



CUSSETA-CHATTAHOOCHEE COUNTY HAZARD MITIGATION PLAN UPDATE 2023 - 2028

Cusseta-Chattahoochee County Emergency
Management Agency

Cusseta-Chattahoochee County, Georgia

Hazard Mitigation Plan Update

2023 – 2028



The Unified Government of
Cusseta-Chattahoochee County

Prepared for the Cusseta-Chattahoochee County Board of Commissioners

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Cusseta-Chattahoochee County's Hazard Mitigation Plan Update 2022

This document was funded in part by the Federal Emergency Management Agency's (FEMA) Hazard Mitigation Planning Grant awarded to Cusseta-Chattahoochee County, Georgia, through the Georgia Emergency Management Agency (GEMA) to fulfill the requirements of the Federal Disaster Mitigation Act of 2000 (DMA 2000). Cusseta-Chattahoochee County's 2018 Hazard Mitigation Plan was updated by the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee and was prepared by Lux Mitigation and Planning Corp. For additional information, please contact Cusseta-Chattahoochee County Emergency Management Agency.

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Adoption Resolution – Cusseta-Chattahoochee County**RESOLUTION – CUSSETA-CHATTAHOOCHEE COUNTY, GEORGIA****CUSSETA-CHATTAHOOCHEE COUNTY HAZARD MITIGATION PLAN
2023-2028**

WHEREAS, Cusseta-Chattahoochee County and its municipalities recognize that it is threatened by several different types of natural and man-made hazards that can result in loss of life, property loss, economic hardship and threats to public health and safety; and

WHEREAS, the Federal Emergency Management Agency (FEMA) has required that every county and municipality have a pre-disaster mitigation plan in place, and requires the adoption of such plans in order to receive funding from the Hazard Mitigation Grant Program; and

WHEREAS, a Hazard Mitigation Plan is a community's plan for evaluating hazards, identifying resources and capabilities, selecting appropriate actions, and developing and implementing the preferred mitigation actions to eliminate or reduce future damage in order to protect the health, safety and welfare of the residents in the community; and

WHEREAS, the Cusseta-Chattahoochee County 2023 Hazard Mitigation Plan has been prepared in accordance with FEMA requirements at 44 CFR 201.6; and

WHEREAS,/the Plan will be updated every five years;

NOW, THEREFORE, BE IT RESOLVED, by the Board of Commissioners of Cusseta-Chattahoochee County, Georgia, that:

1) Cusseta-Chattahoochee County, Georgia, has adopted the Cusseta-Chattahoochee County 2023 Hazard Mitigation Plan; and

2) It is intended that the Plan be a working document and is the first of many steps toward improving rational, long-range mitigation planning and budgeting for Cusseta-Chattahoochee County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Board of Commissioners of Cusseta-

Chattahoochee County, Georgia, in regular session this _____ day of _____,

2023.

Chairperson

County Clerk

Preface

Mitigation Vision for the Future

Emergency Managers succeed or fail based on how well they follow the following fundamental principles of emergency management, mitigation, preparedness, response, and recovery. Purposefully, our emergency management forefathers put the word mitigation first as a “means” to prevent or minimize the effects of disasters.

Mitigation is commonly defined as sustained actions taken to reduce or eliminate long-term risk to people and property from hazards and their effects. Hazard mitigation focuses attention and resources on community policies and actions that will produce successive benefits over time. A mitigation plan states the aspirations and specific courses of action that a community intends to follow to reduce vulnerability and exposure to future hazard events. These plans are formulated through a systematic process centered on the participation of citizens, businesses, public officials, and other community stakeholders.

Mitigation forms, or should form, the very foundation of every emergency management agency. To reduce, minimize, or eliminate hazards in their communities, emergency management agencies adopt and implement mitigation practices. The Federal DMA 2000 sets the benchmark and outlines the criteria for communities with the vision to implement hazard mitigation practices in their communities.

Cusseta-Chattahoochee County realizes the benefits achieved by the development and implementation of mitigation plans and strategies in their community. Cusseta-Chattahoochee County’s elected officials, public safety organizations, planners, and many others have proven that by working together towards the development and implementation of this plan, they can reduce the loss of life and property in their communities.

The jurisdictions covered by this plan include the following:

Cusseta-Chattahoochee County

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Chapter One

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Introduction

Summary of Updates for Chapter One

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Cusseta-Chattahoochee County Hazard Mitigation Plan 2018.

Chapter 1 Section	Updates
Introduction	<ul style="list-style-type: none">• Identification of Mitigation Goals
Authority	<ul style="list-style-type: none">• Verbiage updated
Funding	<ul style="list-style-type: none">• Verbiage updated
Scope	<ul style="list-style-type: none">• Verbiage updated
Purpose	<ul style="list-style-type: none">• Verbiage updated
Consistency with Federal Guidelines	<ul style="list-style-type: none">• Verbiage updated
Plan Review	<ul style="list-style-type: none">• Verbiage updated• Updated mitigation meeting dates for 2023 planning process
Hazard Mitigation Plan Update Committee	<ul style="list-style-type: none">• Updated committee list with the 2023 planning participants• Updated to meet Federal guidelines
Public Participation	<ul style="list-style-type: none">• Updated to match the 2023 planning process
Multi-Jurisdictional Considerations	<ul style="list-style-type: none">• Updated with requirement descriptions
Incorporation of Existing Plans, Studies, and Resources	<ul style="list-style-type: none">• Updated with new plan, study, and resource incorporations

Introduction

The Cusseta-Chattahoochee County Hazard Mitigation Plan Update is the first phase of a multi-hazard mitigation strategy for the entire community. This Plan encourages cooperation among various organizations and crosses political sub-divisions. As written, this Plan fulfills the requirements of the Federal DMA 2000. DMA 2000 provides federal assistance to state and local emergency management agencies and other disaster response organizations to reduce damage from disasters. The Act is administered by GEMA and FEMA.

It is important that state and local government, public-private partnerships, and community citizens can see the results of these mitigation efforts; therefore, the goals and strategies need to be achievable. Cusseta-Chattahoochee County's Hazard Mitigation Plan Update Committee adopted the following goals during plan development:

GOAL 1

Maximize the use of all resources by promoting intergovernmental coordination and partnerships in the public and private sectors

GOAL 2

Harden communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective

GOAL 3

Reduce and, where possible, eliminate repetitive damage, loss of life and property from disasters

GOAL 4

Bring greater awareness throughout the community about potential hazards and the need for community preparedness

This plan complies with all requirements and scope of work as described in Cusseta-Chattahoochee County's Hazard Mitigation Grant application.

Authority

In the past, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The DMA 2000 is the latest legislation to improve the planning aspect of that process; it reinforces the importance of mitigation planning and emphasizes planning for disasters before they occur. The DMA 2000 establishes a pre-disaster hazard mitigation program and designates new requirements for the national post-disaster Hazard Mitigation Grant Program (HMGP). Section 322 identifies the new requirements for planning activities and increases the amount of HMGP funds available to states that have developed a comprehensive mitigation plan prior to the disaster.

State and local communities must have an approved mitigation plan in place prior to receiving post-disaster HMGP funds. Local mitigation plans must demonstrate that their proposed mitigation measures are based on a sound planning process that accounts for the risk to and the capabilities of the individual communities. To implement the new DMA 2000 requirements, FEMA prepared an Interim Final Rule, published in the Federal Register on February 26, 2002, at 44 CFR Parts 201 and 206, which establishes planning and funding criteria for states and local communities.

Developed in accordance with current state and federal rules and regulations governing local hazard mitigation plans, Cusseta-Chattahoochee County's Updated Hazard Mitigation Plan will be brought forth to each participating jurisdiction in Cusseta-Chattahoochee County to be formally adopted. The Plan shall be routinely monitored and revised to maintain compliance with the following provisions, rules, and legislation:

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); and

FEMA's Interim Final Rule published in the Federal Register on February 26, 2002, at 44 CFR Part 201.

Scope

The scope of the Cusseta-Chattahoochee County Hazard Mitigation Plan Update encompasses all areas of Cusseta-Chattahoochee County. The Plan identifies all natural and technological hazards that could threaten life and property in Cusseta-Chattahoochee County. The scope of this Plan includes both short and long-term mitigation strategies with implementation and possible sources of project funding.

The Hazard Mitigation Plan Update is organized to incorporate the requirements of Interim Final Rule 44 CFR 201.4.

Chapter One includes an overview of the Hazard Mitigation Plan Update, the overall goals of the plan, and details of the planning process as required by Interim Final Rule 44 CFR 201.4(c)(1).

Chapter Two of the Plan details the Cusseta-Chattahoochee County profile, including the demographics, municipalities, and history of the county.

Chapter Three identifies the risk assessment process, past natural hazard events with associated losses, and current natural hazard risks. Potential losses are also analyzed as required by Interim Final Rule 44 CFR 201.4(c)(2). Additionally, Chapter Three identifies and analyzes potential technological hazards faced by Cusseta-Chattahoochee County.

Chapter Four identifies Cusseta-Chattahoochee County's hazard mitigation goals and objectives, mitigation strategies and actions, and sources of potential funding for mitigation projects as required by Interim Final Rule 44 CFR 201.4(c)(3).

Chapter Five identifies the maintenance and implementation strategies for the Plan. The process for evaluation of the Hazard Mitigation Plan implementation progress is also detailed as required by Interim Final Rule 44 CFR 201.4(c)(4) and (5).

Funding

Cusseta-Chattahoochee County was awarded a Hazard Mitigation Planning Grant by FEMA through GEMA for the update of Cusseta-Chattahoochee County's 2018 Hazard Mitigation Plan. FEMA contributed 75% toward the total cost of the Plan Update. The Hazard Mitigation Planning Grant required a 25% match by Cusseta-Chattahoochee County. This match was fulfilled entirely (100%) by In-Kind contributions; time spent by county employees, local stakeholders, representatives from organizations, and citizen volunteers updating the Plan was provided instead of cash from the County's budget.

Purpose

The purpose of the Cusseta-Chattahoochee County Hazard Mitigation Plan Update is to:

- Protect life, promote safety, and preserve property by reducing the potential for future damages and economic losses that result from natural and technological hazards;
- Make communities in Cusseta-Chattahoochee County safer places to live, work, and play;
- Qualify for grant funding in both the pre-disaster and post-disaster environments;
- Speed the recovery and redevelopment process following future disaster events;
- Demonstrate a firm local commitment to hazard mitigation principles; and
- Comply with state and federal legislative requirements for local multi-jurisdictional hazard mitigation plans.

Consistency with Federal and State Mitigation Policies

The Plan is intended to enhance and complement state and federal recommendations for the mitigation of natural and technological hazards in the following ways:

- Substantially reduce the risk of life, injuries, and hardship from the destruction of natural and technological disasters on an ongoing basis;
- Create greater public awareness about the need for individual preparedness and about the need to build safer, more disaster resistant communities;
- Develop strategies for long-term community sustainability during disasters; and
- Develop governmental and business continuity plans that will continue essential private sector and governmental activities during disasters.

FEMA publishes several guidance documents for local governments on mitigating natural disasters. The updated Cusseta-Chattahoochee County Hazard Mitigation Plan recognizes, adopts, incorporates, and endorses the following principles:

- Develop a strategic mitigation plan for Cusseta-Chattahoochee County;
- Enforce current building codes;
- Develop incentives to promote mitigation;
- Incorporate mitigation of natural hazards into land use plans;
- Promote awareness of mitigation opportunities and programs throughout our community on a continual basis; and
- Identify potential funding sources for mitigation projects.

It is vital that the private sector is included in mitigation efforts that are consistent with state and federal recommendations, such as the following:

- Develop mitigation incentives with insurance agencies and lending institutions;
- Encourage the creation of a business continuity plan for the continuance of commerce during and following a disaster; and
- Partner with local businesses to educate customers about potential hazards in the community and possible mitigation ideas.

Individual citizens must be made aware of the hazards they may encounter. Additionally, they must be educated on how to protect themselves from the hazards they face. They must be shown that mitigation is an important part of reducing loss of life and property in their community. Their support is critical to the success of any mitigation effort. The updated Cusseta-Chattahoochee County Hazard Mitigation Plan supports the following FEMA recommendations regarding individual citizens:

- Become educated on the hazards that may impact your community;
- Become part of the process by supporting and encouraging mitigation programs that reduce vulnerability to disasters; and,
- An individual's responsibility is to safeguard his/her family, as well as themselves, prior to a disaster event.

Plan Review

Requirement §201.6(c)(1)

The contractor, Lux Mitigation and Planning, had the primary responsibility for collecting updated information and presenting pertinent data to the Plan Update Committee. An online, Dropbox folder was created for Cusseta-Chattahoochee County's Plan Update. The approved 2018 Hazard Mitigation Plan was uploaded to the Dropbox folder, and the link to the folder was emailed to all members of the Hazard Mitigation Plan Update Committee. Each chapter of the 2018 Plan was reviewed. Hazard vulnerability and risk assessment data was updated, as was critical infrastructure information.

Special attention and consideration were given to the review and edit of mitigation strategies listed in the 2018 Plan. The Plan Update Committee examined each strategy and determined whether the strategy had been completed, needed to be modified, was in progress, or no longer applied. The Committee was highly encouraged to create new mitigation strategies to meet the current needs of the county. Mitigation strategies from other Georgia counties were reviewed to help with the creation of new strategies. When the Committee agreed a new mitigation action would be beneficial, it was tailored to Cusseta-Chattahoochee County's needs and was included in the 2023 Plan. The contractor sent the Committee, including sporadically attending participants, regular emails which contained a Dropbox link to the most updated version of the Plan and encouraged the Committee to thoroughly critique each version.

Hazard Mitigation Plan Update Committee Meeting Dates

Thursday, January 26, 2023

Morning Session

Kick-Off Meeting; Introduction to Hazard Mitigation

Afternoon Session

Hazard Identification and Prioritization; Community Risk Assessment Analysis

Thursday, February 23, 2023

Morning Session

Essential and Critical Facilities

Afternoon Session

Review and Edit 2018 Mitigation Strategies

Thursday, March 16, 2023

Morning Session

Discuss/Create New Mitigation Strategies for 2023 Plan

Afternoon Session

Discuss Draft of 2023 Plan; Discuss Available Hazard Mitigation Grants; Discuss Other Hazard Mitigation Plan Uses

*The public was welcome and encouraged to attend all Hazard Mitigation Plan Update meetings.

Each section of Cusseta-Chattahoochee County's 2018 Hazard Mitigation Plan has been revised in some manner. Therefore, a summary of those changes will be listed in the first section of each chapter. Significant additions/modifications to this Plan include the following:

- Addition of Winter Storms to Natural Hazards
- Addition of Earthquake to Natural Hazards
- Addition of Transportation Incident to Technological Hazards
- Consolidation of Civil Disturbance into Terrorism in Technological Hazards

Hazard Mitigation Plan Update Participants

Requirement §201.6(b)(2)

The following 21 participants contributed to the update of Cusseta-Chattahoochee County's 2018 Hazard Mitigation Plan: *(in alphabetical order)*

Amanda Beaver

911 Director

Cusseta-Chattahoochee County Sheriff's Office

Kristie Brooks

Superintendent

Cusseta-Chattahoochee School District - Board of Education

Justin Brown

Chief Ranger

Georgia Forestry Commission

David Bucher

Deputy Director

Cusseta-Chattahoochee County Emergency Management

Scott Carswell

Director

Cusseta-Chattahoochee County Animal Control

James Clark

Deputy County Manager

Cusseta-Chattahoochee County - Office of the County Manager

Gary C. Daniel

Captain

Cusseta-Chattahoochee County Fire Department

Johnny Floyd Jr.

Director

Cusseta-Chattahoochee County Emergency Management

Terry Hancock

Water Administrator

Cusseta-Chattahoochee County Water Utility

Ronald Hedgecock*Coroner*

Cusseta-Chattahoochee County Coroner's Office

Samantha Hedgecock*Director*

Cusseta-Chattahoochee County Community Development

Randy Huff*Director*

Cusseta-Chattahoochee County Public Works

Shaun Jones*Director*

Cusseta-Chattahoochee County Code Enforcement

Frank Lossen*Title*

Cusseta-Chattahoochee County Public Works

Hank Lynch*Sheriff*

Cusseta-Chattahoochee County Sheriff's Office

Bryan Merritt*Title*

Cusseta-Chattahoochee County Public Works

Russell Rhodes*Director*

Cusseta-Chattahoochee County Water Utility

Samuel Schiro*Director*

Marion County Emergency Management Agency

Joshua Sikes*Well Operator*

Cusseta-Chattahoochee County Water Utility

Gregory Stewart*Director*

Stewart County Emergency Management/Public Safety

Demetrius Vanderson*County Clerk*

Cusseta-Chattahoochee County Board of Commissioners

The Plan Update Committee relied on their consultant to guide them through the update process. During meetings, the participants had productive discussions, expanded their professional networks, asked thoughtful questions, made important decisions, and provided critical input during key stages in the update process.

Efforts were made to involve all county departments, as well as community organizations and local businesses, which may have a role in the implementation of mitigation actions and/or policies. These efforts included sending invitations via email to attend the Kick-off Meeting, sending reminder emails before each upcoming meeting, emailing pertinent information throughout the process, and requesting the review and critique of each chapter in the updated Plan.

All neighboring counties – Marion, Muscogee, Russell (AL), Stewart, Talbot, and Webster – were invited to attend the Hazard Mitigation Plan Update meetings and asked to peer review the 2023 Mitigation Plan draft. The Plan was sent to each County EMA office. Stewart County EMA Director Greg Stewart and Marion County EMA Director Samuel Schiro attended and participated in the Hazard Mitigation Plan Update meetings. Cusseta-Chattahoochee County had significant support and contribution to the Hazard Mitigation Plan Update process from surrounding jurisdictions. Additionally, the EMA Directors from surrounding counties were asked to attend Plan Update Committee meetings in hopes they would share mitigation ideas from their own counties.

Public Participation

Requirement §201.6(b)(1)

State Requirement Element F2

Public awareness is a key component of any community's overall mitigation strategy. As citizens become more involved in decisions that affect their safety, they may develop a greater respect for the natural hazards present in their community, and thus, may take the steps necessary to reduce potential impacts of those hazards.

The following local organizations and businesses participated in the update of Cusseta-Chattahoochee County's 2018 Mitigation Plan: Community Development

The Plan Update Committee took it upon themselves to ensure the processes undertaken for the development, implementation, and maintenance of the 2022 Hazard Mitigation Plan adequately considered public needs and viewpoints.

A list of public outreach initiatives can be found below:

- Email reminders were sent to all Plan Update Committee members, as well as other stakeholders, prior to every meeting. Recipients were encouraged to share the meeting invitation with anyone they thought would be an asset to the Plan Update process or anyone who may want to learn more about what a Hazard Mitigation Plan is.
- Cusseta-Chattahoochee County attempted to incorporate underserved and vulnerable populations in the community during the Hazard Mitigation Plan Update process. This was accomplished by inviting organizations in the community who represent, serve, and/or support vulnerable and underserved populations throughout Cusseta-Chattahoochee County. Organizations invited to participate in the planning process include XXXX. The following organizations participated in the Cusseta-Chattahoochee County Hazard Mitigation Plan Update: XXXX

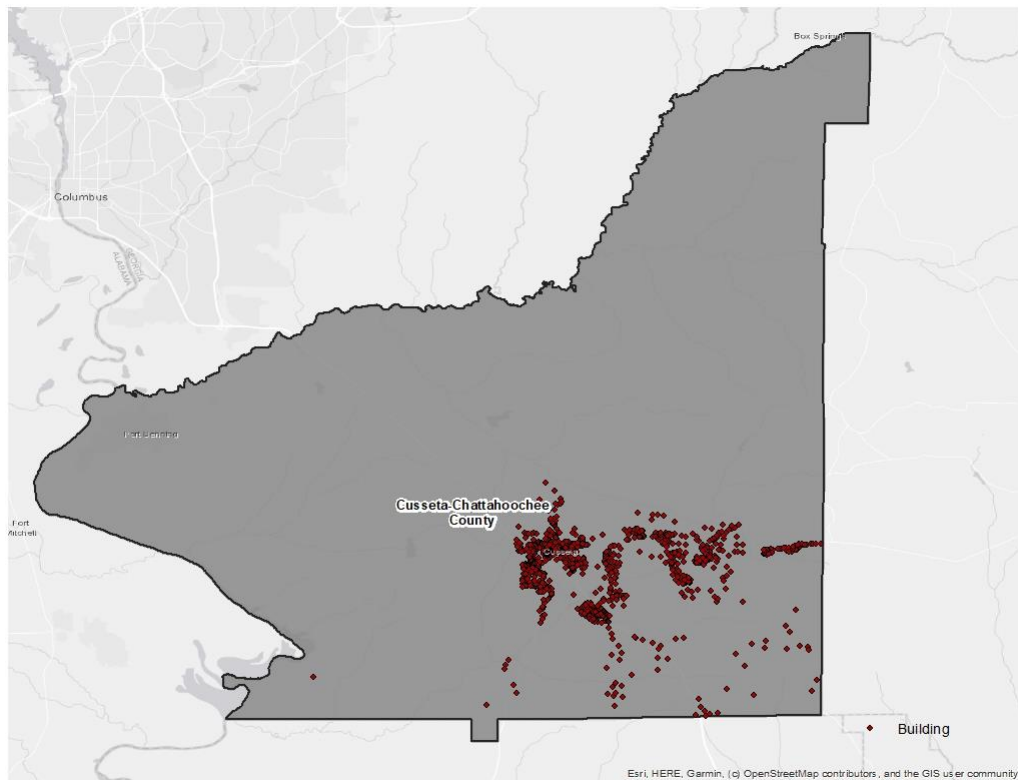
Documentation of Public Meeting Notice

Multi-Jurisdictional Considerations

FEMA does not require cities and towns to adopt a local Hazard Mitigation Plan. However, the Federal DMA 2000 requires that all municipalities, wishing to be eligible to receive Hazard Mitigation Grants through FEMA, must adopt a local multi-hazard mitigation plan and must update that plan every five years. Cusseta-Chattahoochee County's most recent Hazard Mitigation Plan was approved by FEMA in October 2018. The 2023 Mitigation Plan is the third five-year update. This FEMA-approved 2023 Hazard Mitigation Plan makes Cusseta-Chattahoochee County and the City of Cusseta eligible for FEMA's Hazard Mitigation Grant Program, Flood Assistance Mitigation Grants, and Pre-Disaster Mitigation Grants.

As set forth by Georgia House Bill 489, the Emergency Management Agency is the implementing agency for projects pertaining to hazard mitigation. Cusseta-Chattahoochee County is dedicated to work in the best interests of the County. Unless noted otherwise, mitigation strategies apply equally to all jurisdictions.

Distribution of Buildings in Cusseta-Chattahoochee County



Source: 2024 Cusseta-Chattahoochee County HAZUS Report

Incorporation of Existing Plans, Studies, and Resources

Requirement §201.6(b)(3)

State Requirement Element F3

Existing Plans

2018 Cusseta-Chattahoochee County Pre-Disaster Hazard Mitigation Plan
2019 State of Georgia Hazard Mitigation Plan
2014 State of Georgia Hazard Mitigation Plan
Cusseta-Chattahoochee County Local Emergency Operations Plan
Georgia Forestry Commission's Cusseta-Chattahoochee Co. Community Wildfire Protection Plan
Cusseta-Chattahoochee County Joint Comprehensive Plan

Studies

2024 Hazard Risk Analyses (HAZUS Report)
2017 United States Department of Agriculture Ag Census
2010 United States Census
2020 United States Census
2009 Cusseta-Chattahoochee County Flood Insurance Study
Radeloff, V. C., R. B. Hammer, S. I Stewart, J. S. Fried, S. S. Holcomb, and J. F. McKeefry. 2005. *The Wildland Urban Interface in the United States*. Ecological Applications 15:799-805.

Resources

2014 City of Boston Natural Hazard Mitigation Plan Update
2010 Camden County Joint Hazard Mitigation Plan Update
2010 Northern Virginia Hazard Mitigation Plan Update
National Climactic Data Center
National Weather Service
Cusseta-Chattahoochee County Tax Assessor's Data
Cusseta-Chattahoochee County Website
Georgia Mitigation Information System Database
Colorado State University (Hurricane mapping)
United States Geological Survey
FEMA Flood Insurance Rate Maps
National Flood Insurance Program
United States Coast Guard National Response Center Data
Georgia Department of Transportation
Georgia Safe Dams Program
Southern Group of State Foresters Wildfire Risk Assessment

Application of Existing Plans and Studies

Existing Planning Mechanism	Reviewed? Yes/No	Incorporation into 2022 Mitigation Plan
2018 Cuseta-Chattahoochee County Hazard Mitigation Plan	Yes	Baseline for the 2022 Plan; updated mitigation strategies; updated hazards; updated Cuseta-Chattahoochee County information
2019 State of Georgia Hazard Mitigation Plan	Yes	Hazard descriptions; potential hazards; mapping mechanisms; potential mitigation strategies that could be adopted on a local level
Cuseta-Chattahoochee County Local Emergency Operations Plan (LEOP)	Yes	Identification of current resources; identification of current capabilities
Georgia Forestry's Cuseta-Chattahoochee County Community Wildfire Protection Plan (CWPP)	Yes	Mitigation strategies for wildfire and drought; historical data
2017 USDA Agriculture Census	Yes	Agricultural data regarding potential losses for drought and wildfire
2020 United States Census	Yes	To update Cuseta-Chattahoochee County's profile information
2009 Cuseta-Chattahoochee County Flood Insurance Study	Yes	Identify potential flood prone areas; prioritization of flood-related mitigation strategies
Cuseta-Chattahoochee County Comprehensive Plan	Yes	To identify future development trends; identify mitigation strategies to curb trends in a direction that considers the hazards of the area
Cuseta-Chattahoochee County Flood Mitigation Assistance Plan	No	No such plan exists
2023 Cuseta-Chattahoochee County HAZUS Report	Yes	Hazard Analysis

Chapter Two

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Cusseta-Chattahoochee County Profile

Summary of Updates for Chapter Two

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Cusseta-Chattahoochee County Hazard Mitigation Plan 2018.

Chapter 2 Section	Updates
Past Hazards	<ul style="list-style-type: none">• This information involved a review of the hazards listed in the previous plan.• Information was updated for the last 50 years
History	<ul style="list-style-type: none">• Expanded and updated from previous plan
Past Events	<ul style="list-style-type: none">• Identification of major hazard events in Cusseta-Chattahoochee County for the last 50 years• Focus on Federal Declarations and events since the last Hazard Mitigation Plan Update
Demographics	<ul style="list-style-type: none">• Updated data to the 2020 Census information
Economy	<ul style="list-style-type: none">• Updated data and information
Government	<ul style="list-style-type: none">• Updated verbiage
Transportation	<ul style="list-style-type: none">• Updated verbiage
Climate	<ul style="list-style-type: none">• Updated verbiage
Utilities	<ul style="list-style-type: none">• Updated verbiage
NFIP Compliance	<ul style="list-style-type: none">• Updated verbiage
Municipalities	<ul style="list-style-type: none">• Updated verbiage

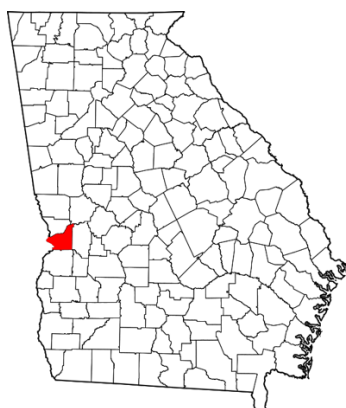
History

Cusseta-Chattahoochee County is named for the Chattahoochee River which forms its western border. On February 13, 1854, Chattahoochee County was formed from portions of Muscogee and Marion Counties. It was the 109th of Georgia's 159 counties. In April 1854, by the order of the inferior court, the town of Cusseta was surveyed and organized by lots to be sold to the highest bidder. Cusseta was thus formed and replaced the older village Sand Town. Cusseta was named in honor of a prominent tribe of Creek Indians, the Cussetah. In 2003 the city of Cusseta and Chattahoochee County formed a unified government.

In 1854, a large two-story wooden courthouse was erected and served as the center of county government until 1974. At this time, plans were made to construct a one-story brick courthouse. The original courthouse was relocated to Westville, a living-history site in neighboring Stewart County.

During its early years, the livelihood of many Chattahoochee County's residents was agriculture. By 1900 the county produced nearly 6,000 bales of cotton. Other agricultural crops of note in 1900 included rice, peanuts, sweet potatoes, and peas along with fruit orchards including apple, peach, and plum.

Since 1918 the Fort Benning Military Reservation has occupied a large portion of Chattahoochee County. Fort Benning was named after Confederate general and Columbus resident Henry L. Benning. The base is a major contributor to the local economy.



Past Hazards

Cusseta-Chattahoochee County, Georgia, has faced many natural hazards in its Cusseta-Chattahoochee history. Severe thunderstorms have been the most prevalent of these hazards. In the last 50 years, Cusseta-Chattahoochee County has been subjected to 85 documented severe thunderstorm events. These events include torrential rainfall, hail, thunderstorm-force winds, and lightning.

Tornadoes, which can sometimes spawn from severe thunderstorms, have also occurred, although with much less frequency. In Cusseta-Chattahoochee County, there have been 9 documented tornadoes in the last 50 years.

Because of heavy rainfall, either within Cusseta-Chattahoochee County or upstream, flooding has also occurred. In the National Climatic Data Center (NCDC) databases of the National Weather Service, there is documentation of 6 flooding events for Cusseta-Chattahoochee County.

Winter storms and heavy snowfall have affected Cusseta-Chattahoochee County on 6 occasions over the last 50 years, according to the NCDC record. Because these natural events are barely an annual occurrence, the pre-planning and preparedness component of emergency management is not as robust as northern or western states that routinely see this type of weather.

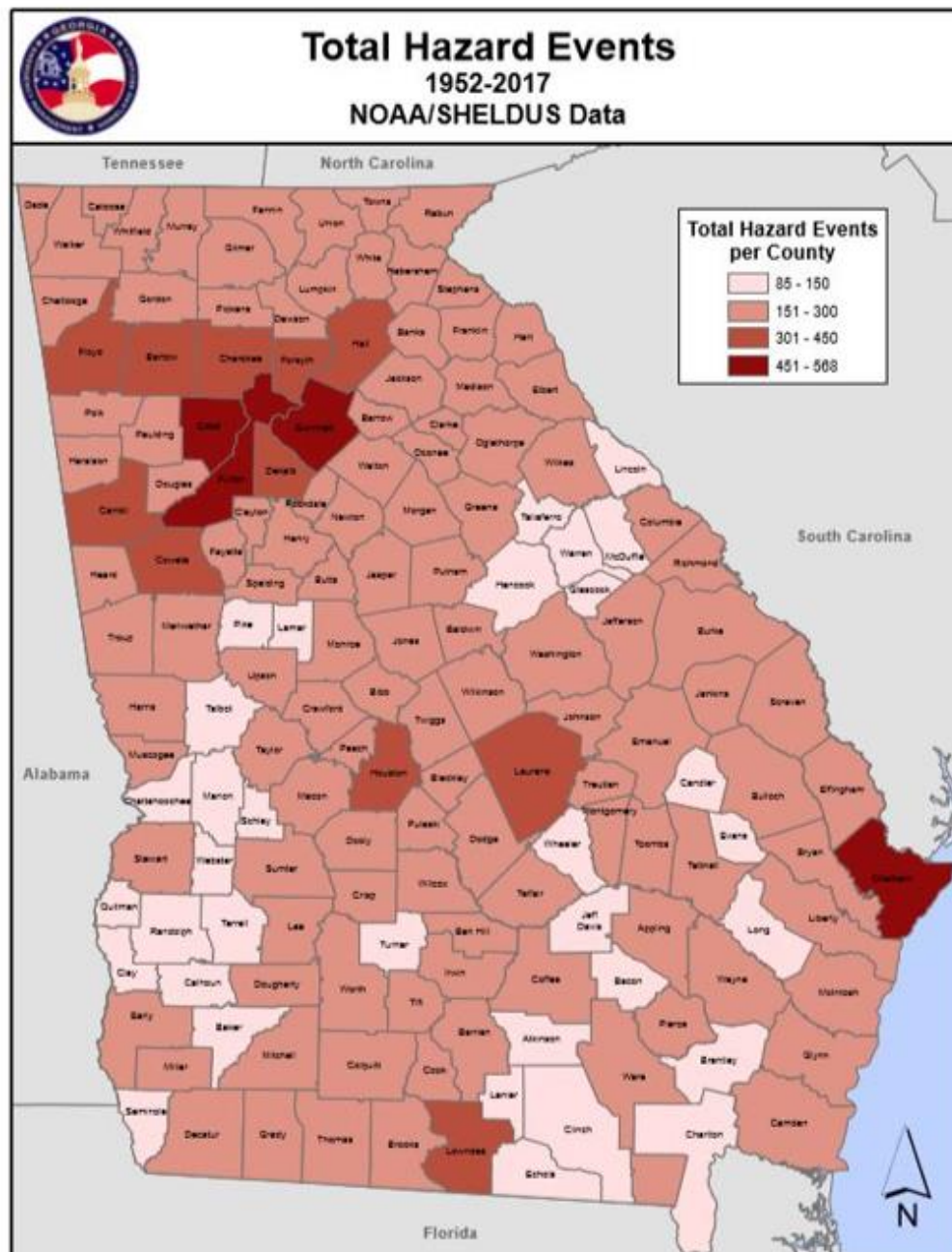
Cusseta-Chattahoochee County has also been impacted by the following: drought, excessive heat, tropical cyclones, earthquakes, and wildfires.

Cusseta-Chattahoochee County has had 9 Presidential Disaster Declarations (FEMA-declared major disasters) – two of which have occurred since the adoption of the 2018 Hazard Mitigation Plan (both for COVID-19 in 2020).



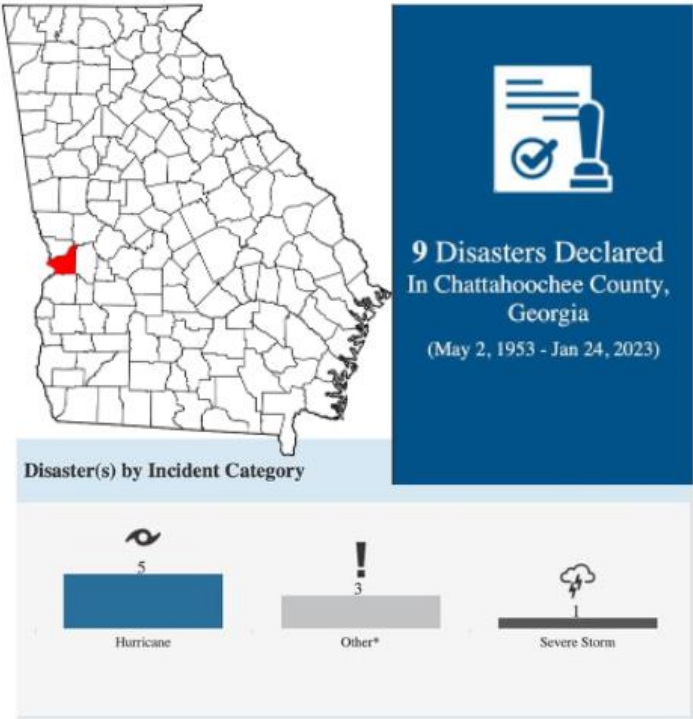
Notable Past Events

- 2022, Tornado (EF1)
- **2020, COVID-19 Pandemic (Federal Declaration x2)**
- **2018, Hurricane Michael (Federal Declaration x2)**
- **2017, Hurricane Irma (Federal Declaration x2)**
- 2017, Tornado (EF0)
- **2016, Severe Storm/Flooding (Federal Declaration)**
- 2015, Tornado (EF1)
- 2015, Flash Flood
- 2014, Tornado (EF1)
- 2011, Tornado (EF1)
- 2009, Tornado (EF1)
- 2009, Tornado (EF1)
- 2008, Tornado (EF0)
- 2007, Hail
- 2006, Tornado (F1)
- **1977, Drought (Federal Declaration)**



Source: 2019 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Federal Disaster Declarations



Source: Federal Emergency Management Agency (FEMA)

National Flood Insurance Program Compliance

JURISDICTION	PARTICIPATING?	PARTICIPATION DATE
CUSSETA-CHATTAHOOCHEE COUNTY	YES	1/6/1988

Demographics

County

	2000 Census	2010 Census	2020 Census
Population	14,882	11,267	9,565
White	58.1%	68.8%	70.3%
African American	29.9%	18.8%	18.4%
Hispanic/Latino	10.4%	12.4%	17.7%
Asian	1.8%	2.2%	3.6%
American Indian	0.8%	0.7%	1.5%
Two or More Races	3.8%	4.4%	5.0%
Median Age	23.2	24	24.5
Median Household Income	\$39,205	\$41,476	\$50,018
Persons in Poverty	12.4%	20.2%	16.5%
Homeowners	23.9%	33.7%	24.1%

Municipalities – Population

	2000 Census	2010 Census	2020 Census
Cusseta	1,244		

**Cusseta unified with Chattahoochee County in 2003. Census data for 2010 and 2020 are for the unified government.*

Social Vulnerability Information

Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as tornadoes or disease outbreaks, to human-caused threats, such as a toxic chemical spill. The Center for Disease Control and Prevention and the Agency for Toxic Substances and Disease Registry (CDC/ATSDR) rates social vulnerability on 16 variables.

