plans for all major businesses and critical facilities	2	6	6	6	3	2	3	2	2	2	3	2	2	3	3	3	6	6	3	3	3	3	3	3	3	83
Educate schools, special needs and government officials on procedures for handling suspicious mail	3	9	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	82
Participate in NFIP's Cooperating Technical Partners Program (CTP)	2	3	4	9	3	3	3	2	3	2	2	2	2	3	3	2	6	6	4	3	3	2	3	3	3	81
Inspect and maintain natural drainage channels to clear beaver dams and debris	2	6	6	5	2	2	2	3	2	2	2	2	2	3	3	2	6	6	6	2	3	3	3	3	3	81
Adopt/enforce comprehensive Building Code legislation	2	6	6	8	3	3	2	1	3	1	2	3	2	3	3	2	4	6	3	3	3	3	3	3	3	81
Enforce legislation that fire extinguishers are clearly marked, available and regularly tested	2	6	4	6	3	2	3	1	3	2	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	81
Assist schools in implementing an emergency telephone line	3	3	2	9	2	2	3	3	3	3	3	2	3	3	3	3	6	4	2	3	3	3	3	3	3	80
Distribute flood awareness and preparedness literature at events	2	6	2	5	3	2	3	2	3	2	3	3	2	3	3	3	6	6	3	3	3	3	3	3	3	80
Obtain PPE for all personnel responding to flood events	2	6	4	5	3	3	3	2	3	2	3	3	3	3	3	3	4	4	4	2	3	3	3	3	3	80
Obtain/maintain fire fighting supplies at all fire departments	2	6	6	6	3	2	3	2	3	2	3	3	2	3	3	3	4	4	3	2	3	3	3	3	3	80

Adopt the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	3	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	3	79
Maintain a supplier list of food, medicines, water and fuel vendors	2	6	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	6	2	3	3	3	3	3	3	3	79
Ensure that all mutual aid shelter, response, mass casualty and recovery agreements are current	2	3	2	9	3	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	3	79
Insure building code compliance Inspections are conducted on construction projects	2	6	6	9	3	3	3	1	2	1	2	2	2	3	3	3	4	4	3	3	2	3	3	3	3	3	79
Require businesses to refuse large quantity sales of precursors	3	3	2	4	3	3	3	3	3	3	3	3	3	3	2	6	6	2	3	3	3	3	3	3	3	3	79
Educate business/schools/local populations on the causes of wild land fires	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	3	79
Educate school/special needs/local populations on preparedness and response to a wild-land fire	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	3	79
Publish outdoor burn ban info in area newspapers during Wild-land fire seasons.	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	3	79
Schedule regular maintenance and testing of hazard warning units (Monthly Testing)	3	9	0	9	3	3	2	1	3	1	3	3	3	3	3	3	6	4	2	2	2	2	3	2	3	3	78
Annually review and update hazard related legislation	2	3	2	9	2	2	3	3	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	3	78
Ensure fire inspections are regularly conducted at businesses and industry	2	6	6	6	3	2	3	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	3	78
Participate in the National Flood Insurance Program (NFIP)	3	0	4	5	3	3	3	3	2	3	2	2	2	3	3	3	6	6	3	3	3	3	3	3	3	3	77
Adopt/enforce mobile home and mobile home park tie down and skirting legislation	2	6	4	8	3	3	3	1	3	1	2	3	2	3	3	2	4	4	2	3	3	3	3	3	3	3	77
Join/participate in local state and federal drug task forces	3	3	2	2	3	3	3	2	3	3	3	3	3	3	3	3	6	6	2	3	3	3	3	3	3	3	77
Ensure that fire codes are rigidly enforced with citations issued for violations.	2	6	6	6	3	2	2	1	2	1	3	3	2	3	3	3	4	4	3	3	3	3	3	3	3	3	77
Train 1st responders in search and rescue techniques	2	9	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	3	76
Assist businesses, schools, special needs and government facilities to post evacuation routes	2	3	2	9	2	2	3	2	3	3	2	1	2	3	3	2	6	6	2	3	3	3	3	3	3	3	76