These variables are:

- Percentage below the poverty level
- Unemployment rate
- Per capita income
- Percentage of population 25+ without a high school diploma
- Percentage of population below 65 without insurance
- Percentage of population under 18 years of age
- Percentage of population age 65 and over
- Percentage of the population age 5 or older with a disability
- Percentage of households with a single parent
- Percentage of population that is Hispanic or non-white race
- Percentage of population over the age of 5 who speak English less than "well"
- Number of large apartment buildings (10 or more housing units per building)
- Percentage of mobile homes
- Number of housing units with more than one person per room
- Number of households with no vehicle available
- Percentage of population living in group quarters

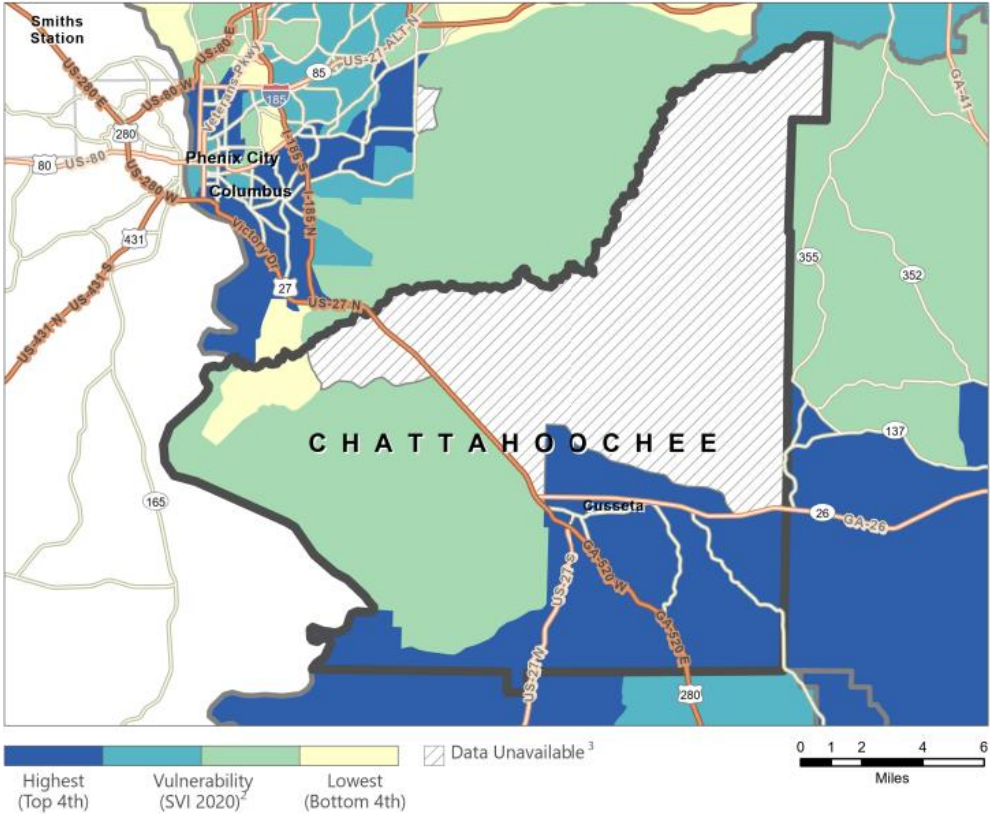
These 16 variables are aggregated into four overall factors: Socioeconomic Status, Household Characteristics, Racial and Ethnic Minority Status, and Household Type/Transportation. Each census tract is then mapped based upon each of these four factors and the overall SVI based upon the full 16 variables. A score is assigned based upon these variables from 0 (no social vulnerability) to 1 (very high social vulnerability).

Cusseta-Chattahoochee County has an Overall SVI score of 0.3354, which indicates a medium to high level of vulnerability. Cusseta-Chattahoochee County also has medium to high levels of vulnerability for Socioeconomic Status (0.6916). Cusseta-Chattahoochee County has high levels of social vulnerability for Housing Type/Transportation (0.9341) and Racial/Ethnic Minority Status (0.8246). Cusseta-Chattahoochee County has a low level of vulnerability for Household Characteristics (0.1938).

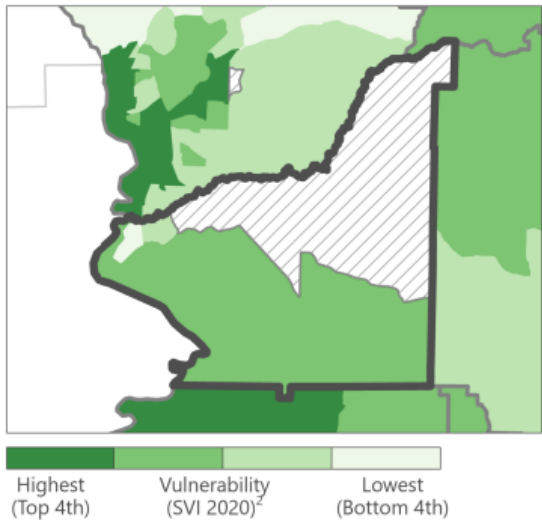
Cusseta-Chattahoochee County does have particular areas that score higher on the SVI Index and higher on each of the four factors. Areas in southeast Cusseta-Chattahoochee

County scored higher on most of the SVI factors than Cusseta-Chattahoochee County as a whole.

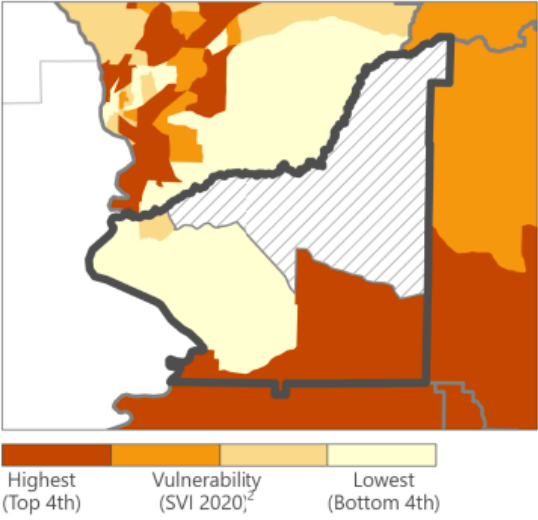
Overall Social Vulnerability



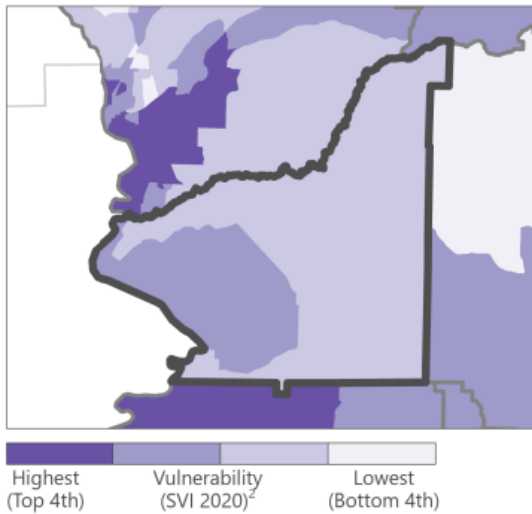
Socioeconomic Status



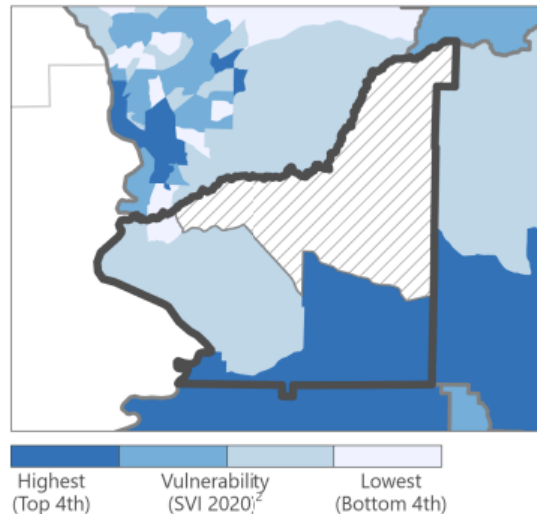
Household Characteristics



Racial and Ethnic Minority Status



Housing Type/Transportation



Economy

Cusseta-Chattahoochee County's economy is primarily industry. Cusseta-Chattahoochee County's cost of living is 11% below the national average. The unemployment rate in Cusseta-Chattahoochee County is 4%, which is above the State average of 3% and the National average of 3.5%. Cusseta-Chattahoochee County has a median household income of \$50,018, which is well below the national average of \$70,784.

The ten largest private employers in Cusseta-Chattahoochee County are:

Company	Product/Service
CB&I Federal Services, LLC	Environmental Services
DA Defense Logistics HQ, LLC	Logistics Technology
Domino's Pizza	Restaurant
ITT Systems Corporation	Technology
Lear Siegler Services, Inc.	Aviation/Aerospace Manufacturing
Panda Express	Restaurant
Science Applications International	Technology
Summit Technologies, Inc.	Technology
The Michaels Organization, LLC	Construction
Tiya Services, LLC	Technology

*The above list is in alphabetical order, not in order of company size.
This data is according to the Georgia Department of Labor, 2021.*

Utilities

Cusseta-Chattahoochee County's utility needs are met by a variety of public and private entities.

Electrical power in Cusseta-Chattahoochee County is provided by the Sumter Electric Membership Corporation, Flint Energies, and Georgia Power.

Water in Cusseta-Chattahoochee County is provided by the Cusseta-Chattahoochee County Water Department.

Government

The form of government specified in the County Charter is known as Commissioner form of government, which provides for an elected body of Commissioners, elected at-large for specified posts. Chairmanship of the Board of Commissioners is elected by and among the elected County Commissioners to serve a term of one year.

The main duties of the Board of Commissioners is to pass local laws, known as ordinances, that regulate a variety of things that promote the health, safety and welfare of the citizens covered by them; to pass a balanced budget each year that funds its own operations as well as to allocate funds to the four Constitutional Officers, other elected officials, the courts and a variety of programs put in place by the State but funded locally; to ensure that necessary services are funded and provided; to set the millage rate for the County government and many other secondary duties.

The Board of Commissioners sets the County millage rate each year to fund a portion of the County budget. They also receive the millage rate that is set by the Board of Education and an assessment by the State which is submitted to the Georgia Department of Revenue each year.

The Board receives, deliberates, and passes local ordinances each year and amends many others to reflect the changing times. Both require that a public hearing be held and these are normally held during the regular Commission meetings. They also pass several resolutions and proclamations throughout the year. Generally, with some exceptions, the Board can pass any local law and ordinance they feel is needed for the County so long as it does not violate the laws of the State or Federal government or the Constitutional rights of any individual. These are researched thoroughly by legal staff before ever being brought to a hearing.

The Board of Commissioners provide many services that citizens expect through the revenues that are raised annually. These include Fire and Ambulance protection; E-911 dispatch services; Zoning and Planning; Inspections; Code Enforcement; Animal Control;

Public Library; Parks and Recreation; Public Works; Waste Management Collection Centers; and agencies that service all these such as Building Maintenance, Vehicle Maintenance, and Emergency Management Services. The budget also funds state mandated services such as Law Enforcement and Detention; Superior, Probate, Magistrate and Juvenile courts; Tax Assessment and Tax Collection services; Elections management; District Attorney (shared with other counties) and some smaller funding for local agencies under the State of Georgia.

Climate

Cusseta-Chattahoochee County, like much of Georgia, enjoys a temperate climate with four well-defined seasons: warm to hot summers; brisk fall temperatures; relatively brief, cool winters; and a warm spring season. As a result, there exists a Cusseta-Chattahoochee growing season in Georgia, perfect for ornamental and economic-boosting agricultural plants.

AVERAGE MONTHLY TEMPERATURES IN GEORGIA (FAHRENHEIT)

Month	Average Georgia Temperature	Average Cusseta-Chattahoochee County Temperature
January	46	46
February	49	50
March	56	57
April	63	63
May	70	71
June	77	78
July	80	80
August	79	79
September	74	75
October	64	65
November	56	56
December	48	49

Transportation

Cusseta-Chattahoochee County's transportation system consists primarily of state highways and county-maintained roads. US Highways 27 and 280, as well as State highways 1, 26, 355, and 520 are major transportation routes that carry the majority of passenger and commercial traffic in and out of Cusseta-Chattahoochee County.

Freight rail services owned and operated by Georgia Southwestern Railways traverse Cusseta-Chattahoochee County.

Municipalities

City of Cusseta



The City of Cusseta was unified with Chattahoochee County in 2003. Cusseta was incorporated as the county seat of Chattahoochee County in 1855. It was named for a nearby peace town of the Lower Creek confederacy. It remains the only incorporated municipality in Chattahoochee County.

Chapter Three

-

hazard Profiles

Summary of Updates for Chapter Three

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Chattahoochee County Hazard Mitigation Plan 2018.

Chapter 3 Section	Updates
Risk Assessment	<ul style="list-style-type: none"> Expanded the explanation of the Risk Assessment Added an explanation of each part of the Hazard Information
Natural Hazard Severe Thunderstorm	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Content revised
Natural Hazard Winter Storm	<ul style="list-style-type: none"> New Section – Not in 2018 Plan
Natural Hazard Flooding	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Land Use and Development trends updated to include municipal NFIP information Content revised
Natural Hazard Tornado	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Content revised
Natural Hazard Drought	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Content revised
Natural Hazard Wildfire	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Content revised
Natural Hazard Earthquake	<ul style="list-style-type: none"> New Section – Not in 2018 Plan
Natural Hazard Tropical Cyclone	<ul style="list-style-type: none"> Updated and consolidated hazard profile with new data Content revised
Natural Hazard	<ul style="list-style-type: none"> Updated hazard description

Extreme Temperatures	<ul style="list-style-type: none">• Added Extreme Cold• Updated and consolidated hazard profile data• Content revised
Technological Hazard Hazardous Materials	<ul style="list-style-type: none">• Updated hazard description• Updated and consolidated hazard profile data• Content revised
Technological Hazard Dam Failure	<ul style="list-style-type: none">• Updated hazard description• Updated and consolidated hazard profile data• Content revised
Technological Hazard Transportation Incident	<ul style="list-style-type: none">• New Section – Not in 2018 Plan
Technological Hazard Terrorism	<ul style="list-style-type: none">• Updated and consolidated hazard profile with new data• Combined Terrorism and Civil Disturbance into a single hazard• Content revised

Risk Assessment

Requirement §201.6(c)(2)(i and ii)

Requirement §201.6(d)(3)

The Chattahoochee County Hazard Mitigation Planning Committee conducted a comprehensive Threat and Hazard Identification and Risk Assessment (THIRA) for Chattahoochee County and all municipalities. This assessment developed the hazard basis for this plan. The assessment includes the following components for each hazard:

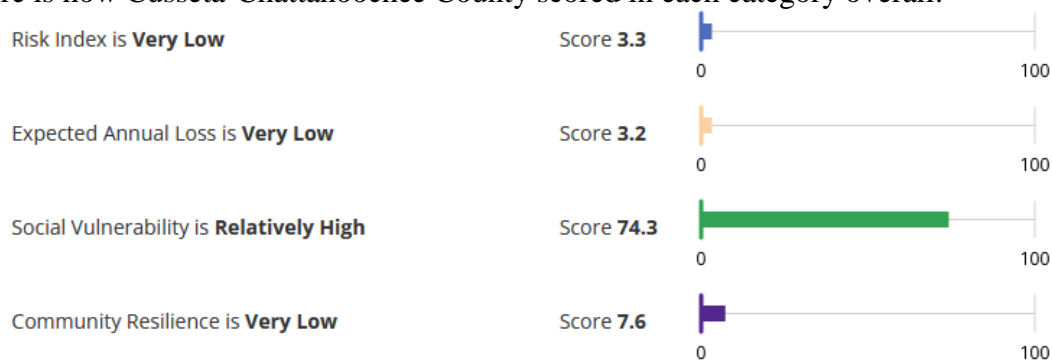
1. *Hazard Identification:* The Chattahoochee County Hazard Mitigation Planning Committee identified nine natural hazards and four technological hazards for this Hazard Mitigation Plan. This is an increase of two natural hazards from the previous iteration of the plan. Each hazard was identified using statistical data and records from a variety of sources. The list of hazards is based upon frequency, severity of impact, probability, potential losses, and vulnerability.
2. *Hazard Description:* Each hazard was described in detail. Many hazard descriptions came from the Georgia Hazard Mitigation Plan since many of the hazards that could impact the state could also potentially impact Chattahoochee County.
3. *Profile of Hazards:* Each hazard was profiled as to how it could potentially impact Chattahoochee County.
4. *Assets Exposed to the Hazard:* The plan considers critical facilities and infrastructure as part of the vulnerability assessment. This assessment determines the vulnerability of the municipalities and attempts to identify the populations most vulnerable to each hazard, although many have potential countywide impacts.
5. *Estimated Potential Losses:* Using critical facility and past history data, an estimation of potential losses due to a particular hazard event were determined.
6. *Land Use and Development Trends:* Land use trends were considered when determining the potential future impacts of each hazard. This is of importance regarding flooding and dam failure events.
7. *Multi-Jurisdictional Concerns:* Each jurisdiction was considered when determining the potential hazard impact.

The National Risk Index was utilized as a database of risk potential for how natural hazards have impacted Cusseta-Chattahoochee County in the past and for how they could impact Cusseta-Chattahoochee County in the future. The National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave,

Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and Census tract. These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

Here is how Cusseta-Chattahoochee County scored in each category overall:



These scores indicate that Cusseta-Chattahoochee County has a very low overall risk and expected annual loss. It also indicates relatively high values of social vulnerability and very low levels of community resilience.

In addition to overall risk, the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee considered how each hazard could potentially impact the vulnerable populations in the community. Utilizing the National Risk Index and census tract data, a few trends were identified. Census tract 13053020100, which includes the southeast portion of Cusseta-Chattahoochee County, had a higher overall risk than any other area. While the overall risk for this area is still relatively low, it is over 10 times higher than the overall risk for Cusseta-Chattahoochee County. This census tract also has a Very High level of Social Vulnerability. This area specifically scores higher on Household Characteristics and Housing Type/Transportation on the Social Vulnerability Index. This census tract area has the highest risk in Cusseta-Chattahoochee County for severe thunderstorms, earthquake, heat, tropical cyclones, severe winter weather, riverine flooding, tornado, and wildfire. It should also be noted that this census tract holds the vast majority of the population in Cusseta-Chattahoochee County due to a significant portion of the county being within the borders of Fort Moore.

In addition to the overall scores, a matrix for each hazard is also produced by the National Risk Index.

Hazard Type	Risk Index Rating	Risk Index Score	National Percentile
Avalanche	Not Applicable	--	
Coastal Flooding	Not Applicable	--	
Cold Wave	No Rating	0	0 100
Drought	Very Low	21.7	0 100
Earthquake	Very Low	29.3	0 100
Hail	Very Low	31	0 100
Heat Wave	Relatively Low	36.8	0 100
Hurricane	Very Low	48.8	0 100
Ice Storm	Very Low	7.5	0 100
Landslide	Relatively Low	56.3	0 100
Lightning	Very Low	23.6	0 100
Riverine Flooding	Very Low	5.1	0 100
Strong Wind	Very Low	7	0 100
Tornado	Very Low	23.4	0 100
Tsunami	Not Applicable	--	
Volcanic Activity	Not Applicable	--	
Wildfire	Very Low	24.6	0 100
Winter Weather	Very Low	8.3	0 100

The National Risk Index also breaks the Expected Annual Loss down for each hazard.

Hazard Type	EAL Value	Social Vulnerability	Community Resilience	CRF	Risk Value	Score
Tornado	\$1,565,035	Relatively High	Relatively Low	1.23	\$1,915,763	64.2
Earthquake	\$427,932	Relatively High	Relatively Low	1.23	\$543,124	71.6
Strong Wind	\$355,893	Relatively High	Relatively Low	1.23	\$437,342	54.4
Lightning	\$273,229	Relatively High	Relatively Low	1.23	\$338,958	80.4
Hurricane	\$271,820	Relatively High	Relatively Low	1.23	\$332,104	55.3
Riverine Flooding	\$223,315	Relatively High	Relatively Low	1.23	\$266,050	38.7
Winter Weather	\$120,956	Relatively High	Relatively Low	1.23	\$149,021	73.6
Ice Storm	\$97,726	Relatively High	Relatively Low	1.23	\$121,471	62.3
Hail	\$93,793	Relatively High	Relatively Low	1.23	\$105,838	49.6
Wildfire	\$46,750	Relatively High	Relatively Low	1.23	\$53,535	54.2
Landslide	\$21,900	Relatively High	Relatively Low	1.23	\$26,574	49.9
Drought	\$7,425	Relatively High	Relatively Low	1.23	\$8,025	37.1
Cold Wave	\$0	Relatively High	Relatively Low	1.23	\$0	0
Heat Wave	\$0	Relatively High	Relatively Low	1.23	\$0	0

As the above graphic indicates, Tornadoes have the highest expected annual loss score of any potential hazard. As far as overall risk score, lightning is considered to be a higher risk event than any other hazard identified.

At the first meeting of the Chattahoochee County Hazard Mitigation Plan Update Committee, the attendees participated in a risk assessment of hazard for Chattahoochee County. This risk assessment was based upon two primary factors: 1. How likely is a hazard to occur; 2. How prepared the committee meeting participants felt the community was for each hazard. This risk assessment relied on the committee meeting attendees to identify the hazards and then rank them by those two factors. As a result, the risk assessment could be skewed by the meeting participants, recency bias, and/or how the hazard would directly impact the organizations represented at this meeting. After additional discussion with the Chattahoochee County Hazard Mitigation Plan Update committee at future meetings, the hazards in this chapter were the agreed upon list. Several of the hazards identified by the committee members were consolidated into expanded hazard descriptions. Those incorporations are notated in the below hazard ranking.

Hazard	Likelihood Score	Preparedness Score	Total Score
Transportation Incident	36	9	45
Severe Thunderstorm	27	6	33
Terrorism	4	28	32
Hazardous Materials Incident	6	19	25
Tornado	20	3	23
Severe Winter Weather	6	8	14
Earthquake	1	9	10
Flooding	2	6	8
Extreme Temperatures	6	0	6
Tropical Cyclone	0	4	4
Wildfire	0	0	0
Drought	0	0	0
Water Contamination*	0	0	0

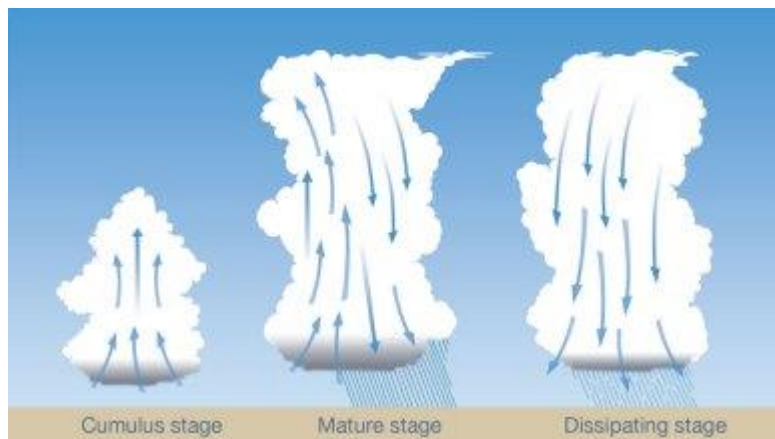
* Water Contamination was incorporated into Hazardous Materials Incident and Terrorism

Natural Hazard: Severe Thunderstorm*Hazard Description*

This section provides general and historical information about thunderstorms, including high wind, lightning, and hail. Other elements of thunderstorms, such as tornadoes and flooding, are addressed in their own sections.

Thunderstorms are formed when moist air near the earth's surface is forced upward through some catalyst (convection or frontal system). As the moist air rises, the air condenses to form clouds. Because condensation is a warming process, the cloud continues to expand upward. When the initial updraft is halted by the upper troposphere, both the anvil shape and a downdraft form. This system of up-drafting and down-drafting air columns is termed a "cell."

As the process of updrafts and downdrafts feeds the cell, the interior particulates of the cloud collide and combine to form rain and hail, which falls when the formations are heavy enough to push through the updraft. The collision of water and ice particles within the cloud creates a large electrical field that must discharge to reduce charge separation. This discharge is the lightning that occurs from cloud to ground or cloud to cloud in the thunderstorm cell. In the final stage of development, the updraft weakens as the downdraft-driven precipitation continues until the cell dies.



Each thunderstorm cell can extend several miles across its base and to reach 40,000 feet in altitude. Thunderstorm cells may compound and move abreast to form a squall line of cells, extending farther than any individual cell's potential.

In terms of temporal characteristics, thunderstorms exhibit no true seasonality in that occurrences happen throughout the year. Convectively, driven systems dominate the summer while frontal driven systems dominate during the other seasons. The rate of onset is rapid in that a single cell endures only 20 minutes.

Natural Hazard: Severe Thunderstorm

However, various cells in different stages of development may form a thunderstorm that lasts up to a few hours as it moves across the surface.

In terms of magnitude, the National Weather Service defines thunderstorms in terms of severity as a severe thunderstorm that produces winds greater than 57 mph and/or hail of at least 1 inch in diameter and/or a tornado. The National Weather Service chose these measures of severity as parameters more capable of producing considerable damage. Therefore, these are measures of magnitude that may project intensity.

Lightning

Lightning occurs when the difference between the positive and negative charges of the upper layers of the cloud and the earth's surface becomes great enough to overcome the resistance of the insulating air. The current flows along the forced conductive path to the surface (in cloud to ground lightning) and reaches up to 100 million volts of electrical potential. In Georgia, lightning strikes peak in July, with June and August being second highest in occurrence.

Hail

Hail is a form of precipitation that forms during the updraft and downdraft-driven turbulence within the cloud. The hailstones are formed by layers of accumulated ice (with more layers creating larger hailstones) that can range from the size of a pea to the size of a grapefruit. Hailstones span a variety of shapes but usually take a spherical form. Hailstorms mostly endanger cars but have been known to damage aircraft and structures.

Hazard Profile

Severe thunderstorms, including high winds, hail, and lightning, are a serious threat to the residents and infrastructure of Cusseta-Chattahoochee County. Severe thunderstorms are the most frequently occurring natural hazard in Cusseta-Chattahoochee County. Many of these storms include high winds, lightning, and hail. Hail up to 2 inches was recorded in Cusseta-Chattahoochee County on several occasions, most recently in 2000. Thunderstorm winds of 65 mph have been reported on many occasions in Cusseta-Chattahoochee County, with the most recent occurring in 2020. While there have been dozens of documented thunderstorm events affecting Cusseta-Chattahoochee County over the last 50 years, it is likely that the official number is a low estimate due to poor record keeping in decades past. For example, only 3 thunderstorm events were recorded between 1971 and 1991, likely a vast underestimation of actual events.

Most of the available information relating to severe thunderstorm events in Cusseta-Chattahoochee County fails to describe damage estimates in any detail. With each thunderstorm event, there are likely unreported costs related to infrastructure costs, public safety response costs, utility repair costs, and personal home and business repair costs.

Natural Hazard: **Severe Thunderstorm**

Hailstone size	Measurement		Updraft Speed	
	in.	cm.	mph	km/h
bb	< 1/4	< 0.64	< 24	< 39
pea	1/4	0.64	24	39
marble	1/2	1.3	35	56
dime	7/10	1.8	38	61
penny	3/4	1.9	40	64
nickel	7/8	2.2	46	74
quarter	1	2.5	49	79
half dollar	1 1/4	3.2	54	87
walnut	1 1/2	3.8	60	97
golf ball	1 3/4	4.4	64	103
hen egg	2	5.1	69	111
tennis ball	2 1/2	6.4	77	124
baseball	2 3/4	7.0	81	130
tea cup	3	7.6	84	135
grapefruit	4	10.1	98	158
softball	4 1/2	11.4	103	166

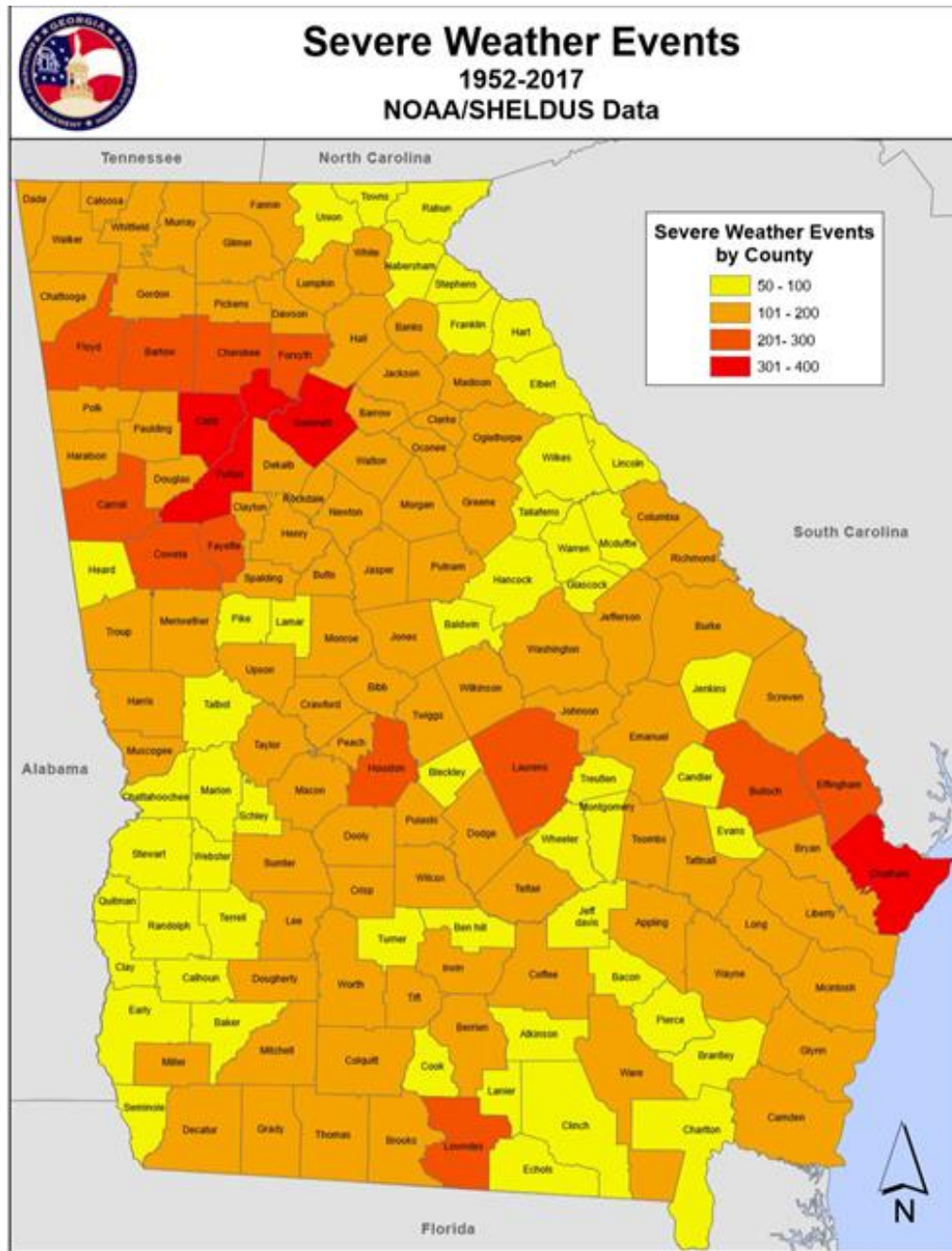
Thunderstorms have occurred during all parts of the day and night and in every month in Cusseta-Chattahoochee County.

The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee utilized data from the National Climatic Data Center, the National Weather Service, numerous weather-related news articles, and the Cusseta-Chattahoochee County LEOP in researching severe thunderstorms and their potential impacts on the county. All information has been gathered on a countywide basis. All thunderstorm hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.

During the last 50 years, 72 thunderstorm events were recorded in Cusseta-Chattahoochee County, with 50 of those occurring in the last 30 years. According to these records, Cusseta-Chattahoochee County has a 0.46% daily chance of a thunderstorm event based upon data from the last 30 years. Over the last 10 years, Cusseta-Chattahoochee County has averaged 1.4 thunderstorm events per year (14 events). Due to improved record keeping protocols, the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee believes the data from the last ten years provides a more accurate representation of the thunderstorm

Natural Hazard: Severe Thunderstorm

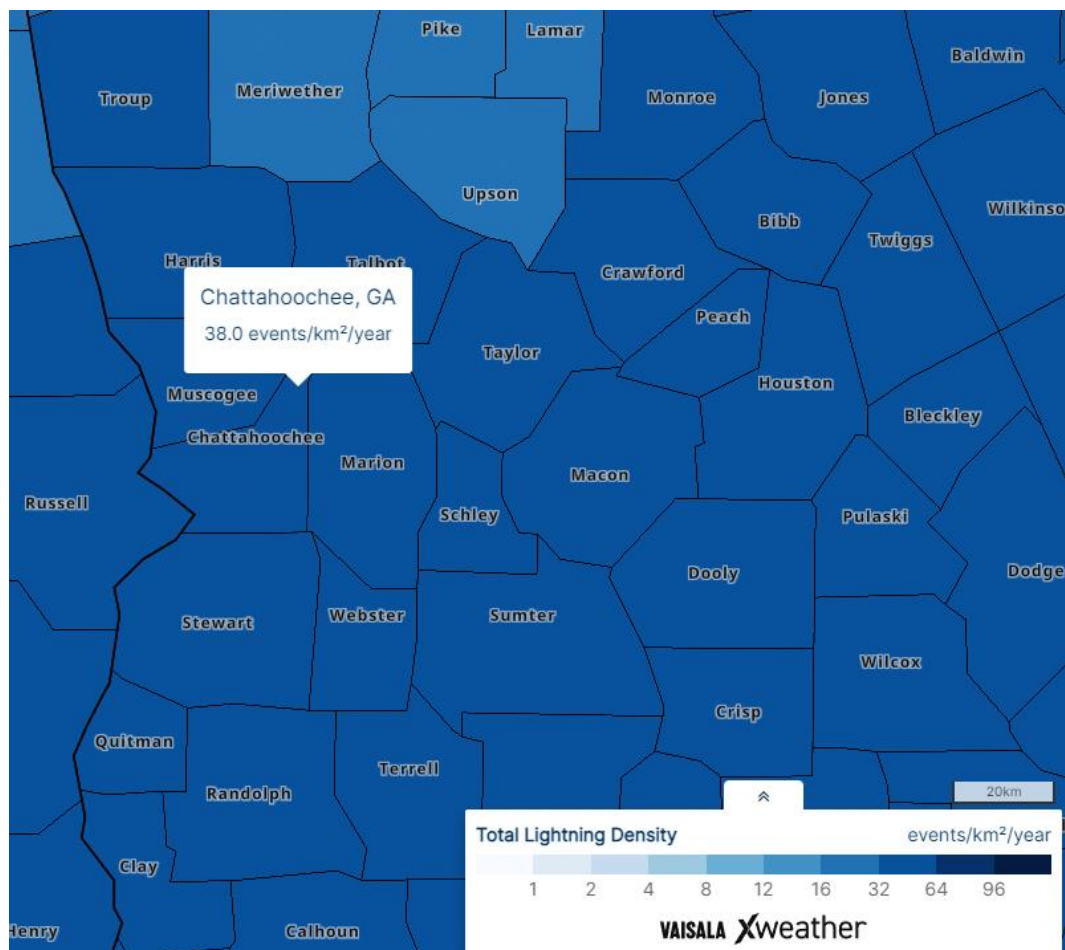
threat to the county. The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee has also determined that the lightning threat is severely under-reported, as shown in the NCDC data numbers. For additional historical data, please see Appendix D.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

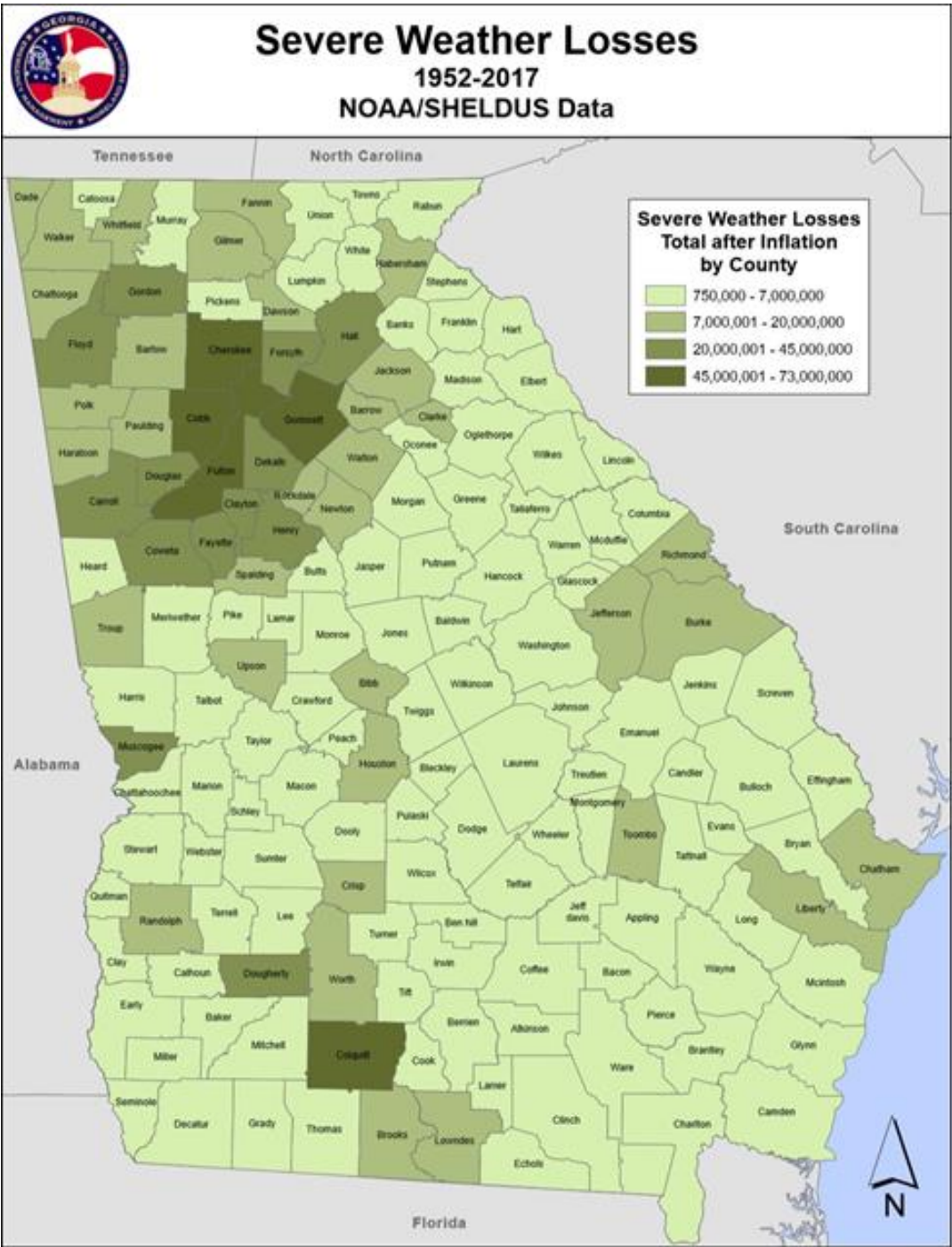
Natural Hazard: Severe Thunderstorm

As indicated by the below graphic, Cusseta-Chattahoochee County averaged 38 flashes of cloud to ground lightning per square mile per year from 2016 to 2022. That equals a 10.4% chance of a cloud-to-ground lightning strike on any given day. This shows a much higher indication of lightning occurrences than has been reported to the National Weather Service and the National Climatic Data Center. It is the determination of the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee that this data shows a more accurate representation of the scope of the threat that lightning poses to the citizens and infrastructure of Cusseta-Chattahoochee County.



Severe thunderstorm winds, which are defined as winds of at least 58 mph in conjunction with a convective event, have occurred with many thunderstorms that have affected Cusseta-Chattahoochee County. These winds can exceed 100 mph and cause damage comparable to weak tornadoes. Below are two maps that identify the wind risk and the hazard wind score for the State of Georgia, including Cusseta-Chattahoochee County. The Hazard Wind Score maps use the following scale:

Natural Hazard: Severe Thunderstorm

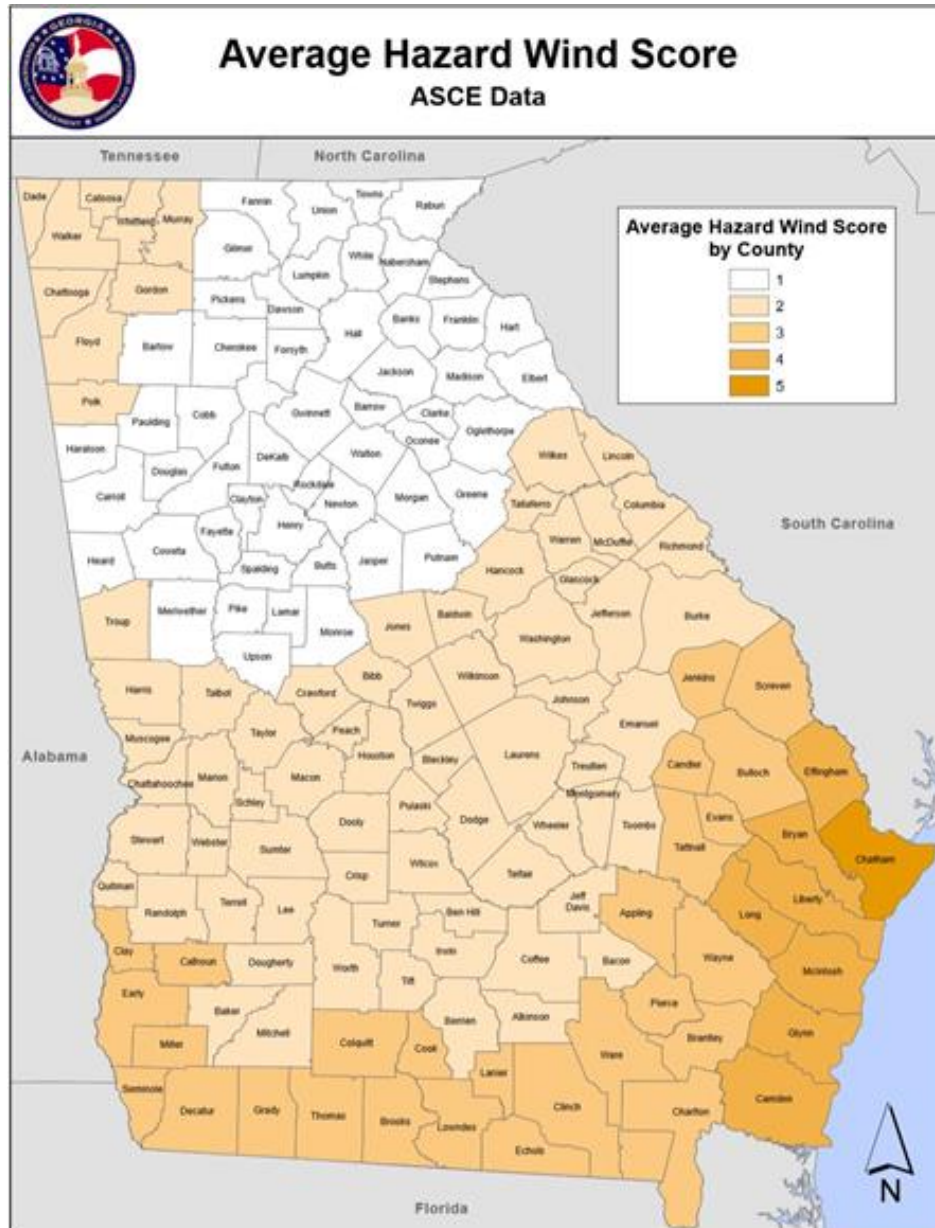


Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm

Assets Exposed to the Hazard

In evaluating assets that are susceptible to severe thunderstorms, the Cusseta-Chattahoochee County HMPC determined that all public and private property is at threat by severe thunderstorms, including all critical facilities. This is due to the lack of spatially prejudice of severe thunderstorm events.



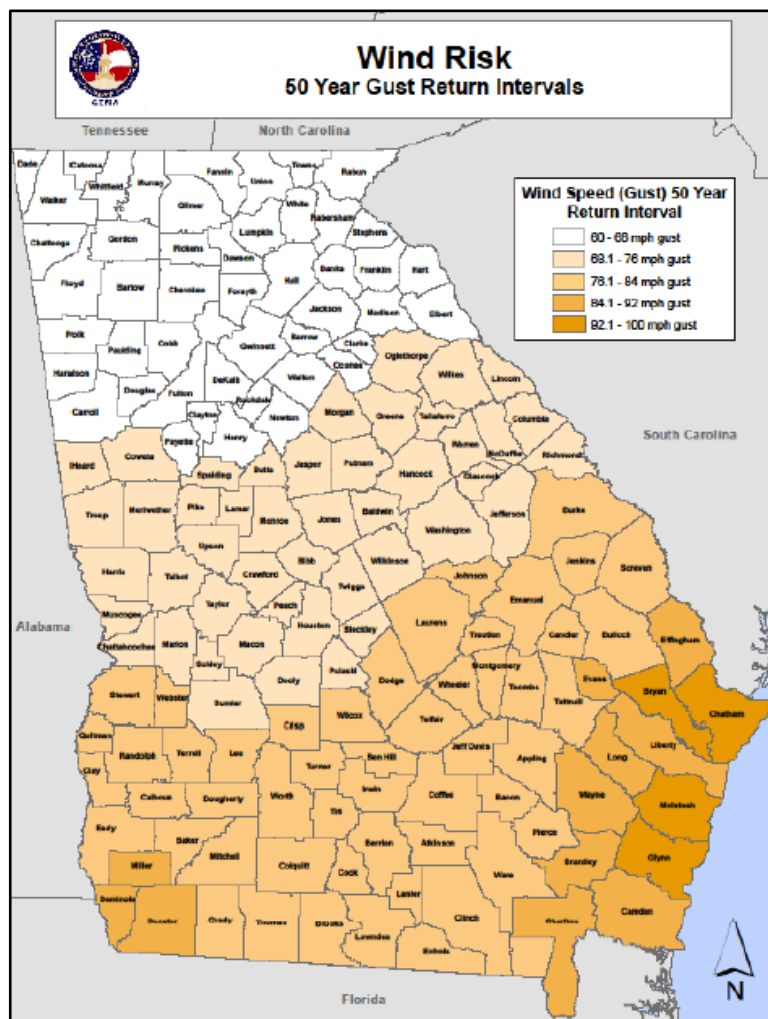
Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm*Estimated Potential Losses*

Estimates of damage for the past events of the last 50 years are over \$239,000, or \$4,780 annually. However, all estimated damages reported have occurred over the last 30 years. When extrapolated over 30 years, the annual average increases to \$7,967. These numbers are thought to be a gross underestimation of actual past damages.

Land Use & Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to Thunderstorms. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta-Chattahoochee County.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Severe Thunderstorm*Multi-Jurisdictional Considerations*

Thunderstorm events have occurred across all areas of Cusseta-Chattahoochee County. Crop damage from thunderstorm events would likely have the greatest impact in the rural areas of Cusseta-Chattahoochee County. However, property damage numbers would be highest in more heavily populated areas due to greater population density. Thunderstorms have the potential to impact all areas of Cusseta-Chattahoochee County.

Hazard Summary

Thunderstorm events pose one of the greatest threats of property damage, injuries, and loss of life in Cusseta-Chattahoochee County. Thunderstorm events are the most frequently occurring weather event that threatens Cusseta-Chattahoochee County. As a result, the Cusseta-Chattahoochee County HMPC recommends that the mitigation measures identified in this plan for thunderstorms should be aggressively pursued due to the frequency of this hazard and the ability for this hazard to affect any part of Cusseta-Chattahoochee County.

Thunderstorm Events Since 2018 in Cusseta-Chattahoochee County

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
CUSSETA	CHATTAHOOCHEE CO.	GA	06/03/2018	19:20	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K
SHACK	CHATTAHOOCHEE CO.	GA	07/03/2018	23:20	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
COTTAGE MILLS	CHATTAHOOCHEE CO.	GA	05/09/2019	17:35	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	05/09/2019	17:51	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
WOOLFOLK	CHATTAHOOCHEE CO.	GA	06/07/2019	14:36	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	09/09/2019	14:49	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
SHACK	CHATTAHOOCHEE CO.	GA	04/08/2020	17:30	Thunderstorm Wind	48 kts. MG	0	0	1.00K	0.00K
SHACK	CHATTAHOOCHEE CO.	GA	04/08/2020	17:40	Thunderstorm Wind	55 kts. EG	0	0	25.00K	0.00K
GOBBLERS HILL	CHATTAHOOCHEE CO.	GA	06/28/2020	19:29	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K

Natural Hazard: Winter Storm*Hazard Description*

Severe winter storms bring the threat of ice and snow. There are many types of frozen precipitation that could create a severe winter weather event. Freezing rain consists of super cooled falling liquid precipitation freezing on contact with the surface when temperatures are below freezing. This results in an ice glazing on exposed surfaces including buildings, roads, and power lines. Sleet is easily discernable from freezing rain in that the precipitation freezes before hitting the surface. Often this sleet bounces when hitting a surface and does not adhere to the surface. However, sleet can compound into enough depths to pose some threat to motorists and pedestrians.

A heavy accumulation of ice, which is often accompanied by high winds, can devastate infrastructure and vegetation. Destructiveness in the southern states is often amplified due to the lack of preparedness and response measures. Also, the infrastructure was not designed to withstand certain severe weather conditions such as weight build-up from snow and ice. Often, sidewalks and streets become extremely dangerous to pedestrians and motorists. Primary industries, such as farming and fishing, suffer losses through winter seasons that produce extreme temperatures and precipitation.

Within Georgia, the impacts of winter storms are often contained within the northern part of the State. However, events like the 1993 “storm of the century” illustrated the vast impacts that one storm can have on the entire state. The winter storms with the greatest impacts on Georgia are the result of coastal storms coming up from the Gulf of Mexico, including the winter storms in 1973 and 1993. The 1973 storm produced snowfalls of up to 19 inches in parts of Central Georgia including the City of Thomaston in Upson County. Also, a major ice storm occurred in 2014, bringing up to 1 inch of ice to the eastern portion of the State near Augusta.

Severe winter weather exhibits seasonal qualities in that most occur within the months of January to March, with the highest probability of occurrence in February. The rate of onset and duration varies from storm to storm, depending on the weather system driving the storm. Severe winter weather rarely frequents the State of Georgia. However, the impacts of the storms substantiate severe winter weather’s inclusion in the risk assessment.

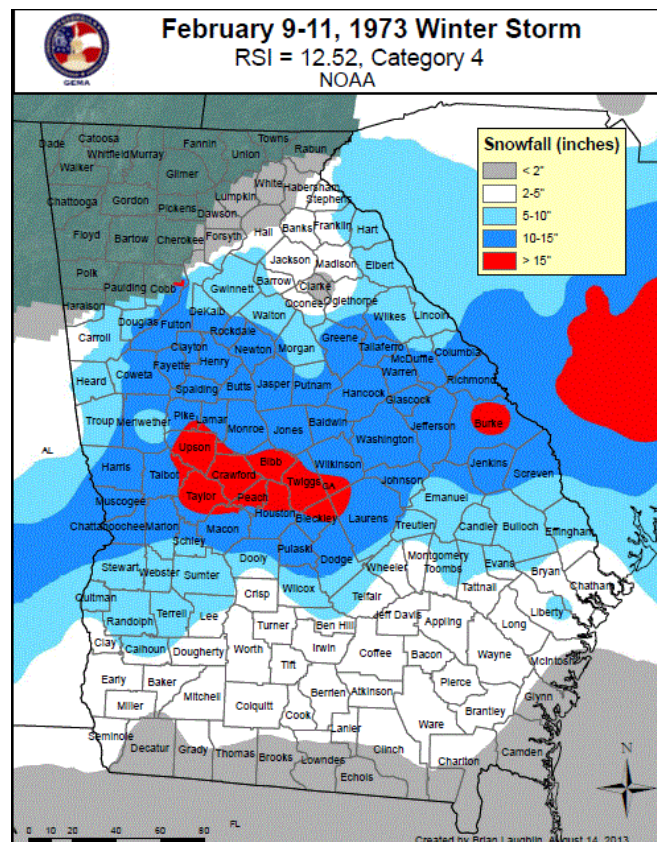
Hazard Profile

While winter storms are not as frequent of an occurrence in Cusseta-Chattahoochee County as they are in areas in the Northern US, they still have the potential to wreak havoc on the community when they do occur. Winter storms in Cusseta-Chattahoochee County typically cause drastic damage to infrastructure, such as roads, power lines, and bridges.

Natural Hazard: Winter Storm

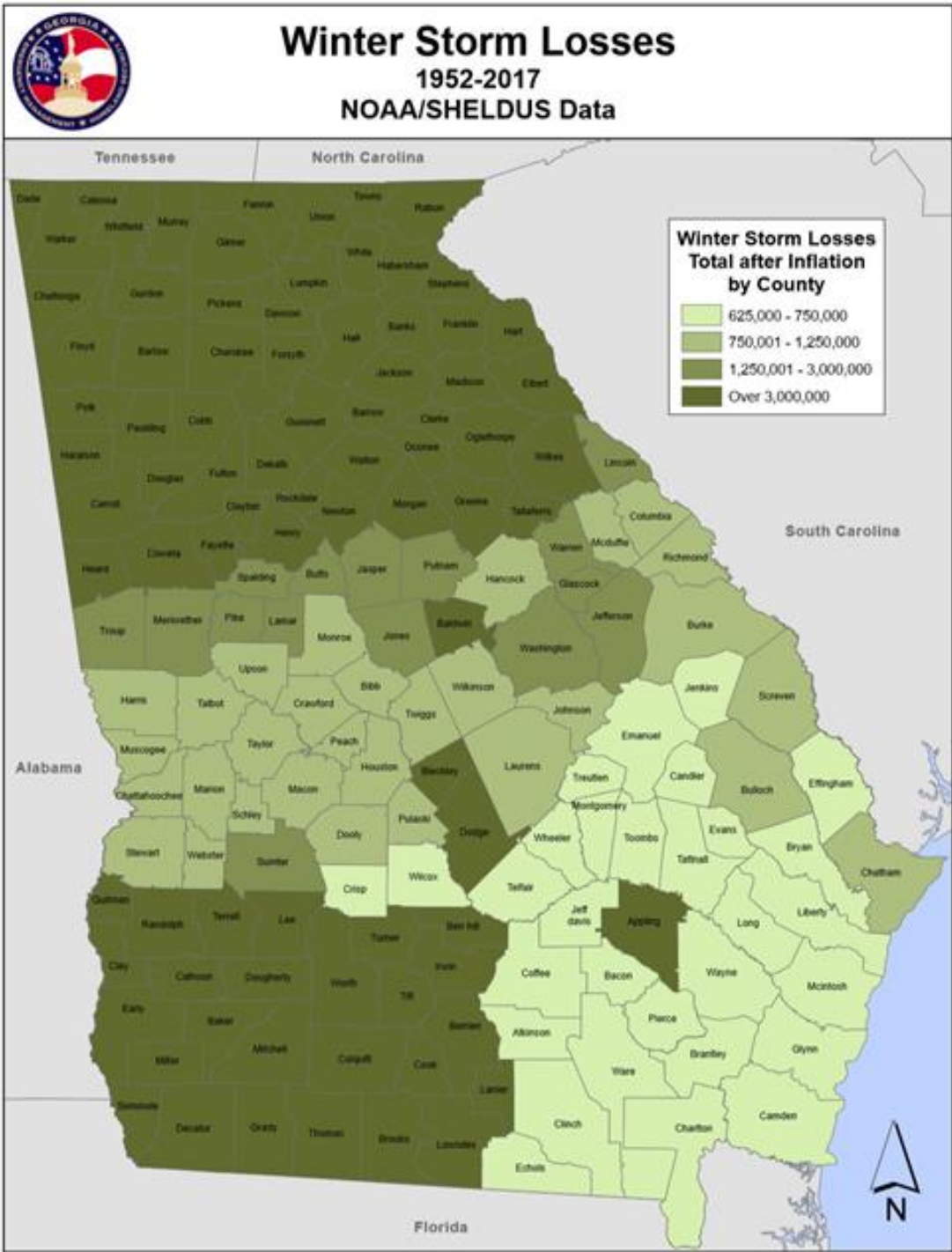
During the past twenty-five years, documentation exists for 6 winter storm events in Cusseta-Chattahoochee County. No consolidated data can be located prior to this timeframe. On average, Cusseta-Chattahoochee County has averaged a winter storm every 4.17 years. All winter storm data has been gathered on a countywide basis. For additional historical data, please see Appendix D. All winter storm hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.

Individual events of Winter Weather can be drastically different depending on many factors, including the duration of the event, the type of precipitation involved, and the depth of the precipitation. Winter Storm events can be a light dusting of snow, $\frac{1}{4}$ inch of ice, or over a foot of snow. During the 1973 snow event, parts of Cusseta-Chattahoochee County reported up to 15 inches of snow and all areas received at least 10 inches of snow. Ice events are another type of winter storm that has impacted Cusseta-Chattahoochee County in the past. These types of winter storms can be particularly crippling due to the increased threat of tree falls related to the weight of accumulated ice and subsequent utility infrastructure failure.



Source: 2014 State of Georgia Hazard Mitigation Strategy (most up-to-date version)

Natural Hazard: Winter Storm



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Winter Storm*Assets Exposed to the Hazard*

Since winter storms are indiscriminate regarding location, the Cusseta-Chattahoochee County HMPC determined that all public and private property, including all critical infrastructure, are susceptible to impacts from winter storms.

Estimated Potential Losses

Total estimated losses for winter storm events of the last 50 years are not available due to a lack of appropriate data.

Land Use & Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to Winter Storms. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta- Chattahoochee County.

Multi-Jurisdictional Considerations

All portions of Cusseta-Chattahoochee County could potentially be impacted by a winter storm, including freezing rain, sleet, and snow. Therefore, all mitigation actions identified regarding winter storms should be pursued on a countywide basis and including all municipalities.

Hazard Summary

Winter storms, which can include freezing rain, sleet, or snow, typically afford communities some advance warning, which is different from many other severe weather phenomena. The National Weather Service issues winter storm watches, advisories, and warnings as much as a day before the storm's impacts begin. Unfortunately, communities in the Southern United States are not equipped to handle winter storms due to their relative infrequent nature. Oftentimes, communities can face severe impact from these storms. The Cusseta-Chattahoochee County HMPC recognizes the potential threats winter storms could have on the community and have identified specific mitigation actions as a result.

Winter Storm Events since 2018 in Cusseta-Chattahoochee County

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/17/2018	04:00	EST-5	Winter Weather		0	0	0.00K

Natural Hazard: Flooding

Requirement §201.6(c)(2)(ii)

Requirement §201.6(c)(3)(ii)

Hazard Description

Flooding is a temporary overflow of water on normally dry lands adjacent to the source of water, such as a river, stream, or lake. The causes of flooding include mass sources of precipitation, such as tropical cyclones, frontal systems, and isolated thunderstorms combined with other environmental variables, such as changes to the physical environment, topography, ground saturation, soil types, basin size, drainage patterns, and vegetative cover. Adverse impacts may include structural damages, temporary backwater effects in sewers and drainage systems, death of livestock, agricultural crop loss, loss of egress and access to critical facilities due to roads being washed-out or over-topped and unsanitary conditions by deposition of materials during recession of the floodwaters.

Floods are loosely classified as either coastal or riverine. Coastal flooding occurs when normally dry, low-lying land is flooded by sea water. Coastal flooding is usually associated with tropical cyclones in Georgia. Riverine flooding occurs from inland water bodies such as streams and rivers. Riverine flooding is often classified based on rate of onset. The first is slow to build, peak, and recede, often allowing enough time for evacuations. The other type of riverine flood is referred to as a “flash” flood, which rapidly peaks and recedes, thus giving insufficient time for evacuations. Flash floods are typically considered the most dangerous of these types.

On a broad scale, flooding can occur around any body of water or low-lying surface given enough precipitation or snowmelt. The spatial extent of the flooding event depends on the amount of water overflow but can usually be mapped because of existing floodplains (areas already prone to flooding).

Flooding in Georgia is highly dependent on precipitation amounts and is highly variable. Certain seasons are more prone to flooding to a greater likelihood of excessive precipitation. Typically, the wet seasons are during the winter, early spring, and midsummer. Late spring and fall are usually drier seasons.

Hazard Profile

The Cusseta-Chattahoochee County HMPC researched flooding information for the last fifty years. The main sources of information used by the Cusseta-Chattahoochee County HMPC came from the National Climatic Data Center, the Cusseta-Chattahoochee County Emergency Operations Plan, and news media sources. It was determined that flooding has caused significant damage on many occasions over the last 20 years.

Natural Hazard: Flooding

One significant flooding event that affected Cusseta-Chattahoochee County occurred in 2015. This event caused over \$56,000 in reported damages according to the National Climatic Data Center. During this event, a few roads and culverts were washing out due to rapidly flowing streams and creeks. This event was caused by approximately 4-5 inches of rain falling in a 12-hour period. However, this is likely a gross underestimation of total damage costs.

While data was collected for the entire 50-year timeframe, little information was available regarding flood events over that period, possibly due to poor record keeping. All flood data was gathered on a countywide basis.

Flood events within Cusseta-Chattahoochee County are typically associated with areas of special flood hazard as identified on Flood Rate Insurance Maps (FIRMs) published by FEMA. Relatively little information is available regarding flooding damage estimates. However, with each flooding event, it is likely that significant costs arose related to road repair, infrastructure repair, and public safety response operations. Most of the flood damage in Cusseta-Chattahoochee County's history appears to be related to roads and culverts washing out because of flood waters. All flooding hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.

Cusseta-Chattahoochee County has one flood gage that provides information on potential impacted areas from floodwaters. This flood gage is located on the Upatoi Creek on the Muscogee County/Chattahoochee County line within the confines of Fort Benning. At this gage, flood stage is reached at 24 feet, which would lead to minor flooding in the woodlands and wetlands along the creek in Fort Benning upstream and downstream from the gage. At 28 feet, low-lying areas of Wildcat Road, Engineer Road, and Georgia Highway 411 begin to flood. At 30 feet, these roadways would become inundated with 1 foot to 2 feet of water. At 32 feet, major flood stage is reached. Large portions of Wildcat Road, Engineer Road, and Georgia Highway 411 would be flooded with 1-4 feet of water. This river gage has a high mark of 32.12 feet in March of 1990.

There are 6 documented flood events over the last 50 years. Based on the 50-year record, it can be inferred that such an event is likely to occur every 8.3 years in Cusseta-Chattahoochee County. This relates to a 12% chance of a flood event occurring in a given year. However, all identified flood events have occurred over the last 20 years. When extrapolated over 20 years, Cusseta-Chattahoochee County has averaged a flood every 3.3 and has a 30% annual chance of a flood event occurring.

For additional historical data, please see Appendix D.

Natural Hazard: Flooding*Assets Exposed to the Hazard*

To evaluate the assets that would potentially be impacted by flooding, the Cusseta-Chattahoochee County HMPC attempted to identify known structures within, or close to, the 100-year floodplain. There are approximately 28 buildings identified in the flood plain.

Estimated Potential Losses

The flooding events in Cusseta-Chattahoochee County over the last 50 years have led to over \$69,000 in damages. Extrapolated over 50 years, this results in an annual average of \$1,380 per year. However, all reported damages have occurred in the last 20 years. As a result, the average over the last 20 years is \$3,450 annually. These estimations are believed to be a gross underestimation of both prior and potential damages from flood events. Based upon the estimations from the 2023 Cusseta-Chattahoochee County HAZUS Report, a flood equivalent to the 1% riverine flood levels could result in estimated losses of more than \$400,000 (28 buildings). However, it is possible that some areas may not experience total losses while others may be inundated with flood water who are not designated in the 1% riverine flood areas.

Land Use & Development Trends

Cusseta-Chattahoochee County participates in the National Flood Insurance Program (NFIP) and follows the program's guidelines to ensure future development is carried out in the best interests of the public. The County (CID No. 130293) first entered the NFIP on January 6, 1988. According to the NFIP guidelines, the County has executed a Flood Damage Prevention Ordinance. This ordinance attempts to minimize the loss of human life and health as well as minimize public and private property losses due to flooding. The ordinance requires any potential flood damage be evaluated at the time of initial construction and that certain uses be restricted or prohibited based on this evaluation. The ordinance also requires that potential homebuyers be notified that a property is located in a flood area. In addition, all construction must adhere to the Georgia State Minimum Standard Codes and the International Building Codes of 2018.

The Flood Damage Prevention codes for Cusseta-Chattahoochee County can be found in Part I, Chapter 12, Article II of the Cusseta-Chattahoochee County Codes of Ordinances. According to these provisions, the Emergency Management Director is the identified administrator of the Flood Damage Prevention articles. The responsibilities of the administrator include, but are not limited to:

- (1) Review proposed development to assure that the permit requirements of this article have been satisfied.
- (2) Review proposed development to assure that all necessary permits have been received from governmental agencies from which approval is required by federal

Natural Hazard: Flooding

or state law, including section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334. Require that copies of such permits be provided and maintained on file.

(3) Review all permit applications to determine whether proposed building sites will be reasonably safe from flooding.

(4)When base flood elevation data or floodway data have not been provided in accordance with section 12-24, then the emergency management director shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other sources in order to administer the provisions of division 3.

(5) Review and record the actual elevation in relation to mean sea level (or highest adjacent grade) of the lowest floor, including basement, of all new or substantially improved structures in accordance with section 12-52(2).

(6) Review and record the actual elevation, in relation to mean sea level to which any new or substantially improved structures have been flood-proofed, in accordance with section 12-52(2).

(7) When flood-proofing is utilized for a structure, the emergency management director shall obtain certification of design criteria from a registered professional engineer or architect in accordance with section 12-52(1)c. and section 12-77(2) or 12-79(2).

(8) Make substantial damage determinations following a flood event or any other event that causes damage to structures in flood hazard areas.

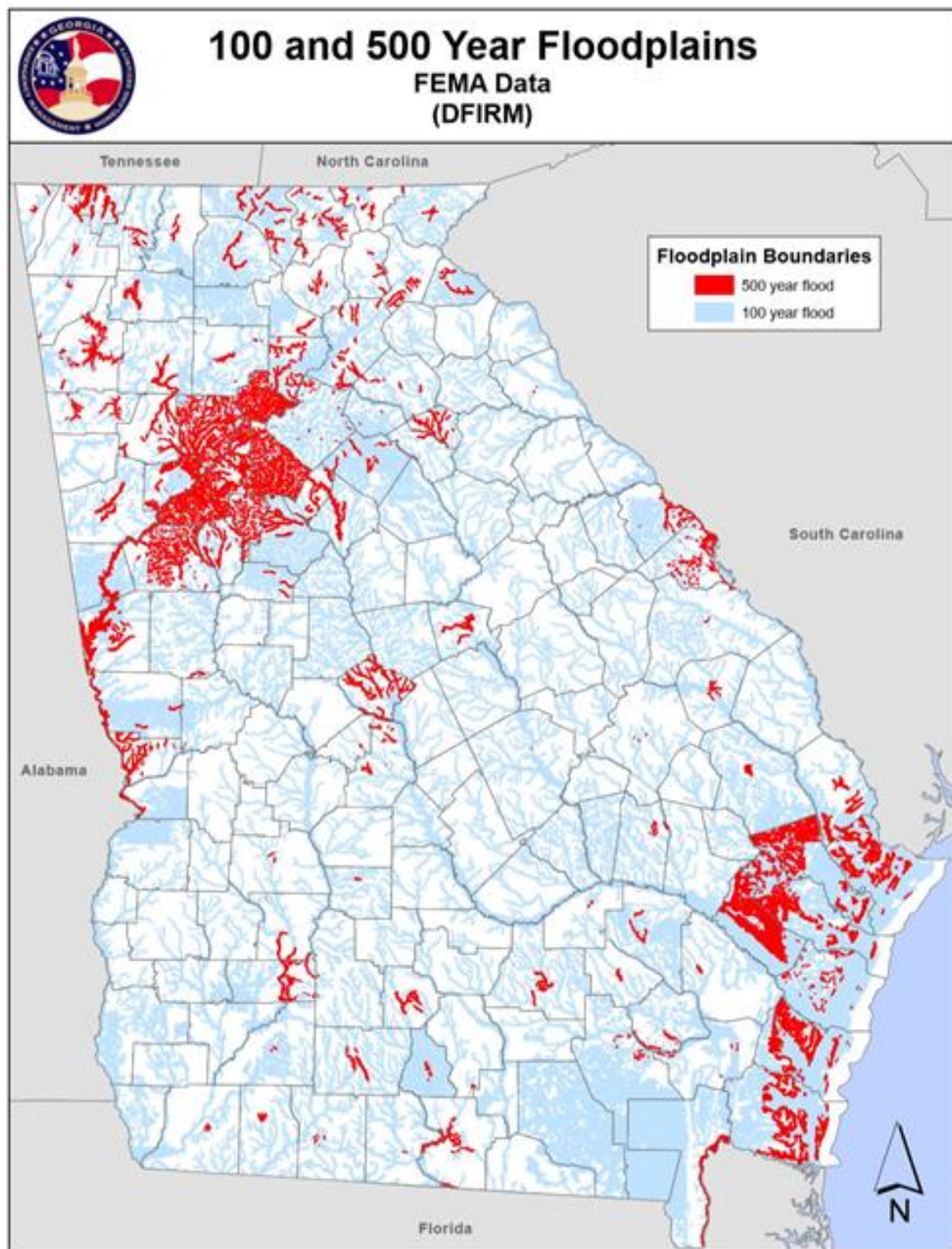
(9) Notify adjacent communities and the Georgia Department of Natural Resources prior to any alteration or relocation of a watercourse and submit evidence of such notification to the Federal Emergency Management Agency (FEMA).

(10) For any altered or relocated watercourse, submit engineering data/analysis within six months to the FEMA to ensure accuracy of community flood maps through the letter of map revision process. Assure flood carrying capacity of any altered or relocated watercourse is maintained.