Develop/implement/maintain the jurisdictions Mitigation Action Plan	2	3	4	9	2	3	3	2	3	2	2	2	2	3	3	3	4	4	4	2	2	3	3	3	3	76
Develop strategies to prevent loss of public records	2	0	4	9	3	3	3	2	3	2	2	2	2	3	3	3	4	4	4	3	3	3	3	3	3	76
Educate developers on Watershed, Floodplain and wetland development restrictions	2	3	4	5	3	2	3	2	3	2	2	2	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Train 1st responders to respond to High Wind events	3	6	0	8	3	2	3	2	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	76
Develop a plan to distribute wildfire awareness and prevention information	3	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	3	2	2	2	3	76
Maintain contact with the Forestry office that issues daily "fire potential" reports	3	3	2	3	3	2	3	2	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	76
Obtain supplies and materials needed to vaccinate and prophylax 1st responders	2	3	0	4	3	2	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Obtain fire PPE for all personnel responding to fire incidents	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Train all fire responders in fire combat techniques annually	2	6	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	75
Ensure that NFPA standards and codes are followed.	2	0	4	6	3	1	3	3	3	2	3	2	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Identify Private 1st responders and contractors to assist in wild-land fire response	2	3	2	3	3	1	3	3	3	3	3	3	2	3	3	3	6	6	2	3	3	3	3	3	3	75
Evaluate/maintain 1st responders emergency kits annually	2	3	0	9	3	1	3	3	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	74
Train 1st responders and officials on the National Incident Management System (NIMS)	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders and officials in Emergency Operations Center Ops and the EOP	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Train 1st responders/officials in performing damage assessments.	2	3	0	9	3	3	3	2	2	2	2	2	2	3	3	3	4	6	2	3	3	3	3	3	3	74
Obtain additional Emergency Operations Center equipment and software	2	6	4	9	3	2	3	2	1	1	2	2	2	3	3	3	4	2	4	1	3	3	3	3	3	74
Obtain disaster supply kits for schools/special needs facilities	3	3	0	9	2	2	3	2	2	2	3	2	3	3	3	3	6	4	2	2	3	3	3	3	3	74
Obtain NOAA weather radios for schools, government and special needs facilities	3	6	0	8	3	3	3	2	2	1	2	2	3	3	3	3	4	4	2	2	3	3	3	3	3	74

Obtain 1st responder PPE and supplies for High Wind response	2	6	0	8	3	2	3	1	3	2	3	3	2	3	3	3	4	4	2	2	3	3	3	3	3	74
Develop a debris clearance program that can be utilized citywide	3	0	2	8	3	3	1	1	3	2	3	3	3	3	3	3	6	6	6	3	2	2	1	2	2	74
Adopt/enforce legislation to control construction standards of mobile homes moved into the city.	2	6	2	8	3	3	3	1	3	1	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	74
Educate homeowners and businesses on wildfire fuels reduction	2	6	2	3	3	2	3	2	3	2	3	3	3	3	3	3	6	6	2	3	2	2	2	2	3	74
Obtain backup power systems for audible warning devices	3	9	0	9	3	3	2	1	2	1	3	3	3	3	3	3	4	2	2	1	2	2	3	3	3	73
Obtain/distribute interoperable radios for all 1st responders	2	6	2	9	3	3	3	2	2	1	2	2	2	3	3	3	4	2	2	2	3	3	3	3	3	73
Train 1st responders on responding to mass casualty events	2	6	0	9	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	73
Assist businesses in developing Business Continuity Plans	3	0	2	9	3	3	3	2	1	3	3	3	1	3	3	3	6	2	4	1	3	3	3	3	3	73
Participate in the NFIP Community Rating System	3	0	0	5	3	2	3	3	3	2	2	2	3	3	3	3	6	6	3	3	3	3	3	3	3	73
Exercise a High Wind event with 1st responders at least annually	3	6	0	8	3	2	2	2	3	2	3	2	2	3	3	2	4	4	2	2	3	3	3	3	3	73
Establish snow and ice response and removal methods	2	6	2	4	3	2	2	2	3	2	3	2	3	3	3	3	6	6	2	3	2	2	2	2	3	73
Maintain contact with state and federal agencies regarding biological and disease threats.	2	6	0	4	3	2	2	2	3	2	2	2	3	3	3	2	6	6	2	3	3	3	3	3	3	73
Train fire 1st responders to at least the "Awareness and Operations level" under OSHA 1910.120	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	73
Obtain and/or expand warning sirens to for all uncovered areas (2 locations)	3	9	0	9	3	3	2	2	3	1	3	3	3	3	3	2	4	2	2	1	2	2	2	2	3	72
Obtain signage to direct the public evacuation during hazard events	2	3	0	9	2	2	3	2	2	2	2	2	3	3	3	3	4	4	4	2	3	3	3	3	3	72
Identify alternative access points for single access neighborhoods	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Acquire signage to indicate water depth at flooding points	2	3	0	5	3	2	3	3	3	3	2	2	3	3	3	3	4	6	1	3	3	3	3	3	3	72
Train citizens in weather observation in conjunction with the National Weather Service (NWS)	2	6	0	8	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72
Train firefighters to obtain for state and national certifications	2	3	4	6	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	72