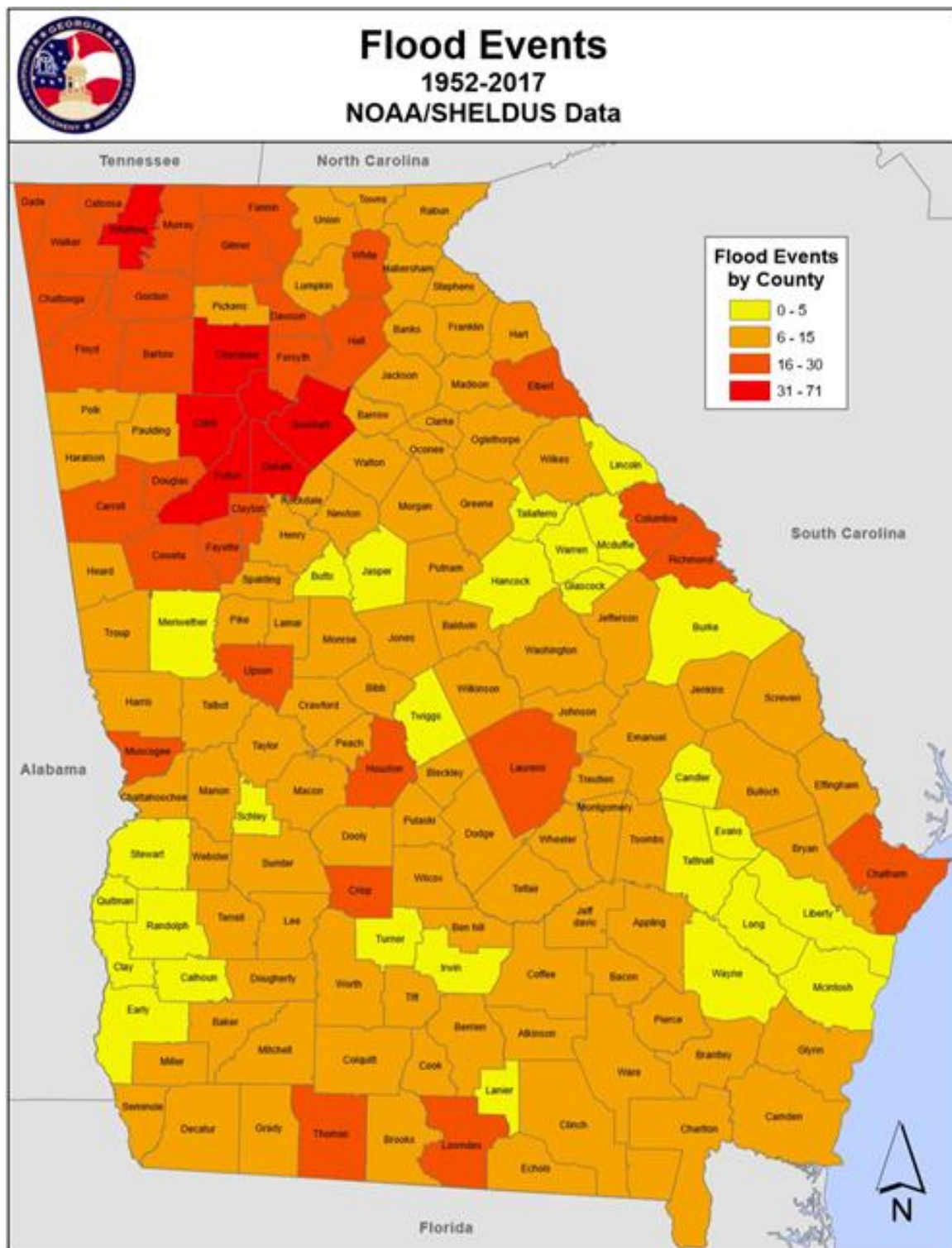
(11) Where interpretation is needed as to the exact location of boundaries of the areas of special flood hazard (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the emergency management director shall make the necessary interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this article.

(12) All records pertaining to the provisions of this article shall be maintained in the office of the emergency management director and shall be open for public inspection.

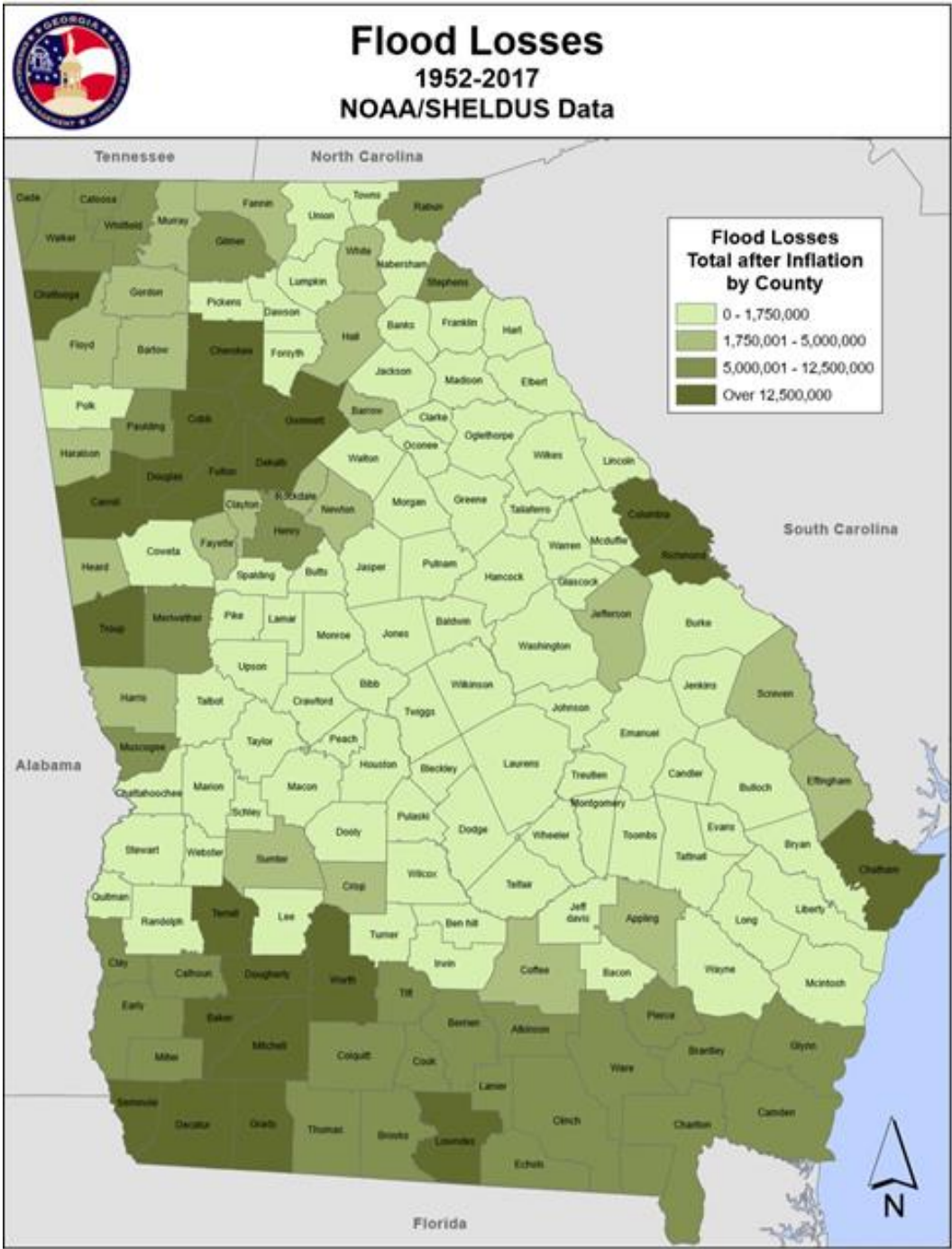
There are no repetitive loss residential properties identified in Cusseta-Chattahoochee County.

Natural Hazard: **Flooding**

Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Flooding**

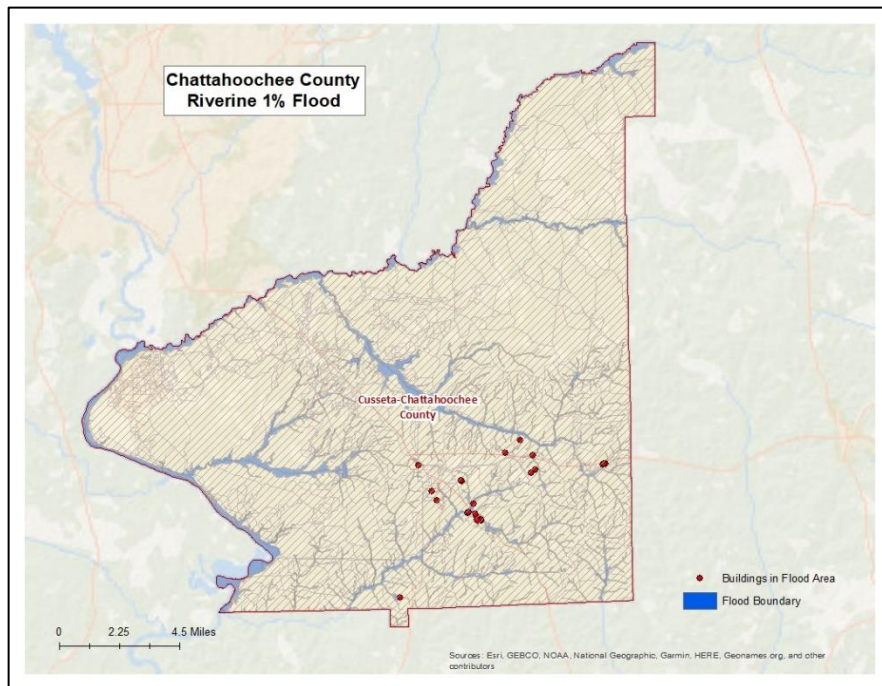
Natural Hazard: **Flooding**



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Flooding*Multi-Jurisdictional Considerations*

During a large-scale flood event, many portions of Cusseta-Chattahoochee County would potentially be impacted by flooding. However, the area's most prone to flooding have historically been those areas located within the 100-year floodplain – particularly those areas along Ochillee Creek, Hichitee Creek, Little Hichitee Creek, Bagley Creek, and the Chattahoochee River and their tributaries and distributaries. All of Cusseta-Chattahoochee County could potentially be impacted.



Source: 2024 Cusseta-Chattahoochee County HAZUS Report

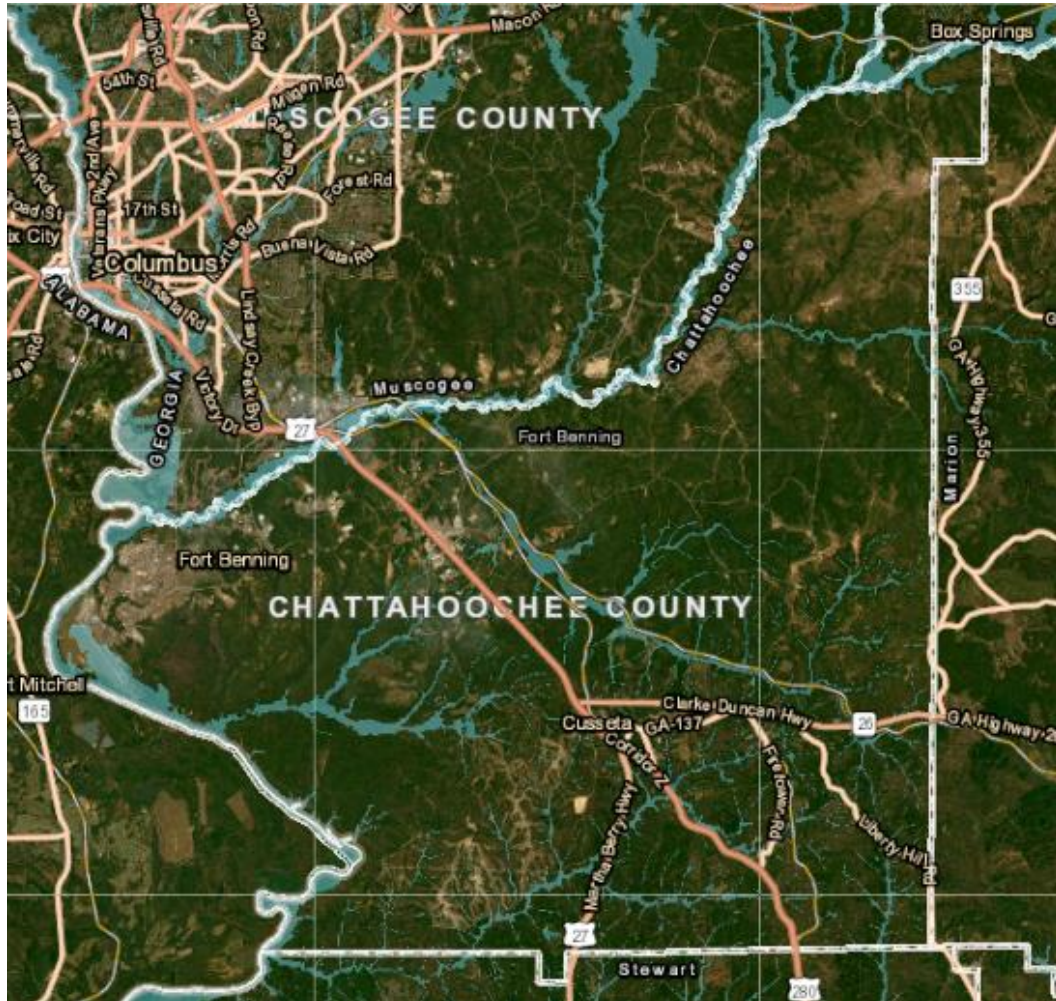
Hazard Summary

Flooding has the potential to inflict significant damage within Cusseta-Chattahoochee County, particularly along Ochillee Creek, Hichitee Creek, Little Hichitee Creek, Bagley Creek, and the Chattahoochee River and their tributaries and distributaries. Mitigation of flood damage requires the community to be aware of flood-prone areas, including roads, bridges, and critical facilities. The Cusseta-Chattahoochee County HMPC identified flooding as a hazard requiring mitigation measures and identified specific goals, objectives, and action items they deemed necessary to lessen the impact of flooding for their communities.

There have been no flooding events documented in Cusseta-Chattahoochee County since the adoption of the 2018 plan.

Natural Hazard: **Flooding**

Cusseta-Chattahoochee County



*Note: All "light blue" shaded areas indicate the extent of the 100-year (or 1% annual) flood risk
All Flood Maps are from the Georgia DFIRM Flood Map Program*

Natural Hazard: Tornado*Hazard Description*

A tornado is a violently rotating column of air (seen only when containing condensation, dust, or debris) that is in contact with the surface of the ground. Exceptionally large tornadoes may not exhibit the classic “funnel” shape, but may appear as a large, turbulent cloud near the ground or a large rain shaft. Destructive because of strong winds and windborne debris, tornadoes can topple buildings, roll mobile homes, uproot vegetation, and launch objects hundreds of yards.

Most significant tornadoes (excluding some weak tornadoes and waterspouts) stem from the right rear quadrant of large thunderstorm systems where the circulation develops between 15,000 and 30,000 feet. As circulation develops, a funnel cloud, a rotating air column aloft, or tornado descends to the surface. These tornadoes are typically stronger and longer-lived. The weaker, shorter-lived tornadoes can develop along the leading edge of a singular thunderstorm. Although tornadoes can occur in most locations, most of the tornado activity in the United States is in the Midwest and Southeast. Tornadoes can occur anywhere within the State of Georgia.

In terms of the continuum of area of impact for hazard events, tornadoes are fairly isolated. Typically ranging from a few hundred to one or two miles across, tornadoes affect far less area than larger meteorological events such as tropical cyclones, winter storms and severe weather events. An exact season does not exist for tornadoes. However, most occur between early spring to mid-summer (February-June). The rate of onset of tornado events is rapid. Typically, the appearance of the first signs of the tornado is the descending funnel cloud. This sign may be only minutes from the peak of the event, giving those in danger minimal sheltering time. However, meteorological warning systems attempt to afford those in danger more time to shelter. The frequency of specific tornado intensities is undetermined because no pattern seems to exist in occurrence. Finally, the duration of tornado events ranges from the few minutes of impact on a certain location to the actual tornado lasting up to a few hours.

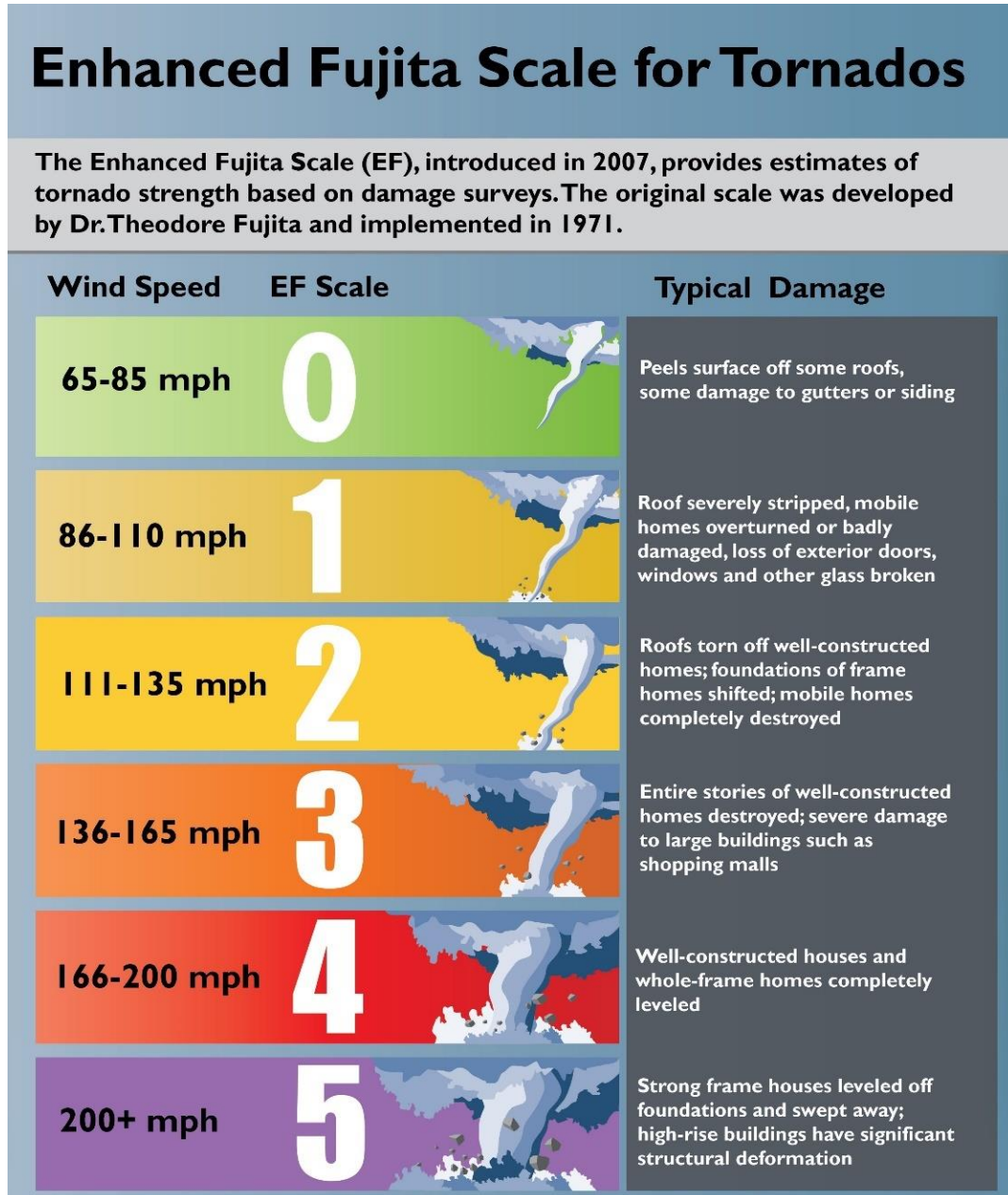
Tornadoes are measured after the occurrence using the subjective intensity measures. The Enhanced Fujita Scale describes the damage and then gives estimates of magnitude of peak 3-second gusts in miles per hour.

Hazard Profile

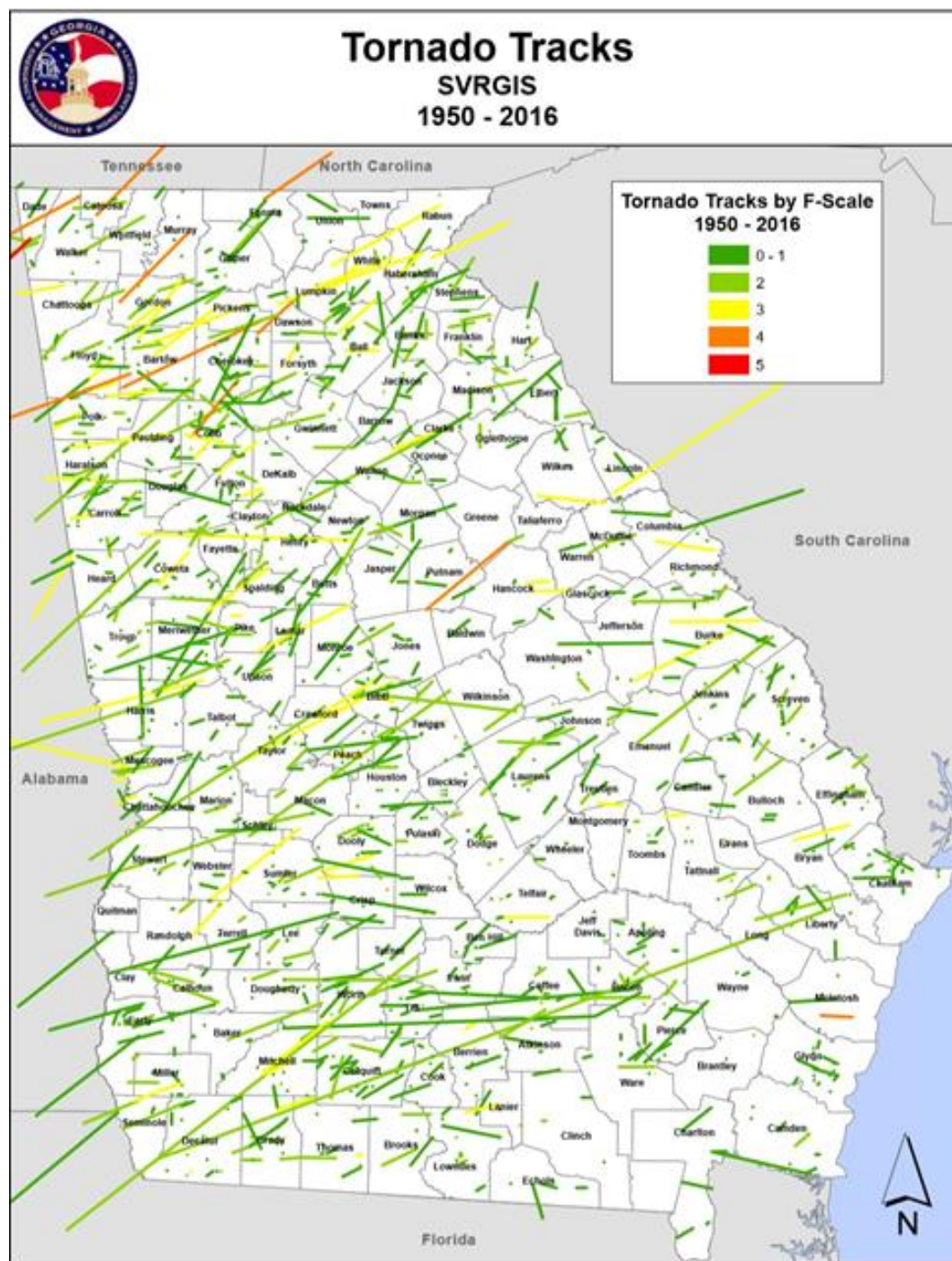
All areas within Cusseta-Chattahoochee County are vulnerable to the threat of a tornado. Due to the indiscriminate and unpredictable nature of tornadoes, there is no reliable method to determine where or when a tornado will strike. There have been 8 documented tornadoes in the last 50 years in Cusseta-Chattahoochee County. It is likely that other tornadoes have occurred within this timeframe, but available records are limited in nature.

Natural Hazard: Tornado

Based on the 50-year information available for Cusseta-Chattahoochee County, a tornado occurs every 6.25 years. On an annual basis, Cusseta-Chattahoochee County has a 16% chance of being impacted from a tornado event. When only the last twenty years are considered, the likelihood of a tornado affecting Cusseta-Chattahoochee County increases dramatically to 40% (8 tornadoes since 2001).



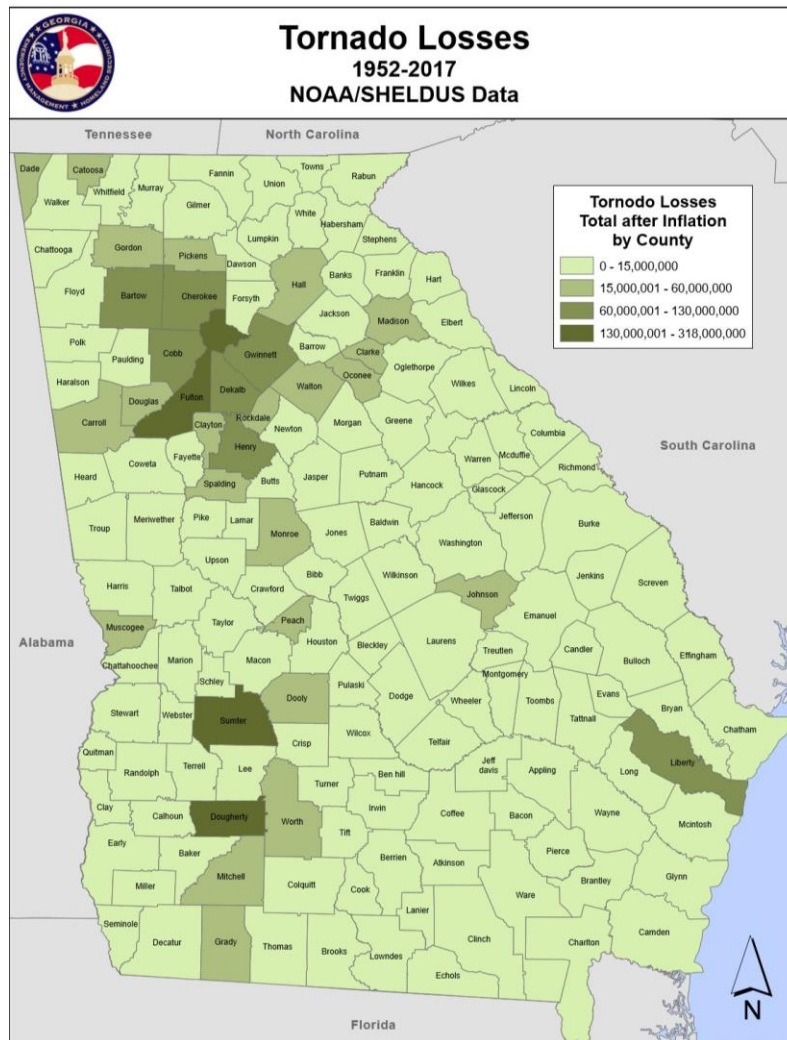
Source: International Code Council

Natural Hazard: **Tornado**

Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Tornado

Individual tornado events can cause extreme damage to an area. This holds true for Cusseta-Chattahoochee County, as well. The strongest and costliest documented tornado in Cusseta-Chattahoochee County was an F1 in 2006 that impacted Fort Benning. This storm caused over \$500,000 in damages. The tornado was on the ground for 1.5 miles and had a damage path around 150 yards wide. This storm produced damage in the McDonald Manor Housing Area and caused 9 injuries. For areas outside of Fort Benning, the strongest tornado to impact the area was an EF1 tornado in 2009. This storm produced approximately \$150,000 in damages and it passed through eastern Chattahoochee County. For additional historical data, please see Appendix D. All tornado hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

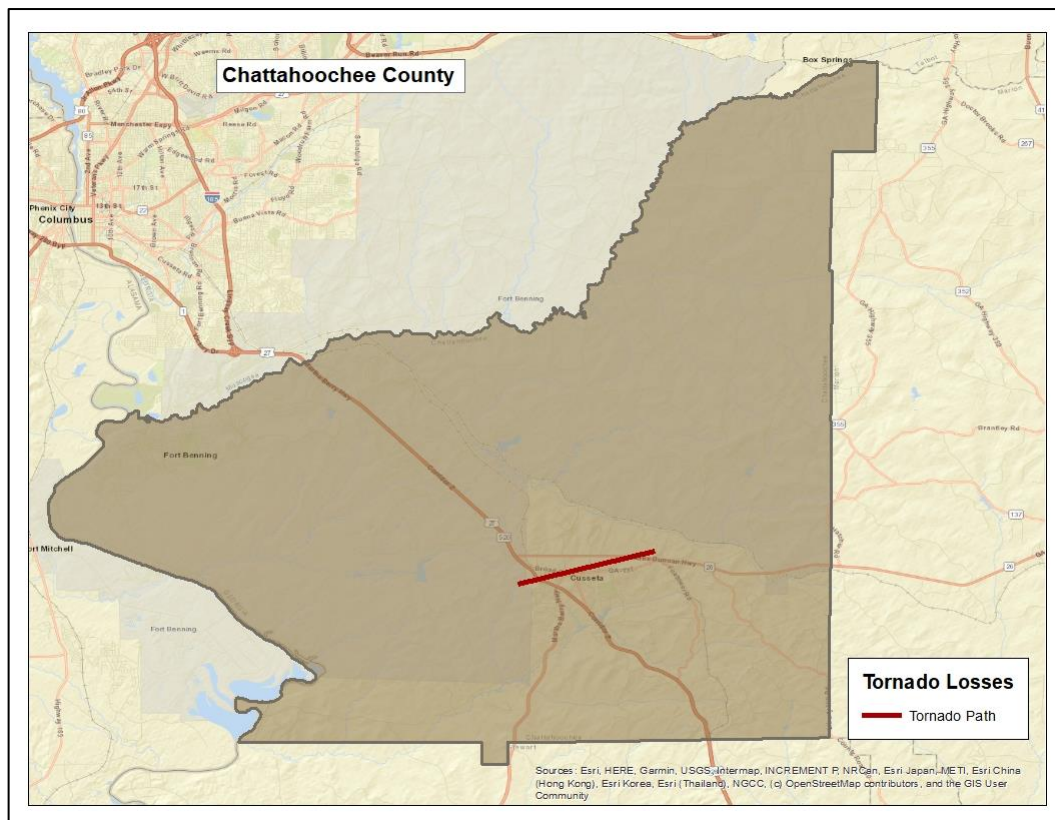
Natural Hazard: Tornado*Assets Exposed to the Hazard*

In evaluating assets that are susceptible to tornadoes, the Cuseta-Chattahoochee County HMPC determined that all public and private property is threatened by tornadoes, including all critical facilities. This is due to the lack of spatial prejudice of tornadoes.

Estimated Potential Losses

Estimates of damage for the past events of the last 50 years are over \$1 million, or \$21,640 annually. However, singular events can cause a significant impact in the amount of losses. Documented damage estimates for tornado events in Cuseta-Chattahoochee County have varied wildly depending on what was damaged.

Within the 2023 Cuseta-Chattahoochee County HAZUS report, a theoretical tornado path for an EF3 was identified that would inflict maximum damage. HAZUS estimated that this theoretical tornado would cause damage to approximately 308 buildings and result in losses more than \$6 million.



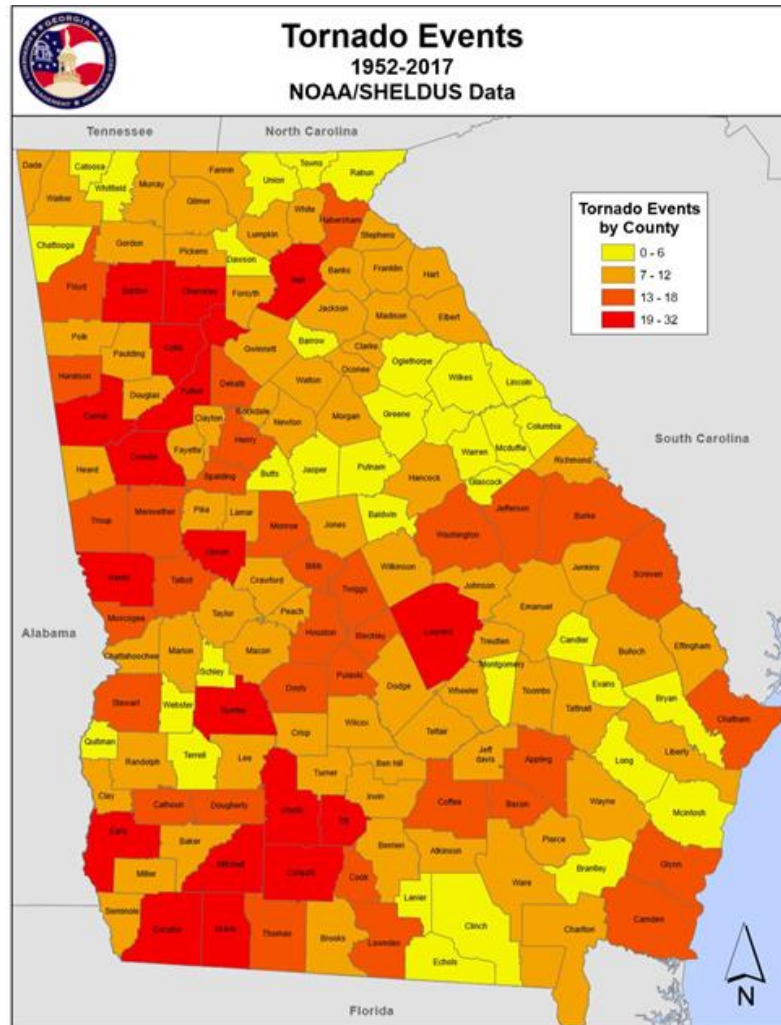
Source: 2024 Cuseta-Chattahoochee County HAZUS Report

Natural Hazard: Tornado*Land Use & Development Trends*

Cusseta-Chattahoochee County has no land use trend related to Tornadoes. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta-Chattahoochee County.

Multi-Jurisdictional Considerations

All portions of Cusseta-Chattahoochee County could potentially be impacted by a tornado due to the indiscriminate nature of tornadic events. Therefore, all mitigation actions identified regarding tornadoes should be pursued on a countywide basis and included all municipalities.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: Tornado*Hazard Summary*

Cusseta-Chattahoochee County remains at risk to potential damage from tornadoes, especially considering the average of one tornado every 6.25 years over the last 50 years. Should a tornado strike in densely populated areas of the county, significant damage or loss of life could occur. Due to the destructive power of tornadoes, it is essential that the mitigation measures identified in this plan regarding tornado activity receive full consideration.

There have been no documented tornadoes since the adoption of the 2018 Cusseta-Chattahoochee County Hazard Mitigation Plan.

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
HEINEBURG VILLAGE	CHATTAHOOCHEE CO.	GA	04/05/2022	13:04	EST-5	Tornado	EF1	0	0	0.00K	0.00K

Natural Hazard: Drought*Hazard Description*

Drought is a normal, recurrent feature of climate consisting of a deficiency of precipitation over an extended period (usually a season or more). This deficiency results in a water shortage for some social or environmental sector. Drought should be judged relative to some long-term average condition of balance between precipitation and evapotranspiration in a particular area that is considered “normal.” Drought should not be viewed as only a natural hazard because the demand people place on water supply affects perceptions of drought conditions. From limited water supplies in urban areas to insufficient water for farmland, the impacts of drought are vast.

Droughts occur in virtually every climatic zone and on every continent. Because the impacts of drought conditions are largely dependent on the human activity in the area, the spatial extent of droughts can span a few counties to an entire country.

Temporal characteristics of droughts are drastically different from other hazards due to the possibility of extremely lengthy durations as well as a sluggish rate of onset. Drought conditions may endure for years or even decades. This factor implicates drought as having a high potential to cause devastation on a given area. The duration characteristic of droughts is so important that droughts are classified in terms of length of impact. Droughts lasting 1 to 3 months are considered short term, while droughts lasting 4 to 6 months are considered intermediate and droughts lasting longer than 6 months are long term. With the slow rate of onset, most populations have some inkling that drought conditions are increasingly present. However, barring drastic response measures, most only have to adapt to the changing environment.

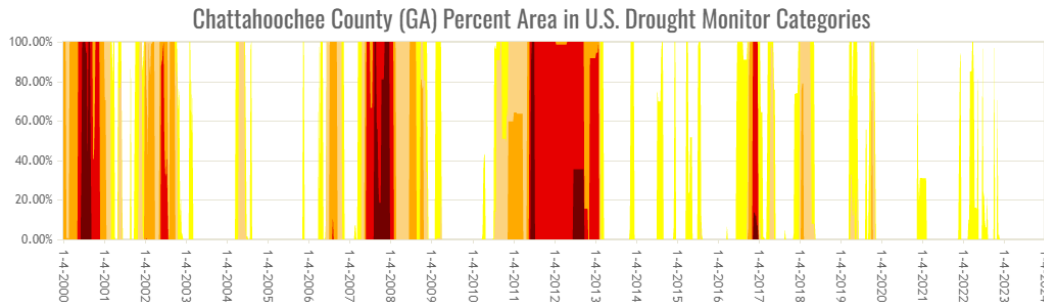
Seasonality has no general impact on droughts in terms of calendar seasons. However, “wet” and “dry” seasons obviously determine the severity of drought conditions. In other words, areas are less susceptible to drought conditions if the area is experiencing a wet season. The frequency of droughts is undetermined, because the hazard spans such a long period of time. However, climatologists track periods of high and low moisture content similarly to the tracking of cooling and warming periods.

Hazard Profile

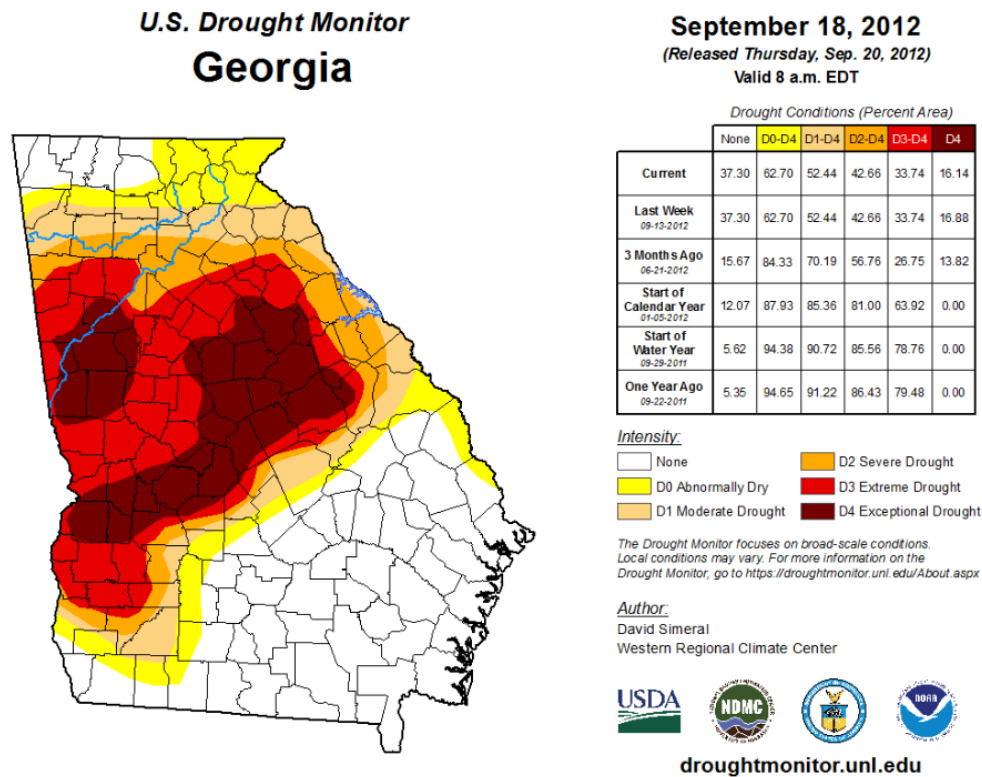
The Cusseta-Chattahoochee County HMPC reviewed data for the last 50 years regarding drought conditions. Historically, agricultural losses have accounted for the vast amount of losses related to drought conditions. Due to poor record keeping and the unpredictable nature of drought conditions, reliability of historical data for the last 50 years is low. Cusseta-Chattahoochee County has been impacted by 9 drought events in the last 25 years, according to data from the National Climatic Data Center. This amounts to a 36% chance of a drought for a given year over the last 25 years. The 2000 Drought caused over \$187,000 in crop damages and is the only documented drought with reported damages.

Natural Hazard: Drought

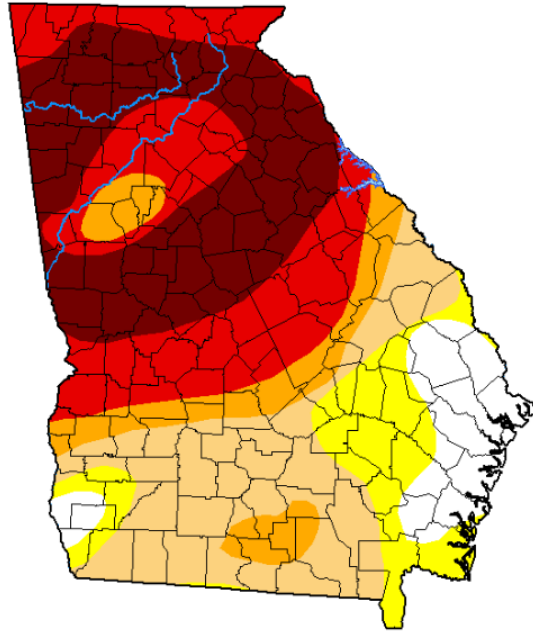
All drought hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.



There have been five recent examples of “exceptional” drought events affecting Cusseta-Chattahoochee County. The most recent events occurred in 2016 and 2012. Both events reached the D4 (Exceptional Drought) designation, according to data from the United States Drought Monitor. Below are maps of these two events.



Source: USDA Drought Monitor – University of Nebraska-Lincoln

Natural Hazard: **Drought****U.S. Drought Monitor
Georgia****December 20, 2016**

(Released Thursday, Dec. 22, 2016)

Valid 7 a.m. EST

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	8.84	91.16	80.67	59.38	49.64	26.52
Last Week 12-15-2016	9.08	90.92	83.09	63.26	50.18	27.25
3 Months Ago 09-22-2016	39.36	60.64	41.09	30.98	11.01	0.00
Start of Calendar Year 12-31-2015	87.36	12.64	0.00	0.00	0.00	0.00
Start of Water Year 09-29-2016	35.37	64.63	45.84	34.50	14.67	1.58
One Year Ago 12-24-2015	85.33	14.67	0.00	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu

Source: USDA Drought Monitor – University of Nebraska-Lincoln

Events of this extent can cause water shortages for residential and corporate needs, as well as affecting the ability for firefighting operations to be properly effective. Drought conditions of this extent can have devastating effects on the local agricultural industries, which has occurred in previous D4 level droughts.

Assets Exposed to the Hazard

While drought conditions do not typically pose a direct threat to structures, secondary hazards from drought such as increased wildfire threat, does pose a significant threat to all public and private property in Cusseta-Chattahoochee County, including all critical facilities. Water resources could also become scarce during a drought, a condition that would potentially affect all Cusseta-Chattahoochee County residences and critical facilities.

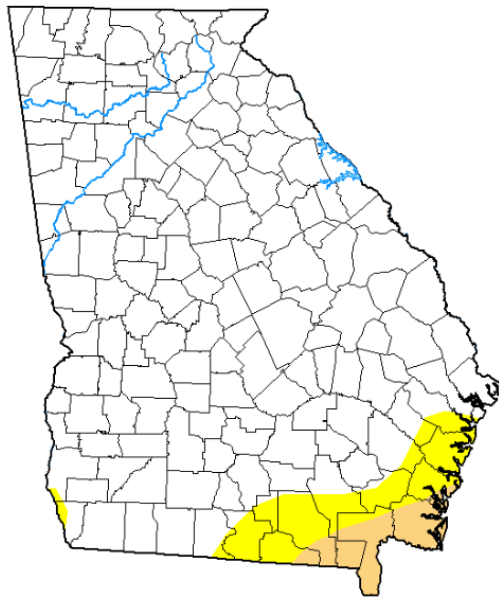
Estimated Potential Losses

No damage to structures or critical facilities is expected as a direct result of drought conditions. However, crop damage and subsequent losses can be expected to occur because of drought conditions. The degree of losses would depend on the duration of the drought,

Natural Hazard: Drought

severity of the drought, temperatures during the drought, season in which the drought occurs, and the specific needs of the involved crops. Water system shortages and need for supply assistance for those systems could also lead to economic losses associated with the drought. According to the 2017 Agriculture Census data, Cusseta-Chattahoochee County's market value of products sold was \$32,000.

U.S. Drought Monitor Georgia



February 21, 2023
(Released Thursday, Feb. 23, 2023)
Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	90.41	9.59	3.07	0.00	0.00	0.00
Last Week 02-14-2023	90.41	9.59	3.07	0.00	0.00	0.00
3 Months Ago 11-22-2022	29.65	70.35	45.09	20.27	0.00	0.00
Start of Calendar Year 01-03-2023	46.36	53.64	28.04	4.81	0.00	0.00
Start of Water Year 09-27-2022	76.20	23.80	0.00	0.00	0.00	0.00
One Year Ago 02-22-2022	68.74	31.26	3.97	0.00	0.00	0.00

Intensity:

None	D2 Severe Drought
D0 Abnormally Dry	D3 Extreme Drought
D1 Moderate Drought	D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.aspx>

Author:

Richard Heim
NCEI/NOAA



droughtmonitor.unl.edu

Source: United States Drought Monitor (University of Nebraska-Lincoln)

Land Use & Development Trends

As growth continues, drought can become a larger threat for Cusseta-Chattahoochee County due to the increased reliance on water infrastructure and wells countywide. This increased pull on these resources in Cusseta-Chattahoochee County could quicken or deepen the impacts of a drought for residential, commercial, and industrial areas. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta-Chattahoochee County.

Multi-Jurisdictional Considerations

All portions of Cusseta-Chattahoochee County could potentially be impacted by a drought, but agricultural areas of the county are potentially more at risk. Therefore, all mitigation actions identified regarding drought should be pursued on a countywide basis.

Natural Hazard: Drought*Hazard Summary*

Drought conditions can cause significant economic stress on the agriculture and forestry interests of Cusseta-Chattahoochee County. The potential negative secondary impacts of drought are numerous. They include increased wildfire threat, decreased water supplies for residential and industrial needs, stream-water quality, and water recreation facilities. The Cusseta-Chattahoochee County HMPC recognizes the potential threats drought conditions could have on the community and have identified specific mitigation actions as a result.

Natural Hazard: Wildfire*Hazard Description*

A wildfire is an uncontained fire that spreads through the environment. Wildfires can consume large areas, including infrastructure, property, and resources. When massive fires, or conflagrations, develop near populated areas, evacuations could possibly ensue. Not only do the flames impact the environment, but the massive volumes of smoke spread by certain atmospheric conditions also impact the health of nearby populations.

Wildfires result from the interaction of three crucial elements: fuel, ignition (heat), and oxygen. Natural and manmade forces cause the three crucial elements to coincide in a manner that produces wildfire events. Typically, fuel consists of natural vegetation. However, as the urban and suburban footprint expands, wildfires may utilize other means of fuel, such as buildings. In terms of ignition or source of heat, the primary source is lightning. However, humans are more responsible for wildfires than lightning. Manmade sources vary from the unintentional, such as fireworks, campfires, or machinery, to intentional arson. With these two elements provided, the wildfires may spread as long as oxygen is present.

Weather is the most variable factor affecting wildfire behavior. Strong winds propel wildfires quickly across most landscapes unless firebreaks are present. Shifting winds create erratic wildfires, which can complicate fire management efforts. Dry conditions provide faster-burning fuels, either making the area more vulnerable to wildfire or increasing the mobility of preexisting wildfires.

Wildfires are notorious for spawning secondary hazards, such as flash flooding and landslides, long after the original fire is extinguished. Both flash flooding and landslides result from fire consuming the natural vegetation that provides precipitation interception and infiltration as well as slope stability.

All of Georgia is prone to wildfire due to the presence of wildland fuels associated with wildfires. Land cover associated with wildland fuels includes coniferous, deciduous, and mixed forest; shrubland; grassland and herbaceous; transitional; and woody and emergency herbaceous wetlands. The spatial extent of wildfire events greatly depends on both the factors driving the fire as well as the efforts of fire management and containment operations.

In terms of seasonality, wildfires can occur during any season of the year. However, drier seasons, which vary within the State of Georgia, are more vulnerable to severe wildfires because of weather patterns and the abundant quick-burning fuels. In terms of rate of onset and duration, wildfires vary depending on the available fuels and weather patterns. Some wildfires can engulf an area in a matter of minutes from the first signs whereas others may be slower burning and moving. The frequency of wildfires is not typically measured because of the high probability of human ignition being statistically unpredictable.

Natural Hazard: Wildfire

Magnitude and intensity are typically only measured by size of the wildfire and locations of burning.

Three classes of fires include understory, crown, and ground fires. Naturally induced wildfires burn at relatively low intensities, consuming grasses, woody shrubs, and dead trees. These understory fires often play an important role in plant reproduction and wildlife habitat renewal and self-extinguish due to low fuel loads or precipitation. Crown fires, which consist of fires consuming entire living trees, are low probability but high consequence events due to the creation of embers that can be spread by the wind. Crown fires typically match perceptions of wildfires. In areas with high concentrations of organic materials in the soil, ground fires may burn, sometimes persisting undetected for long periods until the surface is ignited.

Hazard Profile

Wildfires pose a serious threat to Cusseta-Chattahoochee County. This is a result of the high amount of forestland and vegetation available to fuel potential wildfires. Also, there is an increasing amount of wildland-urban interface (WUI) in Cusseta-Chattahoochee County, which is defined as areas where structures and other human development meets undeveloped wildland properties. 98.7% of Cusseta-Chattahoochee County's population lives within the WUI. All wildfire hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.

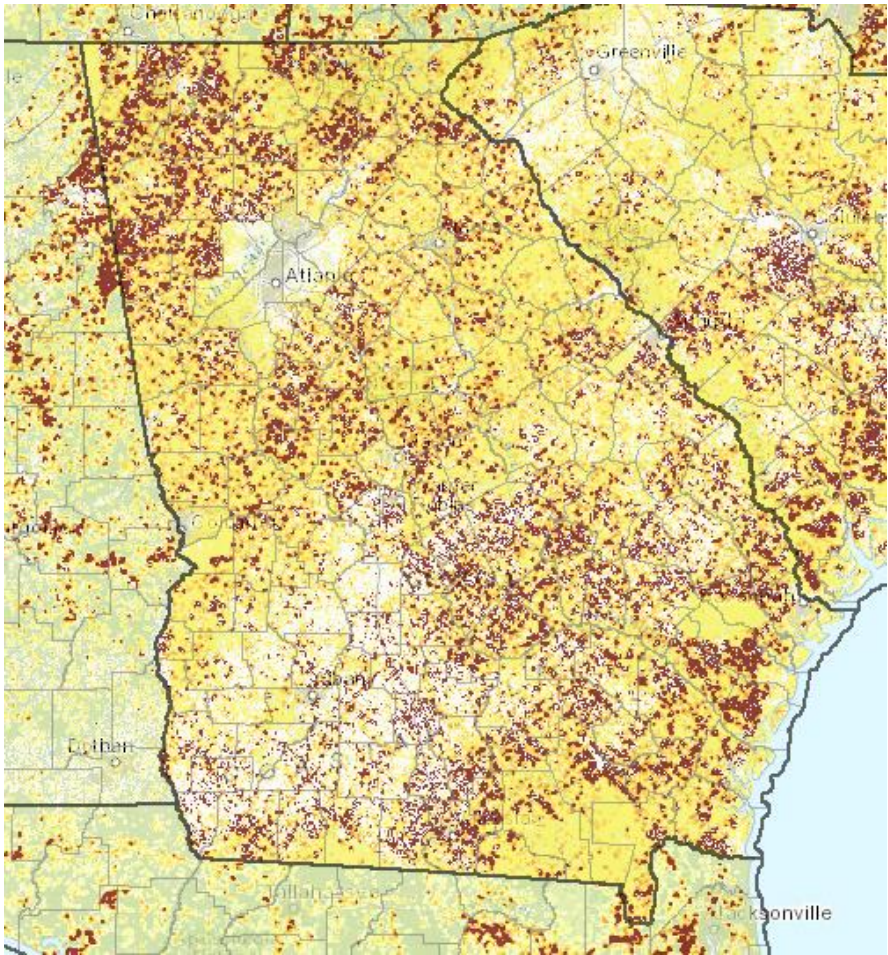
Wildfire statistics were not available for the 50-year timeframe at the time of this profile. According to the Georgia Forestry Commission, Cusseta-Chattahoochee County had 57 wildfires from 2012 to 2023 that consumed a total of 175.1 acres. This equates to an average of 4.75 wildfires per year and these fires consume an average of 14.6 acres per year. Cusseta-Chattahoochee County has a 1.3% daily chance of a wildfire. Historically, debris burning and incendiary have been the top two reasons for wildfires in Cusseta-Chattahoochee County.

Assets Exposed to the Hazard

All public and private property located within the Wildland-Urban Interface, including critical infrastructures, are susceptible to impacts from wildfires. Due to the large area of wildland area in Cusseta-Chattahoochee County and the large amount of WIU, all public and private property, including critical infrastructures, could be directly or indirectly impacted by the threat of wildfire.

Natural Hazard: **Wildfire**

Georgia Wildfire Ignition Density



Source: Southern Group of State Foresters Wildfire Risk Assessment Portal

Jurisdiction	Percentage of Population in WUI
Cusseta-Chattahoochee County	98.7%

Estimated Potential Losses

Little information is available regarding damages, in terms of dollars, for wildfire losses in Cusseta-Chattahoochee County.

Natural Hazard: Wildfire*Land Use & Development Trends*

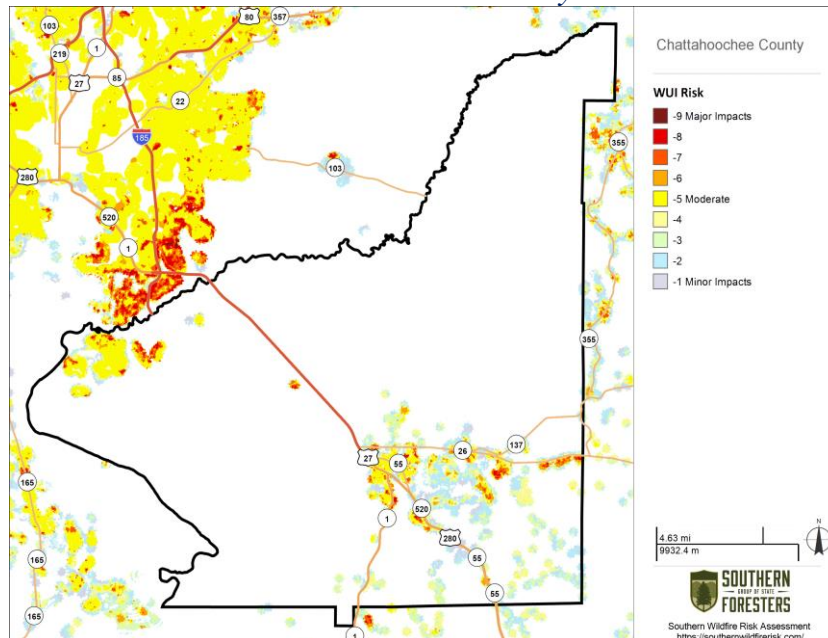
An increase in population would also increase the Wildland-Urban Interface (WUI) in Cusseta-Chattahoochee County. The WUI creates areas where fire can easily move from wildland areas into developed areas and threaten structures and human life. The expansion of the WUI in Cusseta-Chattahoochee County would complicate wildland fire management operations and planning initiatives. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta- Chattahoochee County.

Multi-Jurisdictional Considerations

All portions of Cusseta-Chattahoochee County could potentially be impacted by a wildfire due to the large amount of Wildland-Urban Interface, but the less developed areas of the county are more vulnerable. Therefore, all mitigation actions identified regarding wildfires should be pursued on a countywide basis and include all municipalities.

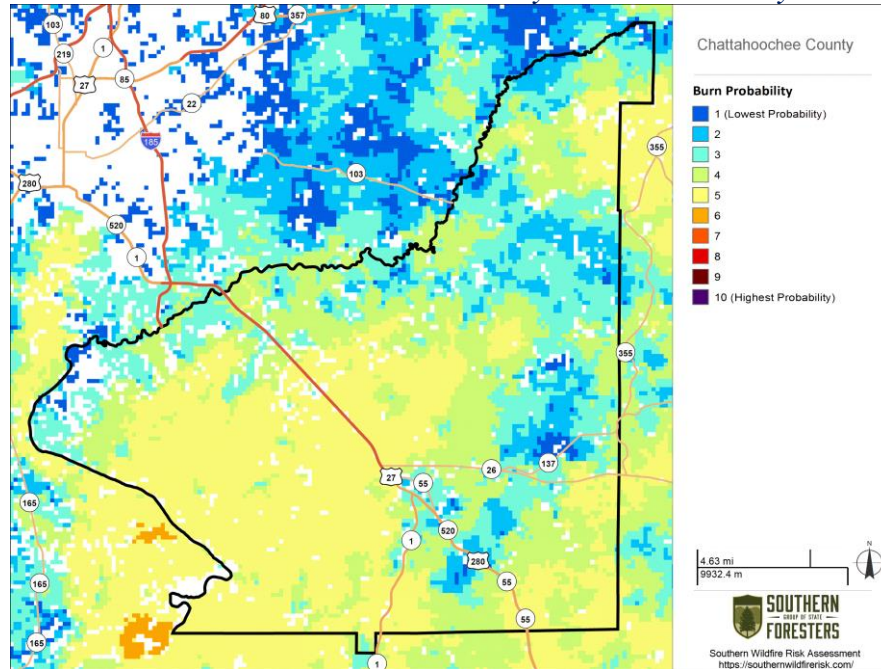
Hazard Summary

Wildfire is a significant threat to Cusseta-Chattahoochee County due to the increased amount of Wildland-Urban Interface. The increasing amount of area where structures and other human development meets undeveloped, wildland property is where 98.7% of Cusseta-Chattahoochee County's population lives. The mitigation measures identified in this plan should be aggressively pursued based on the high frequency of this hazard and the ability for wildfires to inflict devastation anywhere in Cusseta-Chattahoochee County.

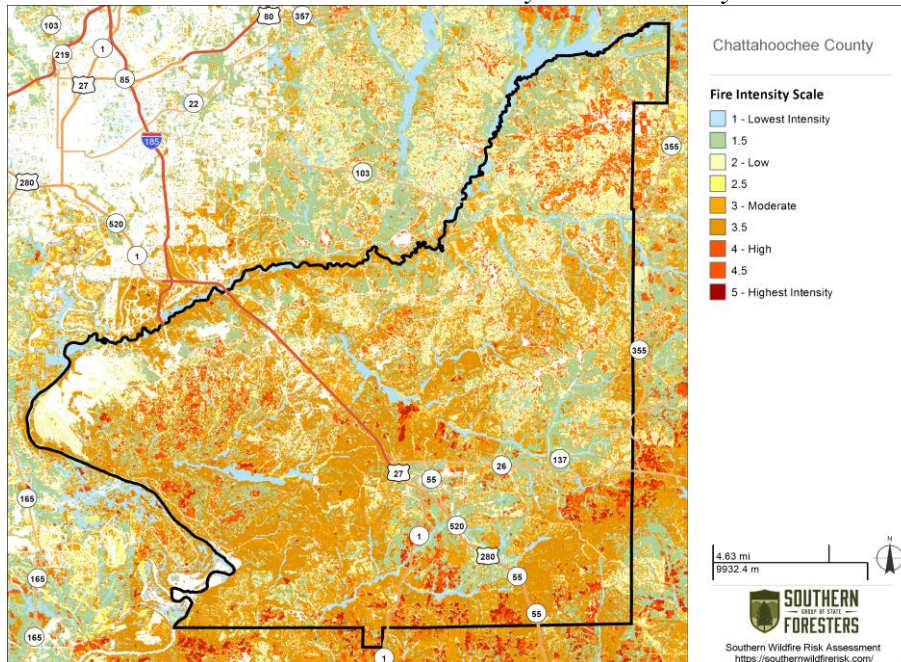
Cusseta-Chattahoochee County WUI Risk

Natural Hazard: **Wildfire**

Cusseta-Chattahoochee County Burn Probability



Cusseta-Chattahoochee County Fire Intensity Scale



*All maps in this section are from the
Southern Group of State Foresters Wildfire Risk Assessment Portal*

Natural Hazard: Earthquake*Hazard Description*

Earthquakes are generally defined as the sudden motion or trembling of the Earth's surface caused by an abrupt release of slowly accumulated strain. This release typically manifests on the surface as ground shaking, surface faulting, tectonic uplifting and subsidence, or ground failures, and tsunamis. In the United States, earthquake activity east of the Rocky Mountains is relatively low compared to the Western states because it is away from active plate boundaries and the plate interior strain rates are known to be very low.

The physical property of earthquakes that causes most of the damage within the United States is ground shaking. The vibrations from the seismic waves that propagate outward from the epicenter may cause failure in structures not adequately designed to withstand earthquakes. Because the seismic waves have different frequencies of vibration, the waves disseminate differently through sub-surface materials. For example, high frequency compression and shear waves arrive first, whereas lower frequency Rayleigh and love waves arrive later. Not only are the speeds varied between seismic waves, but also the types of movement. The surface vibration may be horizontal, vertical, or a combination of the two, which causes a wider array of structures to collapse.

Another manifestation of earthquakes is surface faulting. This phenomenon is defined as the offset or tearing of the earth's surface by a differential movement across a fault. Structures built across active faults tend to sustain damage regularly. There are no active faults within or near Georgia. Distinct inactive faults are known within the state north of the Columbus to Macon to Augusta fall line and running generally northeast-southwest.

The third earthquake phenomenon that causes damage is tectonic uplift and subsidence. Tectonic uplift can cause shallowing of the harbors and waterways while tectonic subsidence can cause permanent or intermittent inundation. Due to the association of tectonic uplift and subsidence with active faults, Georgia is not at risk to these phenomena.

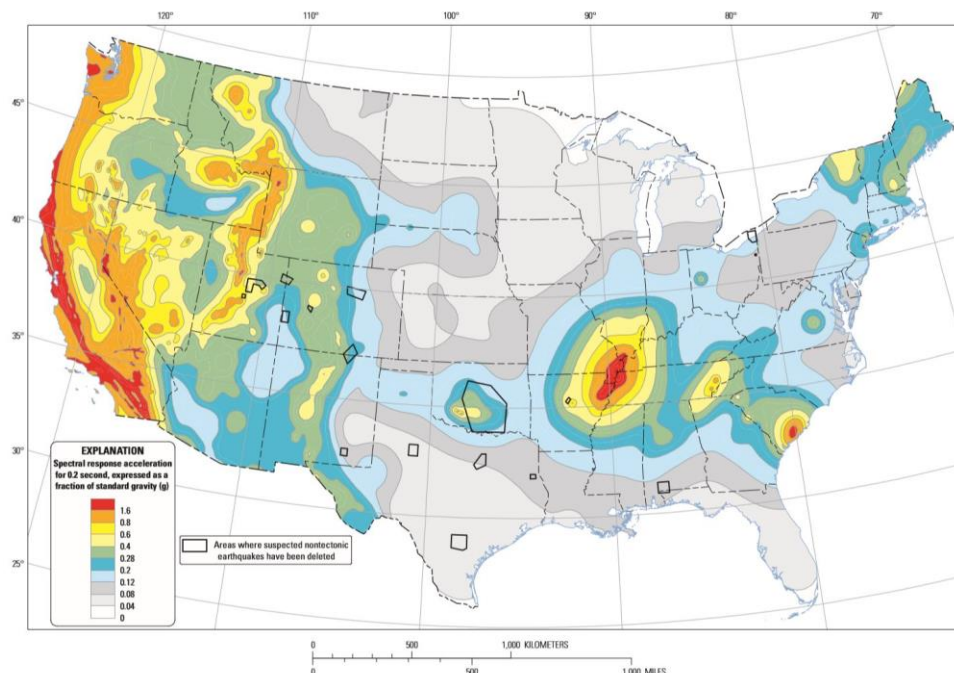
The fourth earthquake damage-causing phenomena are earthquake-induced ground failures, including liquefaction and landslides. During an earthquake, the areas that are rich in sand and silt have groundwater within 30 feet of the surface temporarily behave as viscous fluids during strong ground shaking. Structures built on these materials can settle, topple, or collapse as the ground "liquefies" beneath it. Landslides can also form when earthquake shaking or seismic activity dislodges rock and debris on steep slopes, triggering rock falls, avalanches, and slides.

Natural Hazard: Earthquake

Also, unstable, or nearly unstable, slopes consisting of clay soils may lose shear strength when disturbed by ground shaking and fail, resulting in a landslide. Georgia is at very low risk of seismic induced liquefaction or landslides.

The last of the earthquake-induced phenomena are tsunamis, which are large, gravity-driven waves triggered by the sudden displacement of a large volume of water. The waves produced travel in all directions from the origin at speeds of up to 600 miles per hour. In deep water, tsunamis normally have small wave heights. However, as the waves reach shallower water near land, the wave speed diminishes, and the amplitude drastically increases. Upon impact with a shoreline, the waves can inundate land rapidly, engulfing everything in its path. Successive wave crests follow, typically arriving minutes to hours later, frequently with later arrivals being more dominant. Frequently, the first tsunami waves are downward, causing dramatic exposure of the beach. Because of this, people are often killed trying to collect newly exposed seashells when the positive waves then arrive.

Although large tsunamis are rare in the eastern coast of the US, the possibility of such events occurring anywhere along the Atlantic and Gulf coast exists.



Two-percent probability of exceedance in 50 years map of 0.2 second spectral response acceleration

Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Earthquake***Hazard Profile*

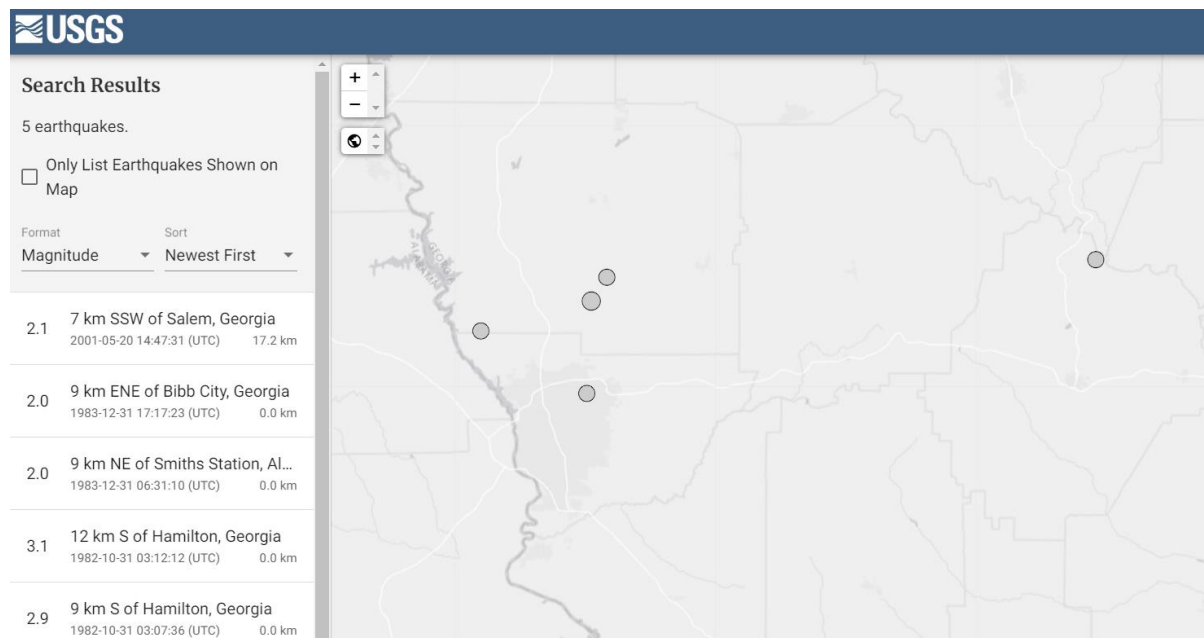
Cusseta-Chattahoochee County is not one of the 37 Georgia counties with the highest earthquake risk, according to GEMA and Georgia Tech School of Earth and Atmospheric Sciences. In reviewing data of the last 50 years, no earthquakes have originated from within Cusseta-Chattahoochee County. Only 5 earthquakes have originated within 50 miles of Cusseta, GA in the last 50 years. The closest earthquake to Cusseta-Chattahoochee County was a 2.0 that occurred 9km east-northeast of Bibb City, GA in 1983. The strongest earthquake to occur within the 50-mile radius was a 3.1 that occurred in Harris County, GA in 1982. Cusseta-Chattahoochee County has an 10% chance of an earthquake occurring within 50 miles of Griffin, GA in any given year. Historically, the 1886 Charleston, SC earthquake, estimated to be between 6.6 and 7.3 on the modern Richter Scale, likely caused impacts to Cusseta-Chattahoochee County. Although no historical records exist exhibiting any damages, Cusseta-Chattahoochee County was estimated to be in a level V area of the Modified Mercalli Intensity scale for this event. This would indicate strong shaking felt by everyone inside and outside at the time of the event and characterized by broken windows, movement of heavy furniture, and slight to moderate damage for poorly built buildings. Even with this low number of occurrences, it was determined that if earthquakes occur within or close to the jurisdiction of Cusseta-Chattahoochee County, significant damage could occur. Therefore, the Cusseta-Chattahoochee County HMPC has determined the threat of earthquakes to be higher than the statistics would indicate. All earthquake hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction.

Instrumental Intensity	Acceleration (%g)	Velocity (cm/s)	Perceived Shaking	Potential Damage
I	< 0.17	< 0.1	Not Felt	None
II-III	0.17 - 1.4	0.1 - 1.1	Weak	None
IV	1.4 - 3.9	1.1 - 3.4	Light	None
V	3.9 - 9.2	3.4 - 8.1	Moderate	Very light
VI	9.2 - 18	8.1 - 16	Strong	Light
VII	18 - 34	16 - 31	Very Strong	Moderate
VIII	34 - 65	31 - 60	Severe	Moderate to Heavy
IX	65 - 124	60 - 116	Violent	Heavy
X+	> 124	> 116	Extreme	Very Heavy

Natural Hazard: **Earthquake**

Assets Exposed to the Hazard

The Cusseta-Chattahoochee County HMPC determined that all critical facilities and all public and private property within Cusseta-Chattahoochee County are susceptible to the impacts of an earthquake due to the lower building codes with regards to earthquakes when compared to other parts of the country.