Adopt/enforce sprinkler and smoke alarm legislation for all necessary facilities	2	6	4	6	3	2	2	1	2	2	2	2	2	3	3	2	4	4	2	3	3	3	3	3	3	72
Adopt/enforce wildfire and burning restriction legislation	2	6	2	3	3	3	2	1	3	1	3	3	2	3	3	2	4	6	2	3	3	3	3	3	3	72
Obtain and maintain NFIP FIRMS to identify jurisdiction flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	3	3	3	3	3	3	71
Develop a plan to provide weather radios to low income residents	2	6	0	8	3	2	3	2	2	1	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Adopt/enforce housing code legislation to limit number of citizens in sub-standard housing	2	6	0	6	3	3	2	1	2	1	2	2	2	3	3	2	6	6	1	3	3	3	3	3	3	71
Obtain smoke detectors and provide free to residents in need.	2	6	2	6	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	71
Exercise 1st responder and hospital Mass Casualty plans regularly.	2	6	0	9	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	2	2	3	3	3	70
Adopt/enforce mobile home legislation to restrict development of lots within the 100-year flood plain.	2	6	4	5	3	3	3	1	3	1	2	2	2	3	3	2	4	4	3	3	2	2	2	2	3	70
Identify roadways, culverts and bridges damaged by flooding	3	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	6	6	1	3	3	3	3	3	3	70
Update Town Land Use Plan to identify areas where development should be restrictive	2	3	6	5	3	2	2	3	2	2	2	2	1	3	3	1	4	4	2	3	3	3	3	3	3	70
Train all 1st responders on repetitive flooding areas and structures	2	3	2	5	3	2	3	2	3	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Educate developers, builders and the public on the location of NFIP designated flood prone areas	2	3	4	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	69
Obtain/Install barriers to block flooding roadways and bridges	2	6	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	1	2	3	3	3	3	3	69
Train fire 1st responders in wild-land fire response techniques	2	6	2	3	3	2	3	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	69
Obtain funds for critical government departments to develop Continuity of Operations Plans	2	0	2	9	3	3	3	2	1	2	1	1	2	3	3	3	4	4	4	1	3	3	3	3	3	68
Obtain DNR compatible radios for interoperable communications.	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	2	3	3	3	3	3	68
Adopt/enforce an NFIP flood plain management plan	2	0	4	5	3	3	2	1	2	1	2	2	1	3	3	2	4	6	3	3	3	3	3	3	3	67
Adopt/enforce floodplain legislation to require structures be built above the NFIP BSE	2	3	6	5	3	3	2	1	2	1	1	1	2	3	3	2	4	6	3	3	2	2	2	2	3	67

Obtain funding to build mobile home community storm shelters	2	6	0	8	3	3	2	2	1	2	2	2	2	3	3	2	4	2	2	1	3	3	3	3	3	67
Obtain a fire education-training trailer for the jurisdiction.	2	6	4	6	3	3	3	2	1	2	2	1	2	3	3	3	2	1	2	1	3	3	3	3	3	67
Obtain fire equipment to combat fires where water hydrants are non-existent	2	6	2	6	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	67
Acquire and install six inch water mains/hydrants Town wide	2	9	6	6	3	3	1	1	1	2	2	1	2	3	3	2	2	2	2	1	2	2	2	2	3	65
Exercise fire response regularly for residences, businesses and industry	2	6	2	3	3	2	2	2	2	2	2	2	2	3	3	2	4	4	2	2	3	3	2	2	3	65
Educate builders, developers and the public on the National Flood Insurance Program (NFIP)	2	0	2	5	3	2	3	2	2	2	2	2	2	3	3	3	4	6	2	3	2	2	2	2	3	64
Develop a storm water management plan for the jurisdiction	2	3	2	5	3	2	2	2	2	2	2	2	2	3	3	3	4	4	2	3	2	2	2	2	3	64
Obtain specialized equipment to combat wild-land fires.	2	6	2	3	3	3	2	3	1	1	1	1	2	3	3	3	4	2	3	1	3	3	3	3	3	64
Adopt/enforce land use flood plain wetlands and watershed zoning	2	3	4	5	3	3	2	1	2	1	2	1	1	3	3	2	4	4	3	3	2	2	2	2	3	63
Adopt/enforce storm water legislation to reduce runoff from developments.	2	0	2	5	3	3	2	1	2	1	2	2	2	3	3	2	4	6	3	3	2	2	2	3	3	63
Obtain equipment to build water flow and water retention areas to mitigate flooding	2	6	6	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	61
Install/replace/maintain culverts ditches and bridges to reduce storm water flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59
Obtain equipment to mitigate bridge, culverts, and roadway flooding	2	6	4	5	3	3	1	1	1	1	2	2	2	3	3	2	2	2	2	1	2	2	2	2	3	59