Source: United States Geological Survey (USGS) Earthquake Hazards Program

Estimated Potential Losses

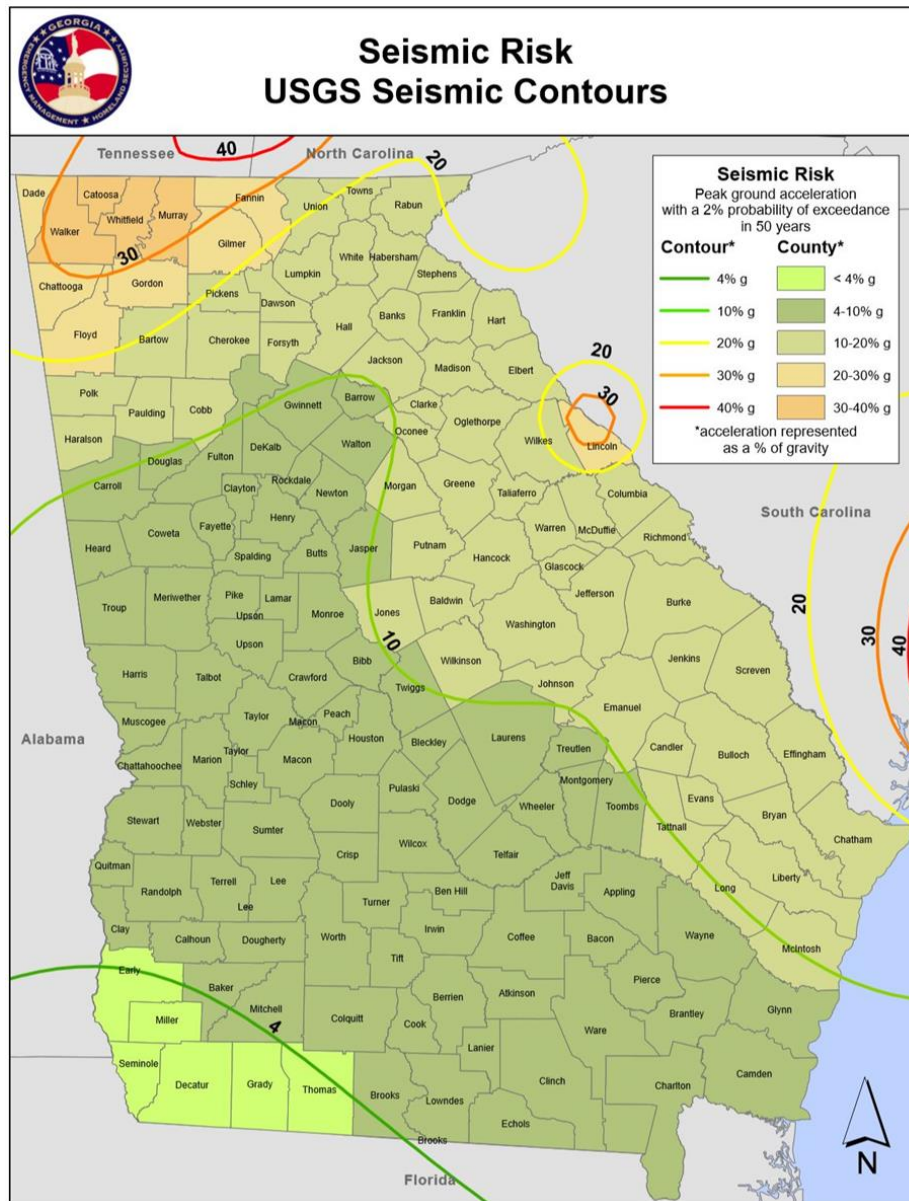
Little information is available regarding damages, in terms of dollars, for earthquake losses in Cusseta-Chattahoochee County.

Land Use and Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to earthquakes.

Multi-Jurisdictional Considerations

All of Cusseta-Chattahoochee County potentially could be threatened by earthquakes. As such, all earthquake mitigation actions should be pursued on a countywide basis and include all municipalities.

Natural Hazard: **Earthquake**

Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Hazard Summary

Even with the infrequency of earthquake impacts in Cusseta-Chattahoochee County, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of the County. The mitigation measures identified in this plan should be pursued based on the high impact potential of this hazard and the ability for earthquakes to inflict widespread devastation anywhere in Cusseta-Chattahoochee County.

Natural Hazard: Tropical Cyclone

Hazard Description

The National Weather Service describes tropical cyclones systems in the Atlantic Basin, including the Gulf of Mexico and Caribbean Sea, into four types based on strength.

Tropical Disturbance: A discrete tropical weather system of apparently organized thunderstorms – generally 100 to 300 nautical miles in diameter – originating in the tropics or subtropics, and maintaining its identity for 24 hours or more.

Tropical Depression: An organized system of clouds and thunderstorms with a defined circulation and maximum sustained winds of 38 mph (33 knots) or less.

Tropical Storm: An organized system of strong thunderstorms with a defined circulation and maximum sustained winds of 39 mph to 73 mph (34-63 knots).

Hurricane: An intense tropical weather system with a well-defined circulation, producing maximum sustained winds of 74 mph (64 knots) or greater. Hurricane intensity is classified into five categories using the Saffir-Simpson Hurricane scale. Winds in a hurricane range from 74-95 mph for a Category 1 hurricane to greater than 156 mph for a Category 5 hurricane.

Saffir-Simpson Scale for Hurricane Classification				
Strength	Wind Speed (Kts)	Wind Speed (MPH)	Pressure (Millibars)	Pressure
Category 1	64- 82 kts	74- 95 mph	>980 mb	28.94 "Hg
Category 2	83- 95 kts	96-110 mph	965-979 mb	28.50-28.91 "Hg
Category 3	96-113 kts	111-130 mph	945-964 mb	27.91-28.47 "Hg
Category 4	114-135 kts	131-155 mph	920-944 mb	27.17-27.88 "Hg
Category 5	>135 kts	>155 mph	919 mb	27.16 "Hg
Tropical Cyclone Classification				
Tropical Depression		20-34kts		
Tropical Storm		35-63kts		
Hurricane		64+kts or 74+mph		

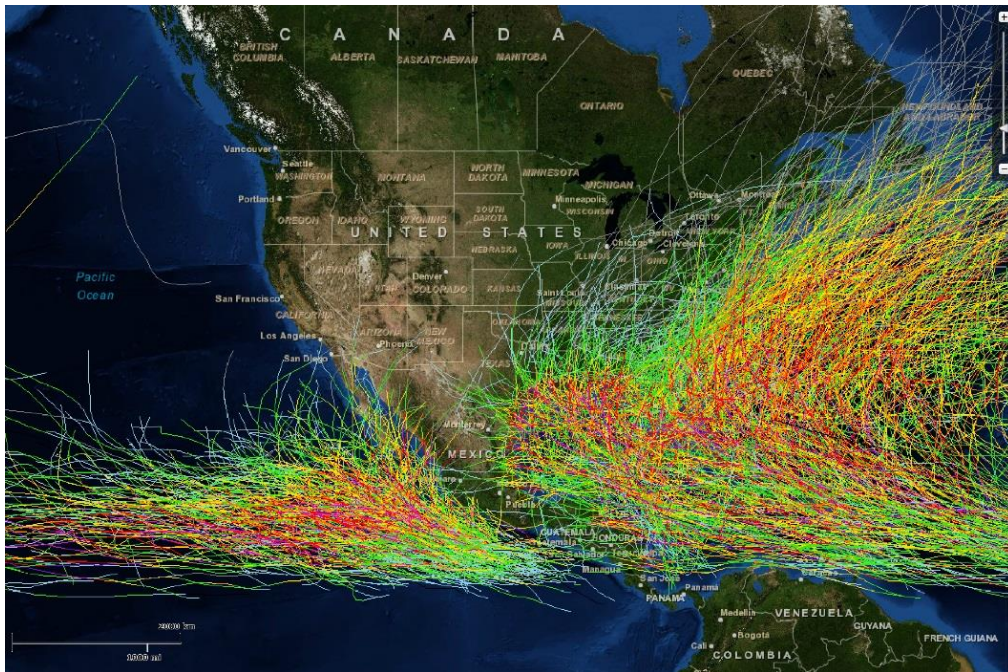
Tropical cyclones can cause catastrophic damage to coastlines and areas several hundred miles inland. Tropical cyclones can produce sustained high winds and spawn tornadoes and microbursts. Additionally, tropical cyclones can create storm surges along the coast

Natural Hazard: Tropical Cyclone*(Hazard Description Continued)*

and cause extensive damage from heavy rainfall. Floods and flying debris from the excessive winds are often the deadly and destructive results of these weather events.

Slow moving tropical cyclones traveling into mountainous regions tend to produce especially heavy rain. Excessive rain can trigger landslides or mudslides. Flash flooding can also occur due to intense rainfall.

Each of these hazards present unique characteristics and challenges; therefore, the following have been separated and analyzed as individual hazards: Tropical cyclones, Thunderstorms, Tornadoes, and Flooding. This section will focus on the direct effects of tropical cyclones.

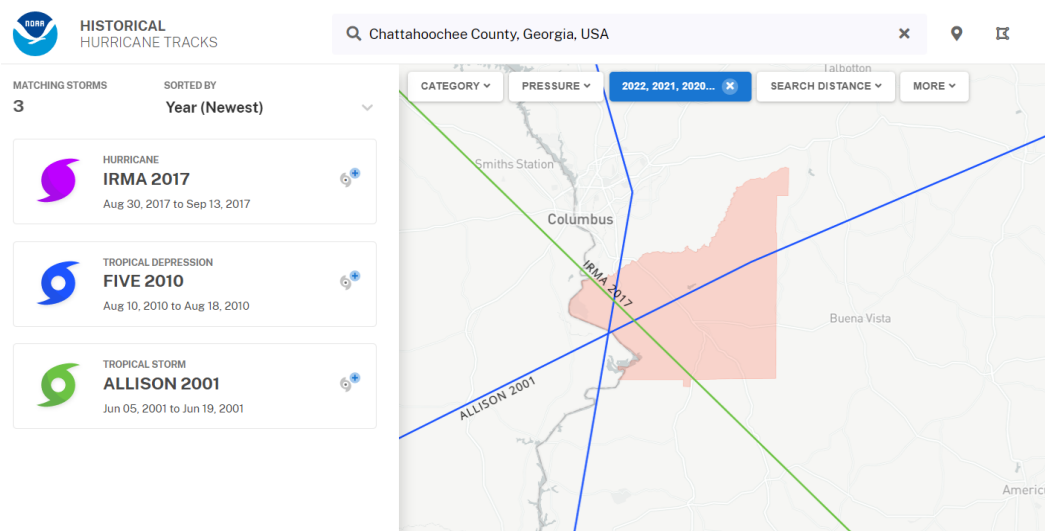
*Hazard Profile*

Tropical cyclones have directly impacted Cusseta-Chattahoochee County on an infrequent basis over the last 50 years. However, the possibility of a hurricane or tropical storm retaining their wind strength as far inland as Cusseta-Chattahoochee County is possible. According to the National Centers for Environmental Information, there have been 16 documented impacts from Tropical Cyclones in Cusseta-Chattahoochee County over the last 20 years. This equates to a 80% chance of a tropical cyclone impacting Cusseta-Chattahoochee County in any given year. The Cusseta-Chattahoochee County Hazard Mitigation Update Committee believes this percentage is more representative of the potential impact.

Natural Hazard: Tropical Cyclone

(Hazard Profile Continued)

Two tropical cyclones – Tropical Storm Allison in 2001 and Hurricane Irma in 2017 – have had a track that directly dissected Cusseta-Chattahoochee County in the last 50 years. Hurricane Irma was still at Tropical Storm strength when it crossed Cusseta-Chattahoochee County. All tropical cyclone hazard data included for Cusseta-Chattahoochee County is limited to countywide data and is not broken down by jurisdiction. In 2017, Hurricane Irma dropped 3-4 inches of rain on Cusseta-Chattahoochee County and wind gusts up to 47 mph (tropical storm-strength) were reported in the county.



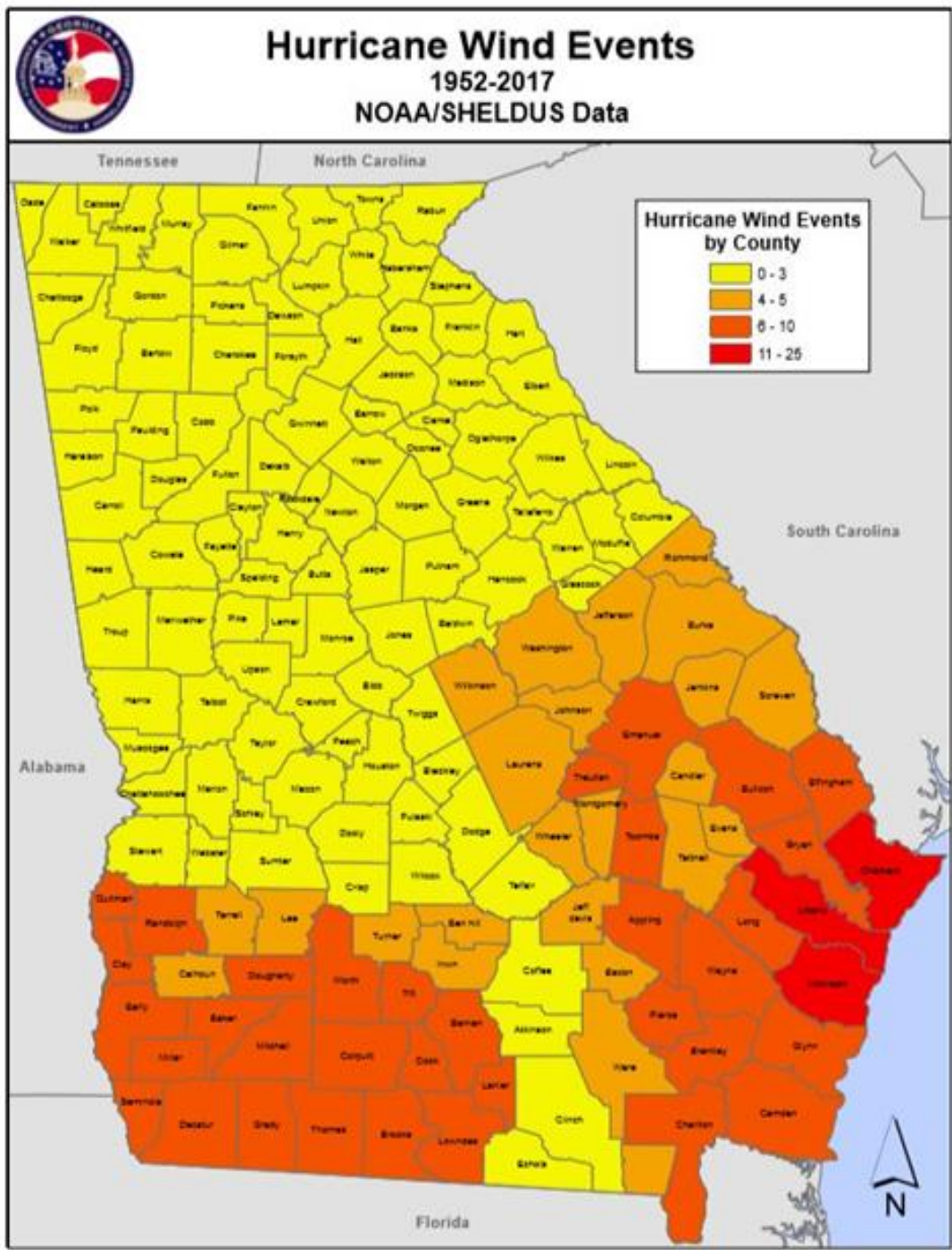
Source: NOAA Office for Coastal Management

The impacts that would result from hurricane or tropical storm forces on the citizens, infrastructure, and critical facilities of Cusseta-Chattahoochee County could be potentially catastrophic in nature. In addition to indirect impacts from a tropical cyclone event, Cusseta-Chattahoochee County's proximity to the Georgia coast could lead to direct impacts from a tropical cyclone event. For example, Cusseta-Chattahoochee County could be impacted by storm surge from any hurricane greater than a Category 1 storm. Parts of Cusseta-Chattahoochee County, particularly those near the Satilla River in southeastern Cusseta-Chattahoochee County, could be inundated with up to 9 feet of water.

Assets Exposed to the Hazard

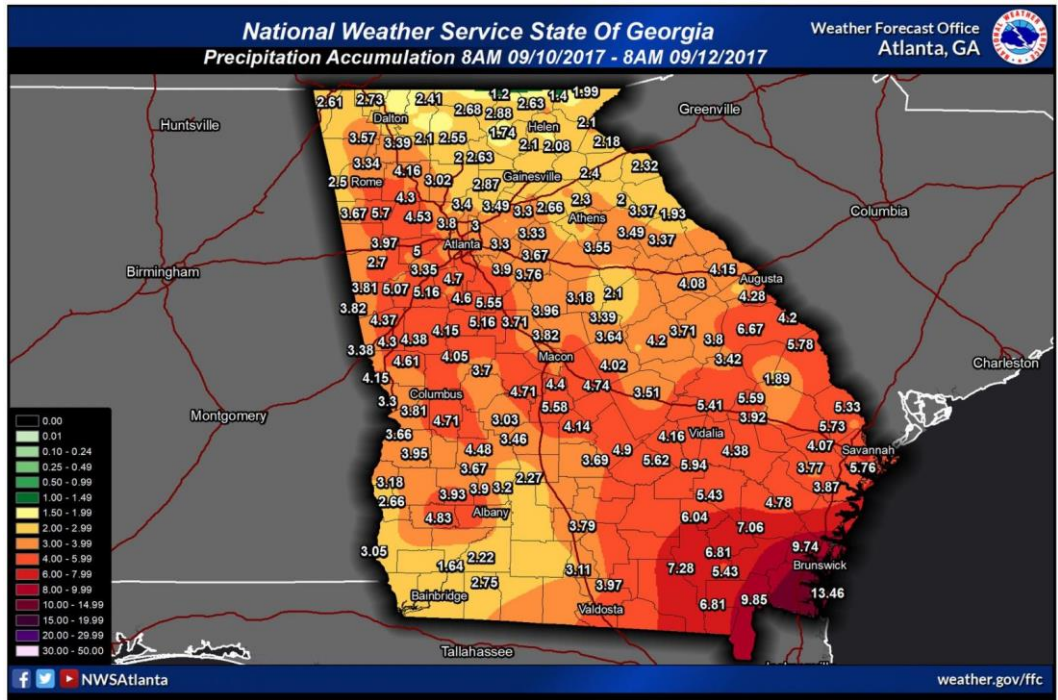
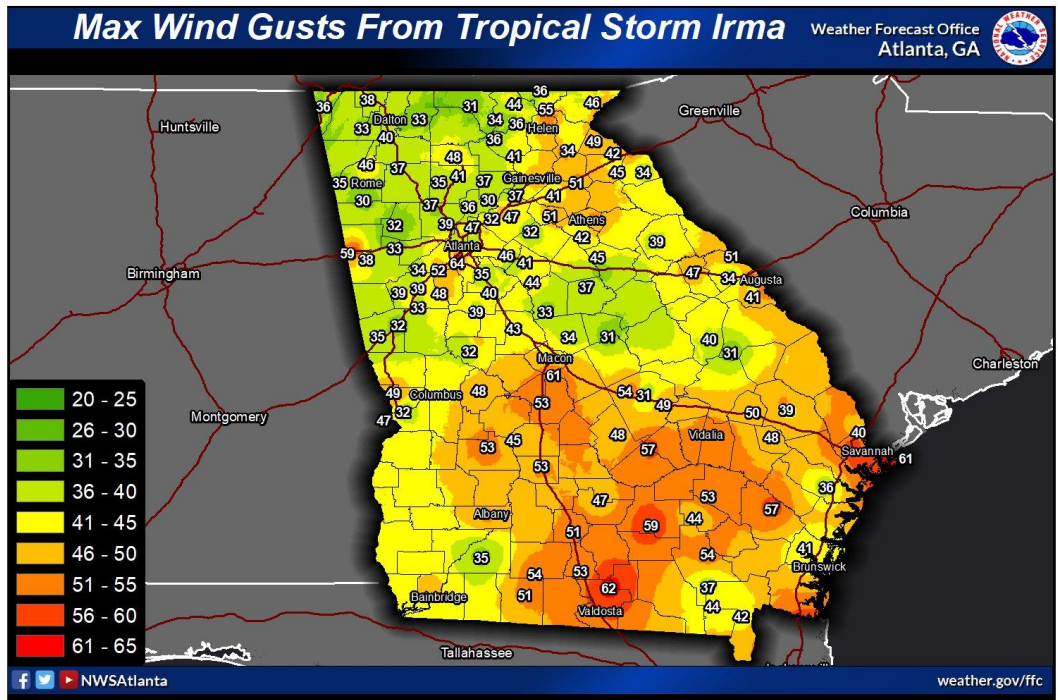
The Cusseta-Chattahoochee County HMPC determined that all critical facilities and all public and private property within Cusseta-Chattahoochee County are susceptible to the direct and indirect impacts of a tropical cyclone.

Natural Hazard: Tropical Cyclone



Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

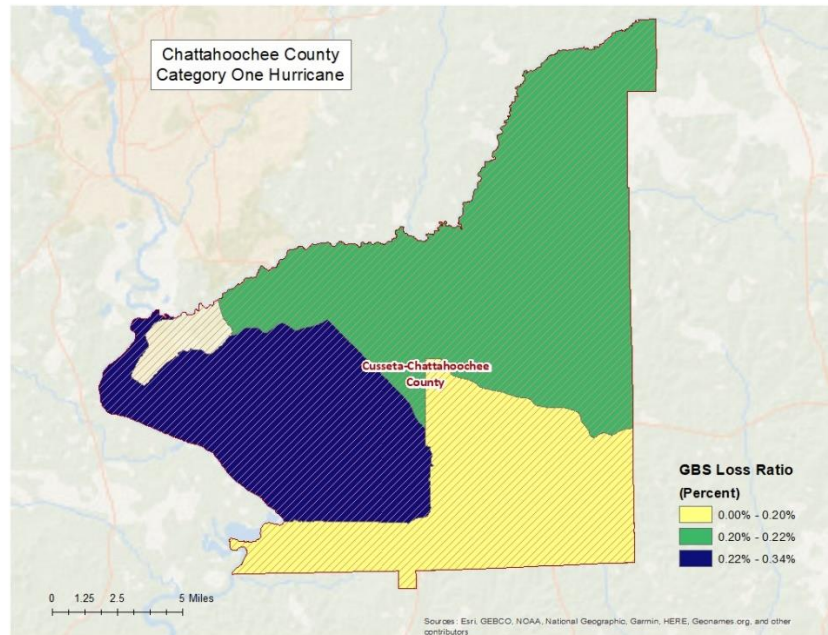
Natural Hazard: Tropical Cyclone



Natural Hazard: Tropical Cyclone*Estimated Potential Losses*

Little information is available regarding damages, in terms of dollars, is available for tropical cyclone losses in Cuseta-Chattahoochee County. Most losses for these events have been labeled under other impacts, such as tornadoes and flooding.

According to the 2024 Cuseta-Chattahoochee County HAZUS Report, a 1% annual risk tropical cyclone event would produce winds up to 78 mph in Cuseta-Chattahoochee County, which would be a Category 1 Hurricane. A storm of this magnitude would create over \$200,000 in damages, which equates to a 0.2% loss ratio. The greatest loss ratio area within Cuseta-Chattahoochee County would be in the western half of Cuseta-Chattahoochee County. A storm of this magnitude would create over 30,000 tons of debris.



Source: 2024 Cuseta-Chattahoochee County HAZUS Report

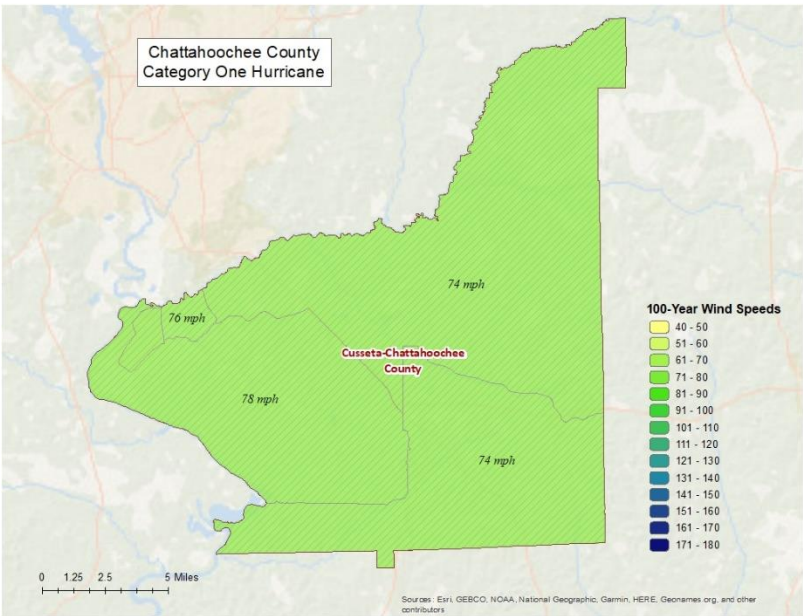
Land Use and Development Trends

Cuseta-Chattahoochee County currently has no land use trends related to Tropical Cyclones. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cuseta-Chattahoochee County.

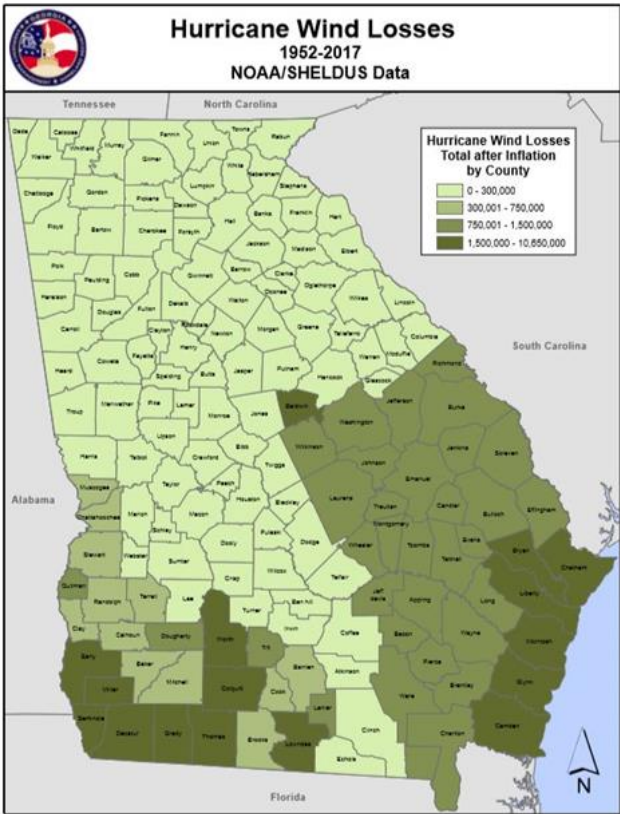
Multi-Jurisdictional Considerations

All of Cuseta-Chattahoochee County potentially be threatened by tropical cyclones. As such, all tropical cyclone mitigation actions should be pursued on a countywide basis.

Natural Hazard: Tropical Cyclone

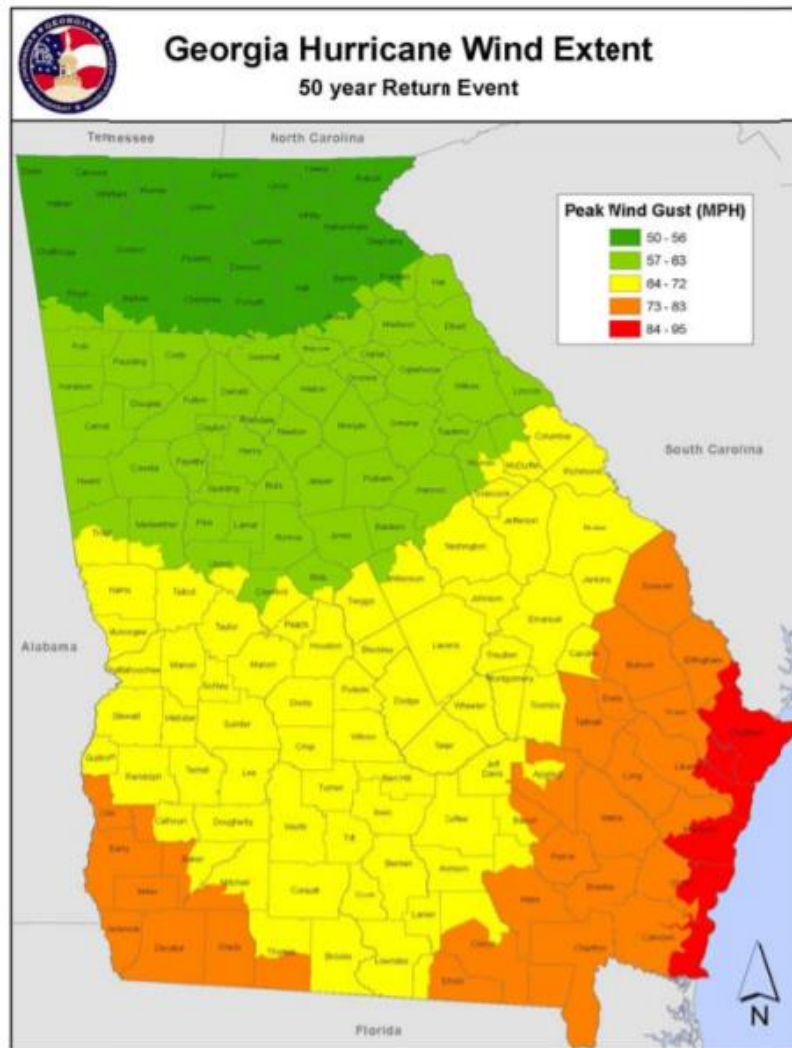


Source: 2024 Cusseta-Chattahoochee County HAZUS Report



Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Natural Hazard: **Tropical Cyclone**



Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Hazard Summary

Even with the relative infrequency of tropical cyclone impacts in Cusseta-Chattahoochee County in the recent past, the potential losses and impacts associated with the event would severely damage the infrastructure and economic viability of Cusseta-Chattahoochee County. The mitigation measures identified in this plan for tropical cyclones should be pursued based on the high impact potential of this hazard and the ability for tropical cyclones to inflict widespread devastation anywhere in Cusseta-Chattahoochee County.

Cusseta-Chattahoochee County has had two Federally Declared Disaster related to Tropical Cyclones, most recently in 2018 (Hurricane Michael).

Natural Hazard: **Extreme Temperatures**

Hazard Description

Extreme temperatures – both hot and cold – can pose a significant threat to an underprepared population. This is particularly true in areas where a population has a large elderly population, a large population of small children, and a population with lower socioeconomic status.

The term extreme heat can be subjective to a degree. FEMA, in their “Mitigation Ideas” publication defines extreme heat as “the condition where temperatures consistently stay ten degrees or more above a region’s average high temperature for an extended period.” The key to this definition is, extreme heat is relative to the average temperature, regardless of the time of year. For example, the National Center for Environmental Information (NCEI) records heat events in Georgia with 60- and 70-degree temperatures in December and January, simply because they are significantly higher than the average temperature for that time of year. According to www.ready.gov/heat, FEMA also offers another definition of extreme heat: “In most of the United States, extreme heat is defined as a long period (2 to 3 days) of high heat and humidity with temperatures above 90 degrees.” This definition can also lead to some subjectivity in the term “extreme.” For example, people that live in the southern parts of the country are more adapted to temperatures in the 90s and 100s than people that live in the more northern tiers. This is not to say those temperatures are not still dangerous. Notably, in recent years, more heat related deaths have occurred in the southern tier states than the northern tiers. The National Weather Service, however, focuses on “Excessive Heat,” defining it as heat indices of 105 degrees or more using a combination of temperature and humidity as a “real feel.”

Just as extreme heat can be subjective, so can extreme cold. Just as the National Weather Service utilizes heat index to attempt to quantify extreme heat, wind chill is often utilized to quantify extreme cold. Prolonged and/or unprotected exposure to extreme cold can be detrimental to people and animals. Additionally, it can be detrimental to exposed infrastructure, as well.

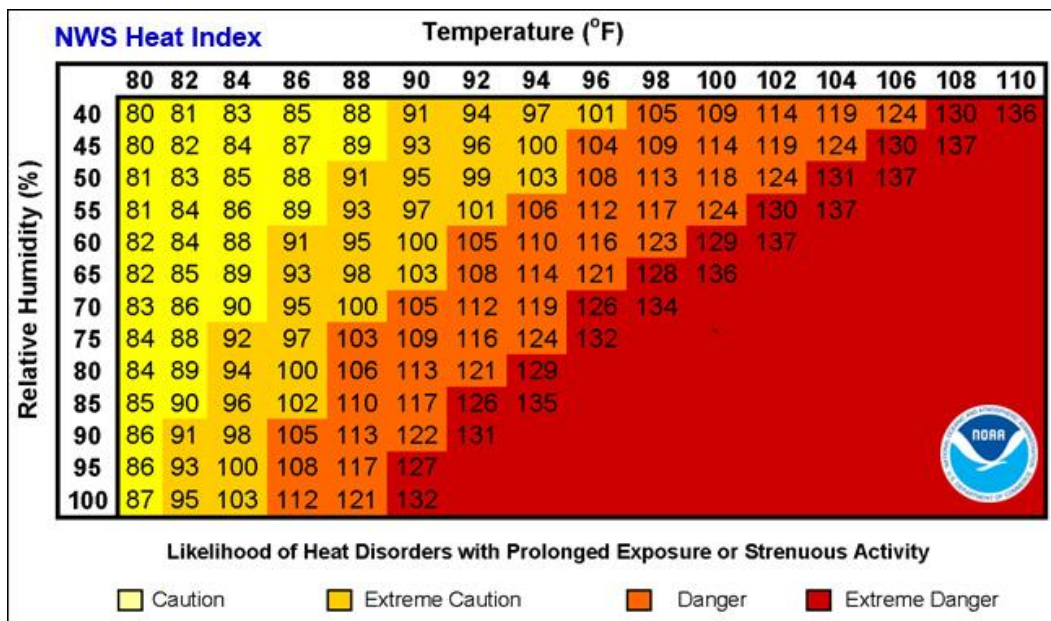
Hazard Profile

According to the National Climatic Data Center, Cusseta-Chattahoochee County have been exposed to extreme cold/wind chill and excessive heat events on 21 occasions since 1996. This means that Cusseta-Chattahoochee County has averaged an extreme temperature event every 1.3 years since 1996. This included 10 extreme cold events and 11 excessive heat events. This averages out to an extreme cold event every 2.7 years (37% annual chance) and an excessive heat event every 2.45 years (41% annual chance).

Natural Hazard: Extreme Temperatures

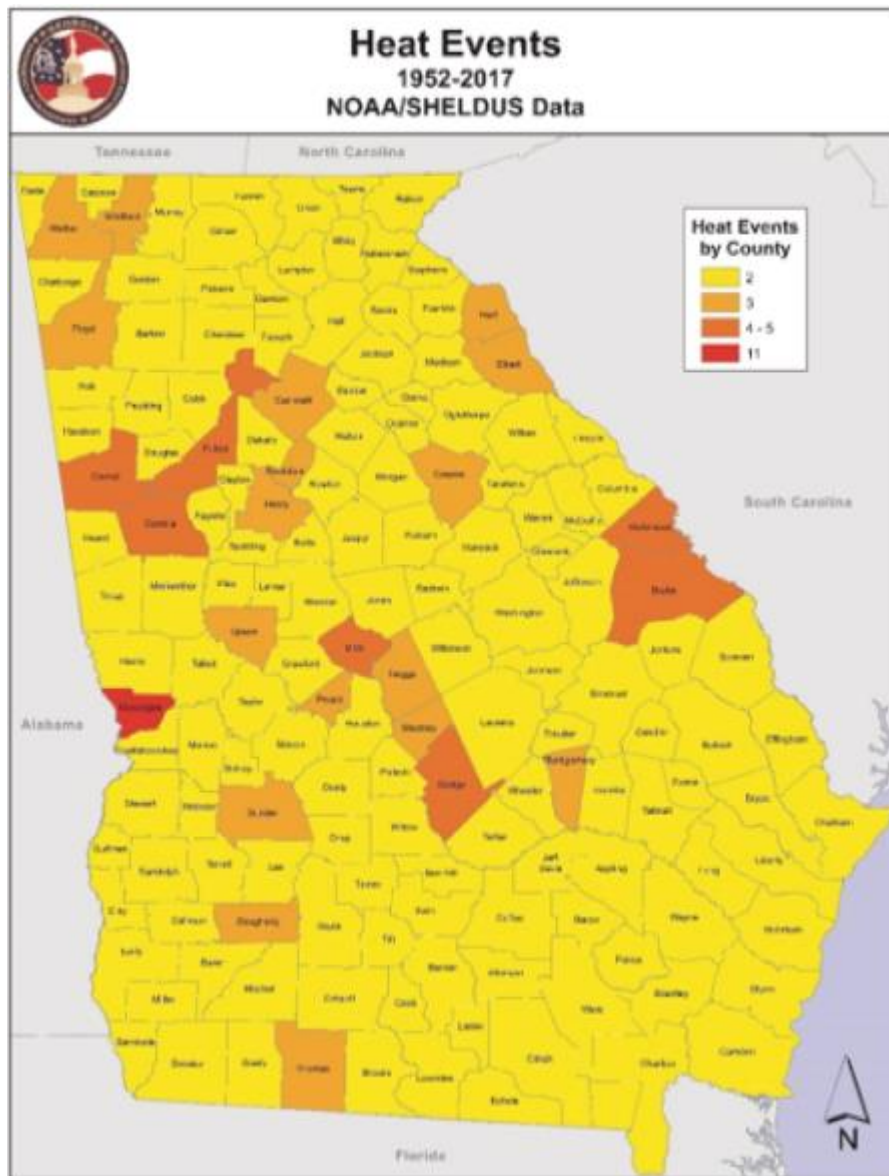
In August of 2007, Atlanta had 8 days that cleared 100 degrees and set eight maximum temperature records during the month. On August 22nd, temperatures reached 104 degrees, which set a record for the month of August. The temperature on August 10th was recorded at 105 degrees. The all-time high for Atlanta was set on June 30, 2012, as temperatures reached 106 degrees.

Due to the large elderly population (17.2% of total population under the age of 18 (22.6%) and large percentage of the population that is under the poverty line (16.5%), Cusseta-Chattahoochee County's population is particularly susceptible to heat-related illnesses.



Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Cusseta-Chattahoochee County has also been exposed to many extreme cold events. Due to its lower latitude and position within Georgia, Cusseta-Chattahoochee County can avoid much of the extreme cold temperatures that sometimes plague the mountainous regions of northeast Georgia. However, Cusseta-Chattahoochee's location and lack of widespread exposure to such events increases the impact those events could have if they were to occur. In 2014, an arctic front sent temperatures into the teens across central Georgia, including Cusseta-Chattahoochee County. This event was accompanied by high winds, which pushed wind chills to -10 degrees in the early morning hours.

Natural Hazard: Extreme Temperatures

Source: 2019-2024 Georgia Hazard Mitigation Strategy and Enhanced Plan

Assets Exposed to the Hazard

The Cusseta-Chattahoochee County HMPC determined that all critical facilities and all public and private property within Cusseta-Chattahoochee County are susceptible to the direct and indirect impacts of an extreme temperature event.

Natural Hazard: Extreme Temperatures

Estimated Potential Losses

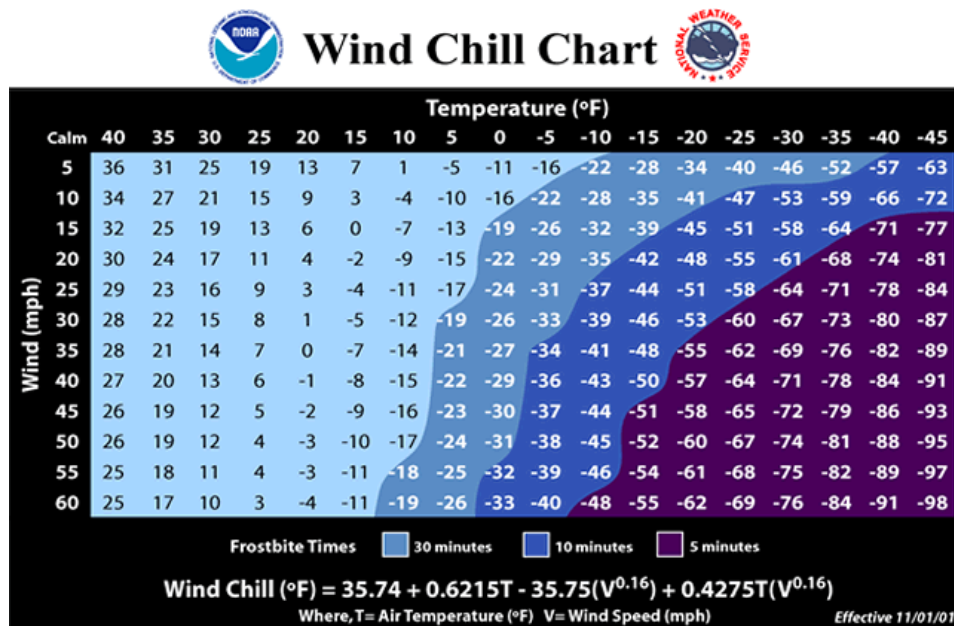
Little information is available regarding damages, in terms of dollars, is available for excessive temperature losses in Cusseta-Chattahoochee County. Most losses for these events have been labeled under other impacts, such as drought and severe winter storms.

Land Use and Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to extreme temperatures. Over 2/3 of the area of Chattahoochee County is encompassed in Fort Benning, a United States Army installation. This severely limits the area of potential future development in Cusseta- Chattahoochee County.

Multi-Jurisdictional Considerations

All of Cusseta-Chattahoochee County, could potentially be threatened by extreme temperatures. As such, all extreme temperature mitigation actions should be pursued on a countywide basis.



Source: National Weather Service

Hazard Summary

Incidents of extreme temperatures – both hot and cold – pose a significant threat to the citizens of Cusseta-Chattahoochee County. Cusseta-Chattahoochee County’s geographical location increases the likelihood of extreme temperature events with extreme heat events generally considered to be more likely. However, the lack of direct preparation for extreme cold events could lead to greater direct impacts.

Technological Hazard: Hazardous Materials*Hazard Description*

Hazardous materials, or hazmat, refers to any materials that may pose a real hazard to human health and/or the environment because of its quantity, concentration, and/or physical or chemical characteristics. Hazardous materials include explosives, flammables, combustibles, oxidizers, toxic materials, radioactive substances, and corrosives. Specific federal and state regulations exist regarding the transport and storage of hazardous materials.

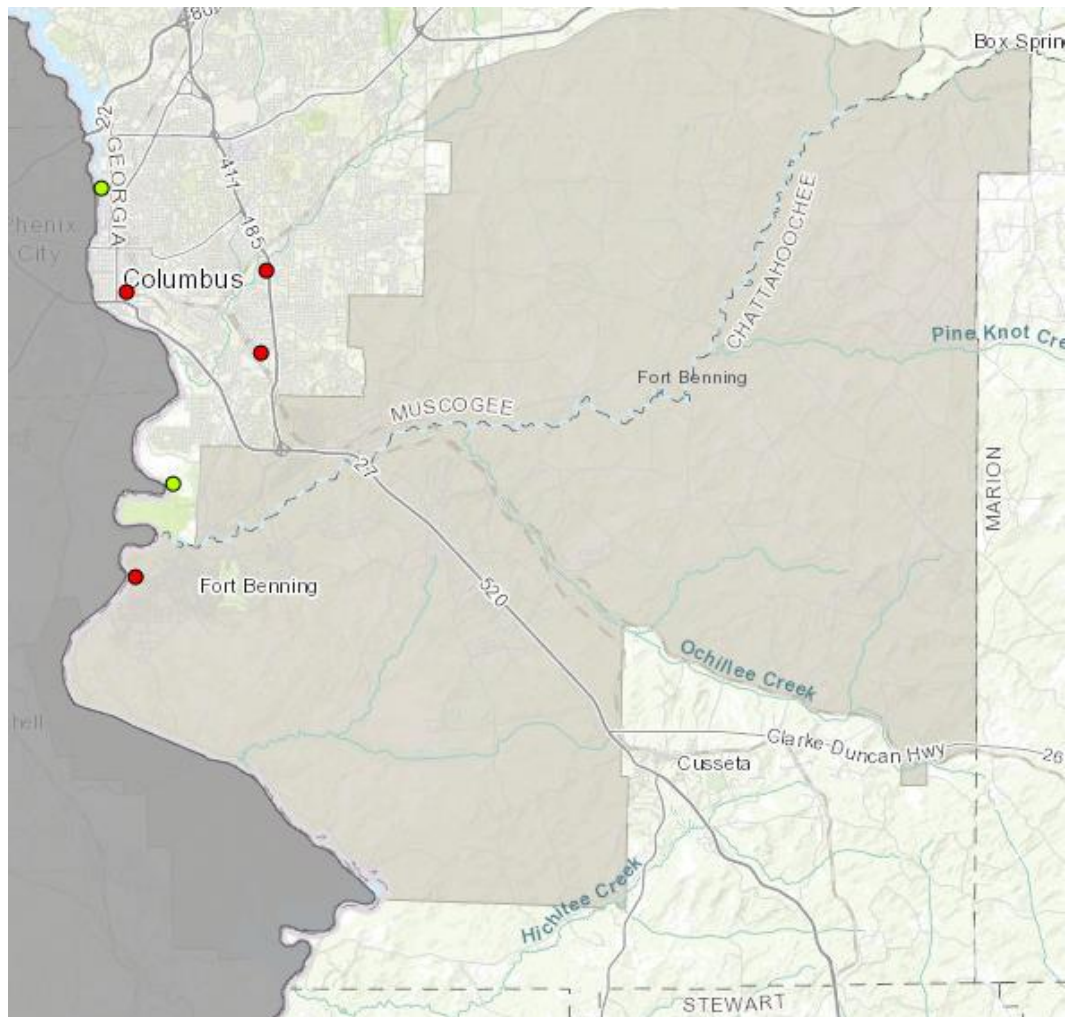
A hazardous materials spill or release occurs when a hazardous material gets into the environment in an uncontrolled fashion. Response to a hazmat spill or release depends greatly on the type of material involved and the subsequent physical and chemical characteristics. Major sources of hazardous materials spills include transportation accidents on roadways and railways, pipeline breaches, and spills into rivers and creeks. Jurisdictions with facilities that produce, process, or store hazardous materials are at risk, as are facilities that treat or dispose of hazardous materials.

Hazard Profile

Data from the Pipeline and Hazardous Materials Safety Administration was reviewed regarding hazardous materials spill history in Cusseta-Chattahoochee County. Data is available from 1989 to 2022 and all available data was reviewed. There was only 1 PHMSA reported hazardous materials spill or release in Chattahoochee County over a 33-year period. It is anticipated that many more hazardous materials incidents have occurred over the last 33 years but have not been reported. This incident occurred in 2007.

According to the Georgia Department of Natural Resources Environmental Protection Division, there is one Hazardous Site Inventory location in Cusseta-Chattahoochee County. This site is located on Fort Moore and is related to a known release of Chlordane, which was used as a pesticide in the United States until it was banned in 1988. Hazardous Site Inventory locations are areas where a known or suspected release of a regulated substance has occurred that was above a reportable quantity and which has you to properly show that state clean-up standards have been met.

The greatest threat for a hazardous materials spill comes from the transportation of materials through Cusseta-Chattahoochee County. This is particularly true for the US Highway 280 and US Highway 27 corridors in Cusseta-Chattahoochee County. These US Highways run through Fort Benning. Railroads owned and operated by the Georgia Department of Transportation, Norfolk Southern, and Georgia Southwestern Railroad also pass through Chattahoochee County and pose a potential threat of a hazardous materials release.

Technological Hazard: Hazardous Materials

Source: Georgia Department of Natural Resources Environmental Protection Division

Hazardous materials releases can also be the result of railway or fixed facility incidents. Fixed facilities continue to be an increasing concern due to Cusseta-Chattahoochee County's growing industrial footprint.

Of concern to the Cusseta-Chattahoochee County Hazard Mitigation Committee is the exposure of water sources to potential hazardous materials incidents. A hazardous materials incident at or near drinking water sources could have devastating effects on a large population in Cusseta-Chattahoochee County.

Another hazardous materials concern for Chattahoochee County is the proximity of Fort Benning. The committee expressed particular concern regarding the sharing of information by Fort Benning with Cusseta-Chattahoochee County. A potential hazardous materials

Technological Hazard: Hazardous Materials

release at Fort Benning could impact Cusseta-Chattahoochee County. This would be particularly true of a hazardous materials spill that impacted the Chattahoochee River.

Assets Exposed to Hazard

The environment is particularly vulnerable to the threat posed by hazardous materials. Waterways are at a high risk for contamination from hazardous materials. Water contamination is of concern to the Cusseta-Chattahoochee County HMPC. Public and private property located near fixed hazardous materials facilities are also a greater risk than the general population of Cusseta-Chattahoochee County. Water contamination from a hazardous materials release is of particular concern to the Cusseta-Chattahoochee County Hazard Mitigation Planning Committee.

Estimated Potential Losses

Estimation of potential losses is difficult regarding hazardous materials due to the vast array of potential types of hazardous materials that could be involved in the incident and unknown costs regarding environmental damages. No recorded information was found regarding the losses associated with hazardous materials incidents in Cusseta-Chattahoochee County. However, a hazardous materials release, whether in transport or at a fixed facility, would incur significant costs regarding emergency response, potential road closures, evacuations, watershed protection measures, expended man-hours, and cleanup materials, equipment, and personnel.

Land Use and Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to Hazardous Materials beyond the presence of Fort Benning in the northern part of Chattahoochee County.

Multi-Jurisdictional Considerations

All of Cusseta-Chattahoochee County, including all municipalities, are vulnerable to both fixed facility and transportation-related hazardous materials releases. However, areas along the US Highway 27 and 280 corridors are of particular concern.

Hazard Summary

Hazardous materials incidents pose a significant threat to the citizens, infrastructure, and critical facilities of Cusseta-Chattahoochee County. Unknown quantities of hazardous materials are transported daily through Cusseta-Chattahoochee County and all municipalities. These materials are often transported via highways. Water contamination because of a hazardous materials spill is of significant concern to the Cusseta-Chattahoochee County HMPC. As a result of the threat posed by hazardous materials, the Cusseta-Chattahoochee County HMPC has identified mitigation actions directly related to this threat.

Technological Hazard: Dam Failure*Hazard Description*

Georgia law defines a dam as any artificial barrier, which impounds or diverts water, is 25 feet or more in height from the natural bed of a stream or has an impounding capacity at maximum water storage evaluation of 100 acre-feet or more. Dams are generally constructed to provide a ready supply of water for drinking, irrigation, recreation, and other purposes. Dams can be constructed from earth, rock, masonry, concrete or any combination of these materials.

Dam failure is a term used to describe a significant breach of a dam and the subsequent loss of contained water. Dam failure can cause significant damages downstream to structures, roads, utilities, and crops. Dam failure can also put human and animal lives at risk. National statistics indicate that one-third of all dam failures in the United States are caused by overtopping due to inadequate spillway design, debris blocking spillways, or settlement of the dam crest. Another third of all US dam failures are the result of foundation defects, including settlement and slope instability.

Hazard Profile

There are no category I and 7 category II dams located within Cusseta-Chattahoochee County. Category I dams are those that would pose a possible threat to human life if a failure were to occur. All category I dams must be inspected annually according to Georgia's Safe Dams Act.

The threat of a dam failure in Cusseta-Chattahoochee County could potentially lead to downstream flooding. This downstream flooding would have many of the same hazards as a flood event, but with the onset of such an event being much quicker than in a typical flood event. Of greatest concern to Chattahoochee County would be a dam breach farther up river, such as at the West Point Lake Dam on the Chattahoochee River.

Assets Exposed to Hazard

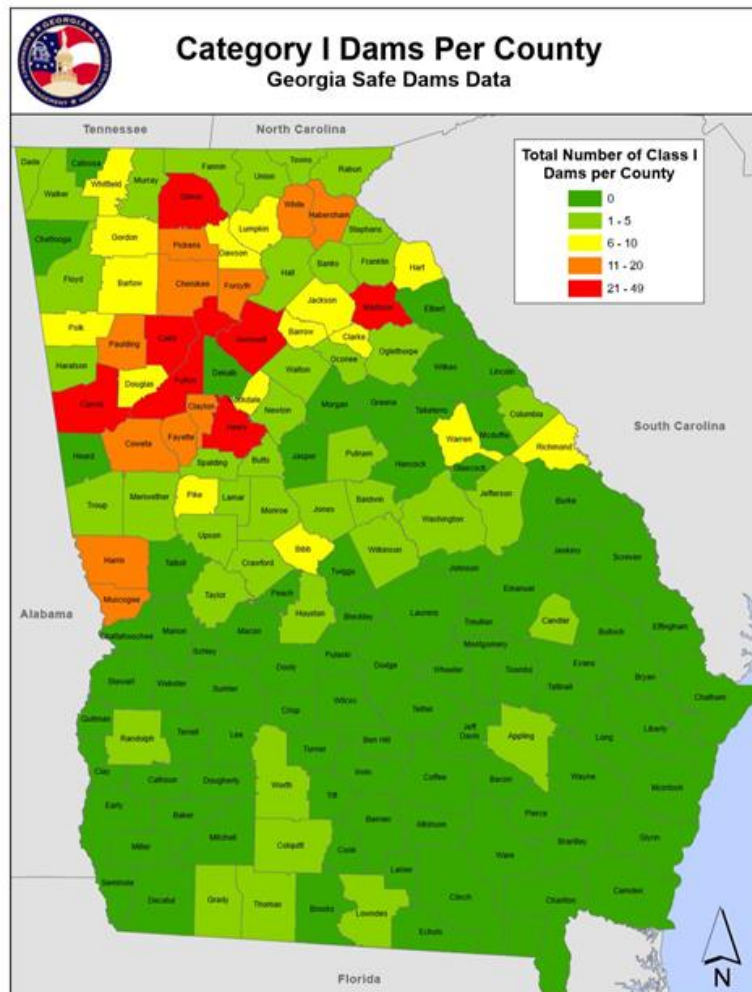
To evaluate the assets that would potentially be impacted by a dam failure, the Cusseta-Chattahoochee County HMPC attempted to identify known structures within, or close to, the 100-year floodplain. All municipalities could be exposed to the hazards of other dams or face secondary hazards from the dams.

Estimated Potential Losses

Loss estimations are not applicable since it is not known which dam will fail and how significant of failure will occur.

Technological Hazard: Dam Failure*Land Use and Development Trends*

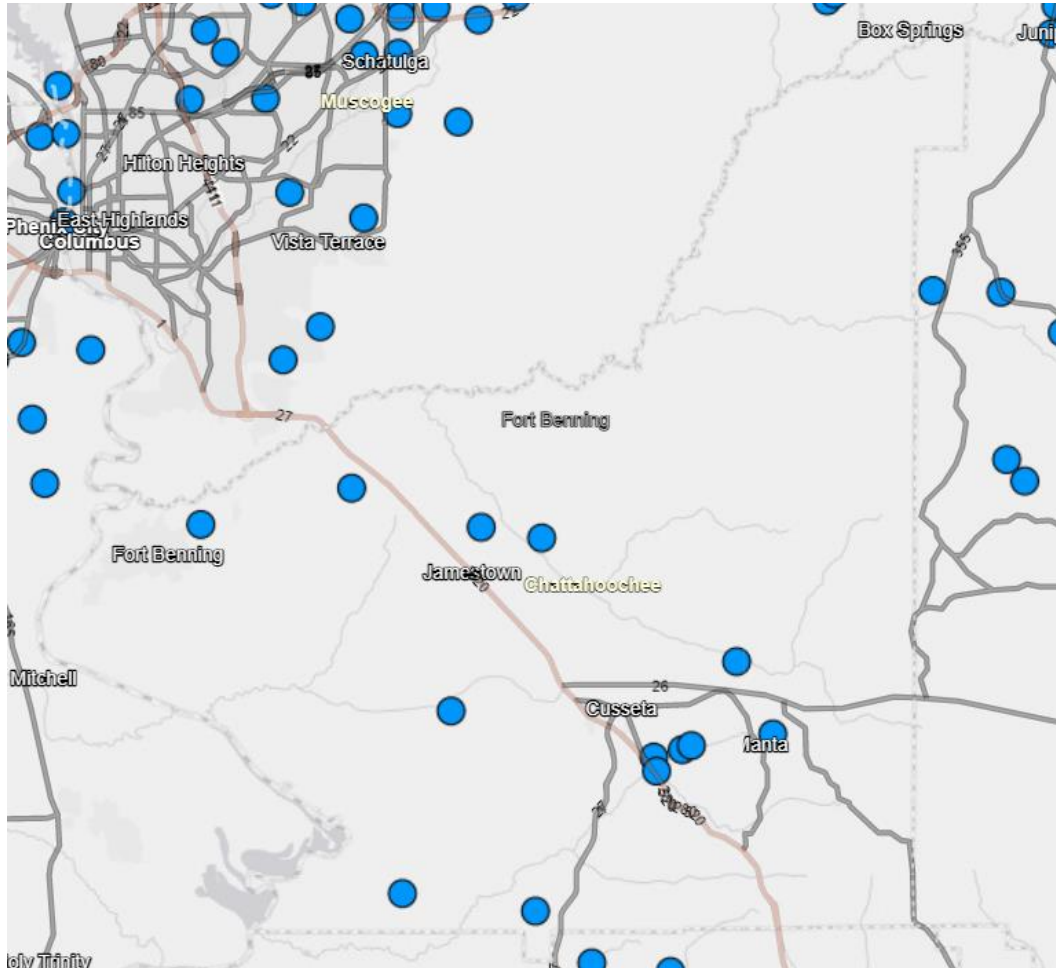
Cusseta-Chattahoochee County participates in the National Flood Insurance Program (NFIP) and follows the program's guidelines to ensure future development is carried out in the best interests of the public. The County (CID No. 130293) first entered the NFIP on January 6, 1988. According to the NFIP guidelines, the County has executed a Flood Damage Prevention Ordinance. This ordinance attempts to minimize the loss of human life and health as well as minimize public and private property losses due to flooding. The ordinance requires any potential flood damage be evaluated at the time of initial construction and that certain uses be restricted or prohibited based on this evaluation. The ordinance also requires that potential homebuyers be notified that a property is located in a flood area. In addition, all construction must adhere to the Georgia State Minimum Standard Codes and the International Building Codes.



Source: 2019-2024 State of Georgia Hazard Mitigation Strategy and Enhanced Plan

Technological Hazard: Dam Failure*Multi-Jurisdictional Considerations*

During a dam failure event, many portions of Cusseta-Chattahoochee County would potentially be impacted by flooding. However, the area's most prone to flooding have historically been those areas located within the 100-year floodplain and downstream from dams.



Source: National Inventory of Dams (United States Army Corps of Engineers)

Hazard Summary

Dam failure poses a threat to Cusseta-Chattahoochee County and its citizens, infrastructure, and critical facilities. A dam failure could prove catastrophic for areas downstream of the dam, particularly if the failure were to occur at any of the Category I or Category II dams located in Cusseta-Chattahoochee County. As a result, mitigation efforts for dam failure should be focused in this potentially affected area.

Technological Hazard: Transportation Incident*Hazard Description*

There are many secondary hazards that could be associated with transportation incidents. Injuries or deaths can occur as a result of the impact of a transportation accident, by a hazardous materials release because of a transportation incident, or by other related transportations hazards. Transportation can occur via roadways, highways, interstates, railways, air, or navigable waterways. Each transportation type poses their own unique hazard issues and consequences.

Roadway hazards are most likely to be caused by a motor vehicle accident involving one or more cars, trucks, vans, or transport vehicles. These incidents can have injuries because of the impact of the MVA or a hazardous materials release into the local environment, including waterways. Railway incidents pose many of the same dangers as motor vehicle accidents. However, the threat of a hazardous materials release is greatly increased when railway transportation incidents are considered.

Air accidents can include commercial airplanes, private airplanes, hot air balloons, helicopters, or other forms of air travel. Each of these incidents can cause a significant threat to human life as well as posing a hazardous material threat due to the cargo being transported or the fuel being used. Navigable waterway incidents can create formidable incidents for response organizations. Because of the waterway, technical expertise is needed to carry out rescue operations, especially in swift-moving waterways. Also, any incident in a waterway is likely to have environmental impacts.

Hazard Profile

Transportation incidents are of a significant concern in Cusseta-Chattahoochee County. Passing through Cusseta-Chattahoochee County are US Highways 27 and 280, and Georgia Highways 1, 26, 355, and 520. Additionally, the railway owned and operated by the Georgia Department of Transportation and Georgia Southwestern Railroad traverse Cusseta-Chattahoochee County.

In addition to the roadways and railroad in Cusseta-Chattahoochee County, the Hazard Mitigation Plan Update committee expressed particular concern over the roadways connecting Cusseta-Chattahoochee County to Columbus that pass through Fort Benning. Since these roads pass through the military installation, they could, potentially, be shut down with little to no warning and restrict access to the Columbus area. This is particularly concerning since Columbus is home to primary hospitals serving Cusseta-Chattahoochee County as well as additional emergency response resources.

Assets Exposed to Hazard

All assets and critical facilities located along or near any transportation route could potentially be impacted by a transportation incident. Areas within Cusseta-Chattahoochee

Technological Hazard: Transportation Incident

County that are not located along or near a transportation route could still face residual impacts.

Estimated Potential Losses

Estimated potential losses cannot be anticipated with this event due to the vast number of differing scenarios regarding transportation incidents.

Land Use and Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to Transportation Incidents beyond an increase in commuter traffic between Cusseta-Chattahoochee County and the City of Columbus.

Multi-Jurisdictional Considerations

Cusseta-Chattahoochee County as well as all municipalities could potentially be impacted by a transportation incident. However, areas along the US Highway 27 and 280 corridors and the Georgia Department of Transportation and Georgia Southwestern Railroad corridor are the greatest at risk.

Hazard Summary

The Cusseta-Chattahoochee County HMPC has determined that transportation incidents pose a high risk to their jurisdictions due to the unpredictable nature and likelihood of the incident. As a result, the Cusseta-Chattahoochee County HMPC has developed mitigation strategies and actions with transportation incidents in mind.

Technological Hazard: Terrorism*Hazard Description*

The Federal Bureau of Investigation (FBI) defines terrorism as violent acts or acts dangerous to human life that violate federal or state law, appear to be intended to intimidate or coerce a civilian population, affect the conduct of a government by mass destruction, assassination, or kidnapping, and is calculated to influence or affect the conduct of a government by intimidation or retaliate against government conduct. Terrorism is usually referenced as being premeditated and politically motivated.

Terrorist acts are, by their very nature, designed and carried out with the intention of inflicting mass casualties and extensive property damage. When an act of terrorism is carried out in a jurisdiction, it will likely be necessary to implement multiple aspects of the emergency management system and summon additional resources from local, state, and federal partners.

Terrorism is generally divided into two types: domestic terrorism and international terrorism. Domestic terrorism is defined as terroristic acts focused on facilities and populations without foreign direction. International terrorism involves activities that are foreign-based and/or sponsored by organizations outside of the United States.

Terrorists often use threats to create fear among the public, to convince citizens that government is powerless to prevent terrorism and to get immediate publicity for their causes. Weapons of Mass Destruction (WMDs), including incendiary, explosive, chemical, biological, radiological, and nuclear agents, have the capability to cause death or serious bodily injury to a significant number of people, thus posing the threat of a catastrophic incident. Terrorism can also include arson, agro-terrorism, armed attack, intentional hazardous materials release, water or food contamination, and attacks on infrastructure and electronic information systems.

Hazard Profile

Terrorism targets have historically been facilities that make a large economic or social impact on the targeted government or jurisdiction. In Cusseta-Chattahoochee County, all critical facilities could be potential targets. Terrorism includes a multitude of potential approaches, including agro-terrorism, which is terrorism targeted toward agriculture.

Of particular concern to the Cusseta-Chattahoochee County Hazard Mitigation Plan Update committee is the proximity of Fort Benning to the jurisdiction. Fort Benning is perceived as a major potential target for a terrorist incident and civil unrest incident. Fort Benning is home to the United States Army Infantry School, the United States Army Armor School, the 75th Ranger Regiment (also known as the United States Army Rangers, and the Western Hemisphere Institute for Security Cooperation - WEISC (formerly known as the School of the Americas). WEISC has been the subject of protests in the past.

Within Cusseta-Chattahoochee County, there are many areas that could be viewed as potential targets for terrorism due to their economic impact on the area. This includes tourist-friendly areas throughout Cusseta-Chattahoochee County, such as Laura S. Walker State Park.

Technological Hazard: **Terrorism**

While active shooter situations are not always classified as terrorism, for this plan, the Cusseta-Chattahoochee County HMPC has chosen to classify them as such. Active shooter situations can occur in any location, including businesses, schools, government buildings, and public spaces. Schools are seen as particularly vulnerable to these types of situations due to the high publicity of recent active shooter events. While active shooter events and other acts of terrorism occur worldwide, they have low probability for Cusseta-Chattahoochee County but would have devastating impacts if they were to occur. To help mitigate some of these impacts, Cusseta-Chattahoochee County has exercised an active shooter response in the past to better prepare for any such event.

Assets Exposed to the Hazard

Due to the unpredictable nature of terrorism, all public and private structures are threatened by the terrorism hazard. This includes all critical facilities.

Estimated Potential Losses

Losses due to terrorism are difficult to estimate due to the unpredictable nature of terrorism. The type of terrorist act carried out, location of the act, and the impact of the act would all affect the potential losses. Please see the critical facilities information for estimated potential losses for each critical facility.

Land Use and Development Trends

Cusseta-Chattahoochee County currently has no land use trends related to Terrorism.

Multi-Jurisdictional Considerations

All of Cusseta-Chattahoochee County, including all municipalities, are vulnerable to potential acts of terrorism. However, critical facilities and their surrounding areas are considered to be at the greatest risk.

Hazard Summary

Terrorism, while a low-probability hazard, would have devastating effects on Cusseta-Chattahoochee County and all municipalities. These impacts would be immediate and long-lasting and could be potentially economically crippling to Cusseta-Chattahoochee County and surrounding communities.

Chapter Four

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hazard mitigation strategies

Summary of Updates to Chapter Four

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Cusseta-Chattahoochee County Hazard Mitigation Plan 2018.

Chapter 4 Section	Updates
Goals and Objectives	<ul style="list-style-type: none">• Updated goals to match the needs of Cusseta-Chattahoochee County and all municipalities
Identification and Analysis of Mitigation Techniques	<ul style="list-style-type: none">• Content Revised• Reviewed mitigation strategies identified in the 2018 plan and made updates• Identified mitigation strategies that were completed• Identified mitigation strategies to be removed

Goals and Objectives

Requirement §201.6(c)(3)

Requirement §201.6(c)(3)(i)

It is important that State and local government, public-private partnerships, and the average citizen can see the results of these mitigation efforts, therefore, the goals and strategies need to be achievable. The mitigation goals and objectives form the basis for the development of specific mitigation actions. County and municipal officials should consider the listed goals before making community policies, public investment programs, economic development programs, or community development decisions for their communities. The goals of Cusseta-Chattahoochee County have changed slightly in the last five years (since 2018) due to specific threat events, such as Hurricane Irma in 2018. Because of the recentness of the impacts of these hazards and the devastation that occurred, these types of events have taken a greater priority, particularly in the increased priority of mitigation strategies directly related to these events and the development of new mitigation strategies related to these hazards.

Each jurisdiction covered by the Cusseta-Chattahoochee County Hazard Mitigation plan update has limited ability to fully implement the mitigation actions described in this plan. These jurisdictions are severely hampered by their small population and tax base when attempting to raise enough revenue to pursue many of these actions. All jurisdictions lack the needed financial strength and staffing to implement all the actions described in this plan. Many of the actions will be pursued through grant programs and by partnering with public and private organizations who can supplement the needed resources to accomplish the goals outlined in this plan. For actions where grant funding or partnerships are not available, Cusseta-Chattahoochee County or municipality revenue streams may be supplemented through Special Purpose Local Option Sales Tax (SPLOST) funds, which are voted on by the electorate.

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|--------|---|
| GOAL 1 | Maximize the use of all resources by promoting intergovernmental coordination and partnerships in the public and private sectors |
| GOAL 2 | Harden communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective |
| GOAL 3 | Reduce and, where possible, eliminate repetitive damage, loss of life and property from disasters |
| GOAL 4 | Bring greater awareness throughout the community about potential hazards and the need for community preparedness |

These objectives state a more specific outcome that Cusseta-Chattahoochee County strives to accomplish over the next five years. Action steps are the specific steps necessary to

achieve these objectives. Objectives are not listed in order of importance.

OBJECTIVE 1	Reduce damage to property and loss of life through the utilization of preventative activities
OBJECTIVE 2	Minimize the damage to property and loss of life through property protection measures
OBJECTIVE 3	Minimize the damage to property and loss of life through natural resource protection activities
OBJECTIVE 4	Reduce damage to property and loss of life through the utilization of structural mitigation projects
OBJECTIVE 5	Increase the ability of Cusseta-Chattahoochee County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures
OBJECTIVE 6	Increase public education and awareness of natural hazards
OBJECTIVE 7	Implement additional protective measures and capabilities in response to manmade incidents
OBJECTIVE 8	Increase public awareness of local manmade hazards and proper response to those hazards

Identification and Analysis of Mitigation Techniques

Requirement §201.6(c)(3)(iv)

Requirement §201.6(c)(3)(iii)

In updating Cusseta-Chattahoochee County's mitigation strategy, a wide range of activities were considered to help achieve the mitigation goals and objectives. This includes the following activities as by the Emergency Management Accreditation Program (EMAP):

- 1) The use of applicable building construction standards;
- 2) Hazard avoidance through appropriate land-use practices;
- 3) Relocation, retrofitting, or removal of structures at risk;
- 4) Removal or elimination of the hazard;
- 5) Reduction or limitation of the amount or size of the hazard;
- 6) Segregation of the hazard from that which is to be protected;
- 7) Modification of the basic characteristics of the hazard;
- 8) Control of the rate of release of the hazard;
- 9) Provision of protective systems or equipment for both cyber and/or physical risks;
- 10) Establishment of hazard warning and communication procedures; and
- 11) Redundancy or duplication of essential personnel, critical systems, equipment, and information materials.

Part of the prioritization includes a general assessment according to the STAPLEE criteria, which stands for Social, Technical, Administrative, Political, Legal, Economic and Environmental. This process led to three designated priorities: High, Medium, and Low. Most items that require grant funding must undergo a full Benefit Cost Analysis to determine the action's actual cost effectiveness prior to funding. This process will be completed as part of the grant opportunity application process.

Strategy Priority	Priority Description	Strategies within this priority
LOW	Low priority strategies are those strategies that will have less direct impact on mitigating Cusseta-Chattahoochee County's hazards, are in the early stages of strategy development, or score poorly on a preliminary cost-benefit analysis	
MEDIUM	Medium priority strategies are those strategies that will have a direct impact on mitigation Cusseta-Chattahoochee County's hazards but will not have as large of an anticipated impact as High Priority strategies or may be focused on hazards that are not as potentially impactful or prevalent for Cusseta-Chattahoochee County. These strategies may be in the earlier stages of development or score mediocre on a preliminary cost-benefit analysis	
HIGH	High priority strategies are those strategies that would have a direct, large impact on mitigation Cusseta-Chattahoochee County's hazards. These strategies are oftentimes well-established needs of Cusseta-Chattahoochee County and/or all municipalities and have score high on a preliminary cost-benefit analysis	

The lead agency listed in the Mitigation Strategy charts will be responsible for the jurisdictional administration and implementation of the mitigation strategy prioritization. Prioritization was determined based on many factors. These include the likelihood of the event, the potential impact of the event, the current readiness posture of Cusseta-Chattahoochee County for the event, the all-hazard impact of the mitigation strategy, and a cost-benefit analysis for the mitigation action. For example, mitigation actions that address high-likelihood, high-impact events with a low cost would rate higher than low-likelihood, high-impact events with a high cost.

The Cusseta-Chattahoochee County Hazard Mitigation Planning Committee also attempted to identify potential funding sources outside of the Columbus Consolidated Government budgets for the mitigation strategies that were identified. This is particularly helpful for future grant planning and for items with significant costs that are beyond the capabilities of Cusseta-Chattahoochee County to procure without grant assistance.

Grant Name	Grant Description	Strategies that could be potentially funded
Hazard Mitigation Grant Program	The purpose of the HMGP is to provide funds to State agencies and local governments in the aftermath of a disaster for projects that reduce or eliminate long-term risk to human life and property	
Flood Mitigation Assistance Program	The FMA program provides funding to assist States and communities in implementing measures to reduce or eliminate the long-term risk of flood damage to buildings, manufactured homes, and other structures insurable under the NFIP.	
Building Resilient Infrastructure and Communities (BRIC) Program	The BRIC program provides funds to states, territories, tribal governments, and communities for hazard mitigation planning and the implementation of mitigation projects before a disaster event occurs to reduce the overall risks to populations and structures while also reducing the reliance on funding from actual disaster declarations.	
Community Development Block Grant	Provides communities with resources to address a wide range of unique community development needs	
Assistance to Firefighters Grant	This program provides funding to meet the firefighting and emergency response needs of fire departments and nonaffiliated emergency medical service organizations	

The following Mitigation Charts meet:

[Requirement §201.6\(c\)\(3\)\(ii\)](#)

[Requirement §201.6\(d\)\(3\)](#)

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
OBJECTIVE 1: Reduce damage to property and loss of life through the utilization of preventative activities															
1.a	Local government and constitutional officers adopt policy of (1) duplicating existing, essential records, (2) duplicating essential records annually thereafter, and (3) designating a secure, off-site depository for essential public records	Board of Commissioners and Chief Appointed Officials	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$10,000	24 months	In place; Digital updating of records in process; Some departments needs to start process	2.2.1.1
1.b	Review digital flood insurance rate maps with base flood elevation for all of Chattahoochee County annually	EMA	✓				✓				Local and federal budgets	Staff time	12 months	New maps completed in 2019	Flood 1.1.1.1 (mod)
1.c	Continue to enforce floodplain development regulations	Board of Commissioners	✓								Local budgets	Staff time	12 months	In place; Continue	Flood 1.1.1.2 (mod)
1.d	Formulate policies for conservation of water during times of water shortage and drought	EMA						✓			Local budgets	Staff time	24 months	Follows state policies; further development needed for emergency policies	Drought 1.1.2.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
1.e	Research language for potential county policy/ordinance regarding burn bans and burn permit process	Board of Commissioners							✓		Local budgets	Staff time	24 months	NEW	NEW
OBJECTIVE 2: Minimize the damage to property and loss of life through property protection measures															
2.a	Make sure that critical facilities and equipment are grounded and check annually	Public Services and EMA			✓	✓	✓				Local budgets	Staff time	12 months	In place, Continue; All wells and water system tanks were grounded in 2022	T-Storm 2.2.1.1
2.b	Install lightning rods on all critical facilities that are not equipped yet	Public Services and Engineering			✓	✓	✓				Public and private grants and/or local budgets	\$500 per facility	48 months	Installed at school athletic fields in 2020; Poor CBA for water system installation costs	T-Storm 2.2.1.2
2.c	Obtain and install power generators or other backup systems where needed (Fire departments, recreation center, wells)	Public Services and Engineering		✓	✓	✓	✓			✓	Public and private grants and/or local budgets	\$50,000 per facility	60 months	Sheriff's Office installed 2019	T-Storms 2.2.2.1
OBJECTIVE 3: Minimize the damage to property and loss of life through natural resource protection activities															

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
3.a	Identify and remove weak, aging, and diseased trees	Public Services and EMA		✓	✓	✓	✓		✓	✓	Public and private grants and/or state and local budgets	\$1,000 per tree	18 months	Regular occurrence annually; Power company completed tree trimming winter 2023	T-Storm 2.2.1.3
3.b	Ban outdoor burning during dry season	Georgia Forestry Commission							✓		Local budgets	Staff time	12 months	Regular occurrence; Daily county follows GFC recommendations and orders on when not to burn	Wildfire 2.1.2.2
3.c	Acquire property for evacuation and emergency ingress/egress for school emergencies	Board of Education			✓	✓	✓		✓	✓	Local budgets	TBD	60+ months	NEW	NEW
OBJECTIVE 4: Reduce damage to property and loss of life through the utilization of structural mitigation projects															
4.a	Petition Georgia DOT to enlarge storm drainage pipes and construct new pipes in key locations under roads to avoid flooding of the roads	Public Works and EMA	✓		✓		✓				Local and state budgets	\$2.5 million	48 months	In the process; Completed project Hwy 520/Manta Road; Patterson Road work completed	Flood 1.2.1.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
4.b	Build a tornado shelter in the area of the three main mobile home parks	EMA			✓	✓	✓				Public and private grants and/or local budgets	\$200,000	48 months	NEW	NEW
OBJECTIVE 5: Increase the ability of Cusseta-Chattahoochee County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures															
5.a	Continue scheduling training classes for the volunteer firefighters through GPSTC	Chattahoochee County Fire and EMA							✓		Local budgets	Staff time	12 months	Regular occurrence annually; Also have in-house instructors to host training	1.1.1
5.b	Monitor (hazard mitigation) plan implementation annually	Hazard Mitigation Planning Committee; EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	12 months	Annually; Document reviewed prior to the end of every fiscal year	2.1.1.1
5.c	Update the Local Emergency Operations Plan (LEOP) for Chattahoochee County annually	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	\$5,000	24 months	Updated 2022; Approved by GEMA	2.1.2.1 (mod)

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.d	Continue good communication and coordinator between emergency services and increase joint training and exercise opportunities, when possible	Law enforcement, fire department, public works, EMS, EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	12 months	Regular occurrence annually	2.3.1.1 (mod)
5.e	Maintain good working relationship with surrounding counties and their emergency services and improve radio communications and interoperability	Emergency service agencies, EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	12 months	In place; Interoperability with Stewart County; Communication improvements needed with Marion and Ft Moore	2.3.1.2 (mod)
5.f	Conduct monthly test of the outdoor emergency warning siren system	EMA				✓					Local budgets	Staff time	12 months	System in place; Weekly test at noon on Saturdays, weather permitting	3.1.1.1 (mod)
5.g	Monitor for and participate in the weekly test of the NOAA tone alert radio	EMA	✓	✓	✓	✓	✓				Local budgets	Staff time	12 months	In place; Items purchased	3.1.1.2 (mod)

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.h	Acquire more weather sirens for the portion of the county with the majority of the population	EMA				✓					Public and private grants and/or local budgets	\$25,000 per siren	24 months	No additional added; Continued maintenance on system in place	3.1.2.1 (mod)
5.i	Maintain a resource inventory lost within Chattahoochee County and with surrounding counties	EMA and Sheriff's Office	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	24 months	NEW	NEW
5.j	Connect into NSA system so repeaters will communicate with one another across the county	911	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$150,000	60 months	NEW	NEW
5.k	Identify funding sources in order to send members of Chattahoochee County EMA to training classes	EMA, Fire departments, EMS, and 911	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	Dependent on classes	24 months	Regular occurrence annually	4.2.1.1
5.l	Procure equipment to establish a mass community warning system that utilizes telephone, text, email, and electronic media to warn the citizens of impending danger	EMA and Sheriff's Office	✓	✓	✓	✓	✓		✓		Public and private grants and/or local budgets	\$8,000 annually	48 months	Contracting with mass notification system soon; in process	4.2.2.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.m	Support fire drills in critical facilities (schools monthly, head start monthly)	Board of Education, DFCS, Senior Center, Fire Department							✓	✓	Local budgets	Staff time	12 months	Fire Drill monthly; EMA participates in full scale drills each October	4.2.3.2 (mod)
5.n	Distribute NOAA tone alert radios to county employees in key positions for their homes	EMA	✓	✓	✓	✓	✓				Public and private grants and/or local budgets	\$5,000	36 months	Program in need of restart – no recent progress; radios need purchasing	4.2.3.3 (mod)
5.o	Request GEMA to provide an experienced emergency response professional to attend and review post-exercise AAR meetings and for real life events	EMA	✓	✓	✓	✓	✓	✓	✓	✓	State budgets	Staff time	18 months	Request in place	4.2.4.1 (mod)
5.p	Schedule and perform the American Red Cross Shelter Simulation Course to DFCS employees	American Red Cross and DFCS	✓	✓	✓	✓	✓		✓	✓	ARC Budget	\$4.50 per student	36 months	In process, completed in 2019	5.1.1.1 and 6.1.1.1
5.q	Increase response capabilities by purchasing shelter equipment and backup generators for shelters	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	\$1,000 a year	36 months	In the process as funds permit	5.1.1.2

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.r	Increase emergency management response capabilities by actively coordinating training on mobile command and EOC activation	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	30 months	In place; more training needed	6.1.1.2 (mod)
5.s	Have an assessment performed by Motorola to address and solve repeater issues	911	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	\$25,000	60 months	NEW	NEW
5.t	Continue to assess vulnerability of the critical facilities	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	\$1,000 a year	24 months	In place; Continue	7.1.1.2 (mod)
5.u	Make a “wish list” of needed equipment for appropriate hazard response and identify funding sources	All public safety agencies	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	12 months	Annually created each fiscal year	8.1.1.2 (mod)
5.v	Alert citizens to the presence of severe weather through weather radios and other broadcasts	EMA			✓	✓	✓				Local budgets	Staff time	12 months	Regular occurrence annually	T-Storm 2.1.1.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.w	Assure that the fire departments mobile power generators are in good working order	Fire Department and EMA		✓	✓	✓	✓			✓	Local budgets	Staff time	12 months	Regular occurrence, annual maintenance	T-Storm 2.2.2.2
5.x	Purchase needed firefighting equipment	Fire Departments	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$300,000	36 months	NEW	NEW
5.y	Purchase portable generator for water utility	EMA	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$40,000	36 months	NEW	NEW
5.z	purchase new wildland firefighting equipment	Fire Department and EMA							✓		Public and private grants and/or local budgets	\$150,000	30 months	Needs being identified and researched	Wildfire 1.1.1.1
5.a	Get more volunteer firefighters certified and recertified through GPSTC	Fire Department and EMA							✓		Local and state budgets	Staff time	60 months	Regular occurrence monthly	Wildfire 1.1.2.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.b b	Get regular forecasts from the GFC's fire weather system on fire danger ratings	Fire Department and EMA							✓		Local and state budgets	Staff time	60 months	Regular occurrence daily	Wildfire 2.1.1.1
5.c c	Enhance radio communications and radio system for all departments	All public safety agencies	✓	✓	✓	✓	✓	✓	✓	✓	Public and private grants and/or local budgets	\$5 million	60 months	NEW	NEW
5.d d	Purchase NOAA weather radios for distribution to citizenry	EMA	✓	✓	✓	✓	✓				Public and private grants and/or local budgets	\$2,500	36 months	NEW	NEW
5.e e	Perform study to identify best locations for outdoor warning sirens	EMA				✓					Public and private grants and/or local budgets	\$10,000	30 months	NEW	NEW
5.ff 5.ee	Install outdoor warning sirens based upon findings of study in 5.ee	EMA				✓					Public and private grants and/or local budgets	TBD by 5.ee	48 months	NEW	NEW

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.g	Purchase automated outdoor warning siren activation system	EMA				✓					Public and private grants and/or local budgets	\$20,000	60 months	NEW	NEW
5.h	Install outdoor warning siren at Riverbend park area	EMA				✓					Public and private grants and/or local budgets	\$25,000	30 months	NEW	NEW
5.ii	Research and implement a responder notification system for public safety responders	All public safety agencies	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$12,000	48 months	NEW	NEW
5.jj	Purchase two ATV/UTVs for search and rescue and other emergency response operations and a trailer for hauling	EMA		✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$20,000	36 months	NEW	NEW
5.k	Purchase mobile electronic signage	Public safety agencies	✓	✓	✓	✓	✓		✓	✓	Public and private grants and/or local budgets	\$100,000	48 months	NEW	NEW

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
5.ll	Purchase light tower with generators	EMA	✓	✓	✓	✓	✓			✓	Public and private grants and/or local budgets	\$15,000	30 months	NEW	NEW
5.m	Purchase or lease a compact excavator with grapple for debris removal	Public Works		✓	✓	✓	✓			✓	Public and private grants and/or local budgets	\$350,000	36 months	NEW	NEW
5.n	Purchase wench for side-by-side	Public Works		✓	✓	✓	✓			✓	Public and private grants and/or local budgets	\$20,000	30 months	NEW	NEW
OBJECTIVE 6: Increase public education and awareness of natural hazards															
6.a	Utilize public information outlets such as newspapers and the Chattahoochee County website to disseminate hazard mitigation information to the general public by providing media with information	Board of Commissioners	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	36 months	In place for website	1.1.2 and 1.1.3

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
6.b	Provide public with hazard mitigation information by displaying severe weather awareness forms in courthouse and other public places	EMA		✓	✓	✓	✓				Local budgets	\$100	36 months	In the process of developing public awareness products	1.1.4
6.c	Support and utilize Weather Smart program to disseminate information to the public	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	24 months	NEW	NEW
6.d	Encourage participation in the CERT Program	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	12 months	CERT formed	1.2.2 (mod)
6.e	research methods of obtaining funding for weather radios	EMA	✓	✓	✓	✓	✓				Local budgets	\$100 annually	60 months	Completed in 2012; continues to look for funding opportunities	1.2.3 (mod)
6.f	Promote participation in the NWS yearly tornado drill in critical facilities	Board of Education and EMA				✓					Local budgets	Staff time	12 months	Annual drill in schools	4.2.3.1 (mod)
6.g	Encourage the general public to purchase weather radios	EMA	✓	✓	✓	✓	✓				Local budgets	Staff time	12 months	Regular occurrence annually	T-Storm 1.2.1.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
6.h	Encourage American Red Cross to teach a Citizen's Disaster Course on a frequent basis	American Red Cross and EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local and ARC budget	\$2,000	12 months	Regular occurrence annually	T-storm 1.2.1.2
6.i	Encourage citizens to follow rules for outdoor burning via county website and social media	EMA, Georgia Forestry, and Fire Departments							✓		Local and state budgets	Staff time	12 months	NEW	NEW
6.j	Promote regular drills at high occupancy locations such as schools, courthouses, the doctor's offices, daycare facilities, hospitals, and industries	EMA			✓	✓	✓				Local budgets	Staff time	12 months	Usually accomplished via meetings and direct contact; In place	Tornado 1.1.1.1 ; Terrori1.1.1.1
6.k	Distribute natural hazards public awareness materials vial multiple medium, including print, social media, and flyers	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	24 months	None due to COVID; Plans in place for 2024 distribution	Tornado 1.1.1.2

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
6.l	Provide print media with “print ready” articles on safety, present tornado awareness programming on local television station, and provide public service announcements to all media	EMA	✓	✓	✓	✓	✓	✓	✓	✓	Local budgets	Staff time	24 months	In the process, need to pub “print ready” information together	Tornado 1.1.1.3
6.m	Send out information about wildfire danger and prevention measures	Fire department, utilities, public works, Georgia Forestry Commission and EMA							✓		Local budgets	Staff time	12 months	Regular occurrence annually via print and social media	Wildfire 2.1.2.1
6.n	Heighten the public awareness on actions the public and private sector can take to conserve water through public announcements	EMA						✓			Local budgets	Staff time	30 months	Water Smart Program to be implemented by 2025	Drought 1.1.1.1
6.o	Educate the public on the differences between red flag warnings versus burn bans and where to find information on red flag warnings	EMA							✓		Local budgets	Staff time	18 months	NEW	NEW

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Flood	Winter Weather	Thunderstorm	Tornado	Tropical Cyclone	Drought/Ex Temp	Wildfire	Earthquake	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
6.p	Hold a public meeting with Georgia Forestry Commission to discuss burning, warnings, permits, and other measures	EMA, Fire Departments, and GFC							✓		Local and State budgets	Staff time	24 months	NEW	NEW

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
OBJECTIVE 7: Implement additional protective measures and capabilities in response to manmade incidents											
7.a	Purchase camera system for water system and wells	Water Department		✓	✓		Public and Private grants and/or local budgets	\$100,000	48 months	NEW	NEW
7.b	Continue to add fencing to high school area to restrict access	Board of Education		✓	✓		Public and private grants and/or local budgets	\$500,000	60 months	NEW	NEW
OBJECTIVE 8: Increase public awareness of local manmade hazards and proper response to those hazards											
8.a	Network with emergency personnel staff on All Hazard Council	EMA	✓	✓	✓	✓	Local budgets	Staff time	12 months	Meetings held monthly	HazMat/ Transpor 2.1.1.1

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
8.b	Participate in All Hazards Council educational programs and training/exercises	EMA	✓	✓	✓	✓	Local budgets	Staff time	12 months	In place; Continue	HazMat/ Transport 2.1.1.2
8.c	Inform the public of location, extent, dangers, and procedures to follow in the event of a release	EMA	✓	✓	✓	✓	Local budgets	Staff time	12 months	Informed through social media platforms and school system	HazMat/ Transport 2.4.1.1
8.d	Distribute civil disturbance safety information in form of flyers, brochures, or public safety announcements	EMA			✓		Local budgets	Staff time	36 months	In the process, developing civil disturbance information	Civil 1.1.1.2
8.e	Provide print media with “print ready” articles on civil disturbance safety, present civil disturbance awareness programming on local television station, and provide public service announcements to all local media	EMA			✓		Local budgets	Staff time	36 months	In the process. Developing civil disturbance information	Civil 1.1.1.3
8.f	Distribute terrorism information in form of flyers, brochures, or public safety announcements	EMA			✓		Local budgets	Staff time	36 months	In the process, developing information on terrorism	Terrorism 1.1.1.2

Strategy #	Mitigation Action	Lead and Supporting Agency, Department, Organization	Dam Failure	Hazardous Materials	Terrorism	Transportation	Funding Source	Estimated Cost	Completion Timeframe	Progress/ Status	Previous Strategy #
8.g	Provide print media with “print ready” articles on terrorism safety, present terrorism awareness programming on local television station, and provide public service announcements to all local media	EMA			✓		Local budgets	Staff time	36 months	In the process. Developing terrorism information	Terrorism 1.1.1.3

Completed Mitigation Strategies

Previous Strategy #	Strategy Description	Status
Thunderstorms 1.1.1.1	Through building code standards, require mobile homes to be tied down and withstand 75 mph wind load	COMPLETE; Regulations in place
Flood 1.1.1.1	Work with FEMA to create digital flood insurance rate maps with base flood elevations for all of Chattahoochee County	COMPLETE; 2019 Maps; Modified to review annually
Flood 1.1.1.2	Enforce floodplain development regulations	COMPLETE; Modified to Continue
4.1.1.1 and 8.1.1.1	Create inventory assessment of current equipment versus meeting the need	COMPLETE; New strategy to maintain inventory lists
5.1.1.1 and 6.1.1.1	Schedule and perform the American Red Cross Shelter Simulation Course to DFCS employees	COMPLETE; Class held in 2019; left strategy to do again
7.1.1.1	Schedule and perform initial database list for critical facilities	COMPLETE during Hazard Mitigation Plan Update

7.1.1.2	Assess vulnerability of the critical facilities	COMPLETE; Annually; Modified to continue
Tornado 2.1.2.1; Civil Unrest and Terrorism 2.1.2.1	Create procedure to call off-duty employees at the scene of the disaster event	COMPLETE
HazMat/Transport 1.1.1.1	Incorporate cost of association memberships into EMA budgets	COMPLETE
1.2.2	Form local emergency response team (CERT)	COMPLETE; Modified to encourage participation
HazMat/Transport 2.2.1.1	Be in contact with emergency personnel staff at the state and federal level to find funding sources	COMPLETE; Grant writer hired in 2023
HazMat/Transport 2.3.1.1	Analyze land uses for the purpose of identifying and securing an area to temporarily park commercial vehicles transporting hazardous materials overnight	COMPLETE; Truck Stop opened in 2023
HazMat/Transport 2.4.1.2	Develop an evacuation plan for locations with high concentrations of people (using GA 520 and 26 and US 27)	COMPLETE; Updated in April 2022 as part of LEOP

Deleted Mitigation Strategies

Previous Strategy #	Strategy Description	Reason
4.1.2.1	Research cost and training for local 911 system	<i>Completed in previous plan; strategy removed</i>
Tornado 2.1.1.1; Civil Unrest and Terrorism 2.1.1.1	Develop grant application for pager system for emergency personnel notifying them of impending weather	<i>Newer technologies available to accomplish this task</i>
1.2.1	Form public education committee	<i>No longer needed; EMA has good grasp on public education needs for hazards</i>

Thunderstorms 2.1.1.2	Inform the public that staying inside a house or car and not using electrical appliances during a thunderstorm can reduce risk of lightning strikes	<i>Part of overall public awareness</i>
Tornado 1.1.1.2	Distribute tornado safety information in form of flyers, brochures, or public safety announcements	<i>Replaced with all encompassing public education strategy</i>
Tornado 1.1.1.3	Provide print media with “print ready” articles on safety, present tornadoes awareness programming on local television station, and provide public service announcements to all media	<i>Replaced with all encompassing public education strategy</i>
HazMat/ Transportation 1.1.2.1	Formally designation of EMA Director of individual to serve as local hazmat resource contact and maintain community involvement in program	<i>No longer needed as a strategy</i>
Civil 1.1.1.1	Research and analyze potential locations for civil disturbances	<i>Completed in previous updated; Removed</i>

Chapter Five

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Maintenance and implementation

Summary of Updates for Chapter Five

The following table provides a description of each section of this chapter, and a summary of the changes that have been made to the Cusseta-Chattahoochee County Hazard Mitigation Plan 2018.

Chapter 5 Section	Updates
Maintenance	<ul style="list-style-type: none">• Content Revised
Plan Distribution	<ul style="list-style-type: none">• Content Revised
Implementation	<ul style="list-style-type: none">• Content Revised
Evaluation	<ul style="list-style-type: none">• Content Revised
Peer Review	<ul style="list-style-type: none">• Content Revised
Plan Update	<ul style="list-style-type: none">• Content Revised
Conclusion	<ul style="list-style-type: none">• Content Revised

Maintenance

Requirement §201.6(c)(4)(iii)

To adhere to best practices, state and federal guidelines, and lessons learned, the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee has developed a method to ensure the regular review and update of the Plan occurs. Plan maintenance protocols identified during the 2018 Cusseta-Chattahoochee County Hazard Mitigation Plan was followed, to the best abilities of Cusseta-Chattahoochee County. This most importantly included an increased attempt for public participation and inclusion in the planning process. The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee will reconvene annually in February to monitor and evaluate the progress of the mitigation strategies in the Plan. Cusseta-Chattahoochee County's Emergency Management Director, Johnny Floyd following questions annually:

- Do the goals address current and expected hazards and conditions?
- Are the goals and objectives still relevant to the County?
- Has the nature or magnitude of risks changed?
- Does the risk assessment portion of the Plan need to be updated or modified?
- Are the goals and objectives meeting changes in state and federal policy?
- Are the current resources appropriate for implementing the Plan?
- Are there local implementation problems, such as technical, political, legal, or coordination issues with other agencies?
- Did the jurisdictions, agencies, and other partners participate in the plan implementation process as proposed?

The responsible parties for various mitigation strategies will provide a report during this annual meeting regarding the following:

- How well did the implementation processes work?
- Were any difficulties encountered during implementation?
- How successful was the coordination of efforts?
- Are there any suggestions for revision of any strategies?

Cusseta-Chattahoochee County's Emergency Management Director will send the minutes from this annual meeting to Cusseta-Chattahoochee County Commission.

If there are any updates or modifications to the Cusseta-Chattahoochee County Hazard Mitigation Plan, the Emergency Management Director will forward the changes to the Georgia Emergency Management Agency's Hazard Mitigation Officer. All annual reviews of the Cusseta-Chattahoochee County Hazard Mitigation Plan will be open to the public. These meetings will be advertised both in the local newspapers, but also on signage in the publicly used facility hosting the meeting.

Maintenance Log

Revision Date	Revised Section	Reason for Revision	Revised By
2022-2023	Five Year Hazard Mitigation Plan Update	FEMA Requirement	Cusseta-Chattahoochee County Hazard Mitigation Planning Committee with assistance from Lux Mitigation and Planning

Plan Distribution

This Plan will be distributed, but not limited, to the following departments and organizations within Cusseta-Chattahoochee County:

Cusseta-Chattahoochee County Board of Commissioners
Cusseta-Chattahoochee County Emergency Management Agency
Cusseta-Chattahoochee County Sheriff's Office
Cusseta-Chattahoochee County Public Works
Cusseta-Chattahoochee County Planning Department
Cusseta-Chattahoochee County Board of Education
Cusseta-Chattahoochee County Fire Departments

A printed copy of the approved Plan will be available for viewing at the Cusseta-Chattahoochee County Commissioner's Office located 215 McNaughton Street. The existence and location of these copies will be publicized in the County's designated newspaper legal organ.

Implementation

Requirement §201.6(c)(4)(ii)

Each jurisdiction participating in the Cusseta-Chattahoochee County Hazard Mitigation Plan is responsible for implementing specific mitigation actions as prescribed in this plan. In the Mitigation Strategies section, every proposed strategy is assigned to a specific local department or agency to assign responsibility and accountability and increase the likelihood of subsequent implementation.

In addition to the designation of a local lead department or agency, some strategies have secondary or assisting department or agencies listed as well. This allows for a sharing of responsibility and coordination of effort for some of the identified strategies that cross lines of departmental responsibility. The completion date has been assigned to assess whether identified mitigation strategies are being implemented in a timely fashion.

Cusseta-Chattahoochee County and all municipalities will seek outside funding sources to implement mitigation projects in both the pre-disaster and post-disaster environments. When applicable, potential funding sources have been identified and targeted for the proposed actions listed in the mitigation strategies. It will be the responsibility of each participating jurisdiction to determine additional implementation procedures beyond those listed within the Cusseta-Chattahoochee County Hazard Mitigation Plan.

This plan will serve as a comprehensive mitigation plan. The mitigation strategies, hazard identification, and other information identified in this plan will be integrated into all comprehensive Cusseta-Chattahoochee County plans, as well as all municipality plans in the future. Incorporation of these strategies will occur, as necessary, throughout this planning cycle covered by this Hazard Mitigation Plan Update. Aspects of this plan will be integrated into the Cusseta-Chattahoochee County Comprehensive Plan during the next planning cycle.

Identified hazards and mitigation strategies of the 2018 Cusseta-Chattahoochee County Hazard Mitigation plan were integrated into the Local Emergency Operations Plan, multiple County and City SOPs and SOGs, and future planning and zoning plans. Cusseta-Chattahoochee County will integrate mitigation strategies identified in this plan into the Cusseta-Chattahoochee County Comprehensive Plan, Community Wildfire Protection Plan, Continuity of Operations Plan, and other future plans. Strategies identified in the previous plan were applied to grant applications, building and zoning requirements, and development planning considerations for Cusseta-Chattahoochee County and all municipalities. Many of these strategies will be applied using previously identified policies and ordinances, including the NFIP compliance ordinances and water-use ordinances, which have now been applied countywide. All jurisdictions have the authority to adopt locally binding ordinances and policies to enhance the mitigation strategies in their jurisdiction.

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 jurisdictions to implement hazard mitigation activities.

Regulatory Tools/Plans	Regulatory Type: Ordinance, Resolution, Codes, Plans, Etc.	Local Authority	State Prohibited	Higher Authority
Building Codes	County/Municipal Code	Yes	No	No
Capital Improvements Plan		Yes	No	No
Comprehensive Plan	Cusseta-Chattahoochee County Comprehensive Plan	Yes	No	No
Economic Development Plan	Cusseta-Chattahoochee County Comprehensive Plan	Yes	No	Yes
Emergency Management Accreditation Program		No	No	Yes
Emergency Response Plan	Cusseta-Chattahoochee County Local Emergency Operations Plan (LEOP)	Yes	No	Yes
Flood Management Plan		Yes	No	No
Historic Preservation		Yes	No	No
National Flood Insurance Program Participation		Yes	No	Yes
Continuity of Government/Operations Plan		No	No	No
Post-Disaster Ordinance		Yes	No	No

Zoning Ordinances	County and Municipal Codes	Yes	No	No
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Opportunities to integrate the requirements of this Plan into other local planning mechanisms shall continue to be identified. 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 Cusseta-Chattahoochee County Hazard Mitigation Planning Committee to be the most effective and appropriate method to implement local hazard mitigation actions at this time.

Evaluation

Requirement §201.6(c)(4)(i)

Periodic revisions and updates of the Cusseta-Chattahoochee County Hazard Mitigation Plan may be required to ensure that the goals of this plan are kept current with federal, state, and local regulations. These revisions should also consider any potential changes in the hazard vulnerability and mitigation priorities of Cusseta-Chattahoochee County.

The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee will meet annually to review the Cusseta-Chattahoochee County Hazard Mitigation Plan. During this annual review, mitigation strategies will be reviewed to evaluate the progress that has occurred for each identified mitigation strategy. The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee will also meet following any disaster event to review the identified mitigation strategies for that hazard and determine if timelines should be adjusted or additional mitigation strategies should be identified and added to the plan. These steps will ensure that the Cusseta-Chattahoochee County Hazard Mitigation Plan is continuously updated to allow for changes in hazard vulnerabilities and identified mitigation strategies.

The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee will complete all evaluations of the Cusseta-Chattahoochee County Hazard Mitigation Plan.

Peer Review

State Requirement Element F1

To maintain standards of quality, improve performance, and provide credibility to the Cusseta-Chattahoochee County Hazard Mitigation Plan Update, representatives of local emergency management agencies bordering Cusseta-Chattahoochee County conducted a peer review of the Plan. The peer review of this Plan constitutes a form of self-regulation, accountability, and new insights offered by qualified professionals in neighboring communities, which face many of the same natural and man-made hazards.

Cusseta-Chattahoochee County Hazard Mitigation Plan Update was peer reviewed by:

Chance Corbett Director Columbus Consolidated Government Homeland Security & Emergency Management	Date
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Greg Stewart Director Stewart County Emergency Management Agency	Date
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Samuel Schiro Director Marion County Emergency Management Agency	Date
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LeAnn Erenheim Director Talbot County Emergency Management Agency	Date
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Cody Brown Director Webster County Emergency Management Agency	Date
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Plan Update

Requirement §201.6(c)(4)(i)

The Federal Disaster Mitigation Act of 2000 requires that the Hazard Mitigation Plan be updated at least once every five years. The Cusseta-Chattahoochee County Emergency Management Agency is the department responsible with ensuring this requirement is met. The Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee will be involved in this future process and will aid the Cusseta-Chattahoochee County Emergency Management Agency in ensuring that all jurisdictions provide input into the planning process. The public will be invited to participate in the planning process through public hearings to be held whenever major updates to this plan are needed and during annual review meetings. This plan will expire in the third quarter of 2027; therefore, the approval and adoption of the next plan update must be completed before that time.

In the first quarter of 2027, Cusseta-Chattahoochee County plans to begin the Hazard Mitigation Plan Update process for the fourth time. This planning process will include bi-monthly meetings to accomplish the identified goals of the Cusseta-Chattahoochee County Hazard Mitigation Plan Update. This process will be headed up by the Cusseta-Chattahoochee County Emergency Management Agency. The Cusseta-Chattahoochee County Hazard Mitigation Planning Committee will follow a similar process as was undertaken during this planning cycle to complete all FEMA and GEMA requirements for the Hazard Mitigation Plan Update. This process will be completed by the first quarter of 2028 to meet all identified planning deadlines.

Conclusion

As a result of the hazard mitigation planning process, Cusseta-Chattahoochee County, and all municipalities therein, as well as additional participating organizations have gained significant information and knowledge regarding Cusseta-Chattahoochee County's disaster history, natural and technological hazards, vulnerabilities, and potential strategies to lessen the impacts of the identified hazards.

One consistent theme identified by the Cusseta-Chattahoochee County Hazard Mitigation Planning Committee was the inability to consistently identify geographic locations that were more vulnerable to most hazards due to the widespread potential effects and random impact areas of each hazard. This was exceedingly true for most natural hazards. Recognizing this challenge, the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee determined it was best to identify many mitigation goals, objectives, and strategies that were both general and specific in nature. These strategies allow the Cusseta-Chattahoochee County Hazard Mitigation Plan Update Committee to adopt strategies that will have the greatest positive effect on the greatest amount of the population.

The Cusseta-Chattahoochee County Hazard Mitigation Planning Committee adopted strategies in all six of the major mitigation categories: Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, and Public Education and Awareness. Property Protection and Emergency Services comprised the greatest number (XXX%) of the mitigation strategies identified by Cusseta-Chattahoochee County.

**Appendix A – Cusseta-Chattahoochee County Hazard Mitigation Planning
Committee Sign In Sheets**

Appendix B – Hazard Data Tables

Severe Thunderstorms

Location	County/Zone	St.	Date	Time	Type	Mag	Dth	Inj	PrD	CrD
Totals:							0	21	239.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	12/05/1977	17:13	Hail	1.25 in.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	07/16/1980	16:00	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	07/16/1980	18:30	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	02/10/1981	12:00	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	07/29/1981	16:30	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/26/1982	19:55	Hail	0.75 in.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	05/03/1984	19:45	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/05/1985	19:53	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	07/03/1985	19:11	Thunderstorm Wind	70 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	06/03/1987	12:08	Hail	0.88 in.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/25/1988	18:30	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/05/1989	22:00	Thunderstorm Wind	0 kts.	0	2	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/28/1990	13:40	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	05/21/1990	14:30	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/02/1991	00:26	Thunderstorm Wind	62 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/29/1991	09:00	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/29/1991	09:20	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K

CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/29/1991	10:15	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/29/1991	13:40	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	03/29/1991	13:40	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/09/1991	19:08	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/09/1991	19:45	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/19/1991	16:45	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/29/1991	14:23	Hail	1.00 in.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	04/29/1991	16:00	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	05/05/1991	15:15	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	07/01/1992	12:35	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	08/27/1992	16:07	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
CHATTAHOOCHEE CO.	CHATTAHOOCHEE CO.	GA	11/04/1992	12:10	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Cusseta	CHATTAHOOCHEE CO.	GA	02/22/1993	04:30	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Cusseta	CHATTAHOOCHEE CO.	GA	03/22/1993	04:30	Thunderstorm Wind	0 kts.	0	0	0.00K	0.00K
Fort Benning	CHATTAHOOCHEE CO.	GA	06/29/1994	14:45	Hail	0.75 in.	0	0	0.00K	0.00K
Fort Benning	CHATTAHOOCHEE CO.	GA	06/29/1994	14:45	Thunderstorm Wind	0 kts.	0	0	5.00K	0.00K
Cusseta	CHATTAHOOCHEE CO.	GA	07/02/1995	19:00	Thunderstorm Wind	0 kts.	0	0	1.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	07/25/1997	20:30	Thunderstorm Wind	50 kts.	0	0	4.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	11/01/1997	15:40	Hail	0.75 in.	0	0	2.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	04/27/1999	12:20	Thunderstorm Wind	50 kts.	0	0	0.00K	0.00K

CUSSETA	CHATTAHOOCHEE CO.	GA	05/13/1999	17:10	Hail	0.75 in.	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	03/03/2000	22:00	Thunderstorm Wind		0	0	2.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/25/2000	16:45	Thunderstorm Wind		0	0	1.50K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/25/2000	16:45	Hail	0.75 in.	0	0	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	01/19/2002	15:50	Thunderstorm Wind		0	0	0.50K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	07/02/2002	16:20	Hail	0.75 in.	0	0	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	07/07/2002	18:00	Thunderstorm Wind		0	0	3.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	02/22/2003	07:45	Thunderstorm Wind	50 kts. EG	0	0	1.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	05/02/2003	21:15	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	07/11/2003	18:52	Hail	1.00 in.	0	0	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	07/13/2003	14:30	Thunderstorm Wind	40 kts. EG	0	0	0.25K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	04/12/2004	18:10	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	04/22/2005	17:40	Hail	0.75 in.	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	04/30/2005	09:00	Thunderstorm Wind	50 kts. EG	0	0	2.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	05/20/2005	15:30	Hail	0.75 in.	0	0	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	08/16/2005	15:40	Lightning		0	19	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	03/20/2006	21:24	Thunderstorm Wind	51 kts. MG	0	0	1.50K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	03/20/2006	21:40	Hail	1.75 in.	0	0	0.00K	0.00K
COUNTYWIDE	CHATTAHOOCHEE CO.	GA	05/10/2006	16:40	Thunderstorm Wind	59 kts. MG	0	0	5.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	05/13/2006	21:46	Hail	1.00 in.	0	0	0.00K	0.00K

CUSSETA	CHATTAHOOCHEE CO.	GA	03/01/2007	16:37	Thunderstorm Wind	50 kts. EG	0	0	3.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	04/11/2007	18:55	Hail	1.75 in.	0	0	80.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/12/2007	23:30	Lightning		0	0	5.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	05/11/2008	04:31	Hail	0.88 in.	0	0	0.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	07/05/2008	16:04	Hail	1.00 in.	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	01/07/2009	02:16	Thunderstorm Wind	52 kts. EG	0	0	2.00K	0.00K
COTTAGE MILLS	CHATTAHOOCHEE CO.	GA	02/28/2009	10:12	Thunderstorm Wind	39 kts. EG	0	0	1.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	05/06/2009	16:47	Hail	0.75 in.	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/16/2010	18:10	Hail	1.75 in.	0	0	30.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/16/2010	18:10	Thunderstorm Wind	35 kts. EG	0	0	1.00K	0.00K
(LSF)LAWSON AAF FT B	CHATTAHOOCHEE CO.	GA	03/27/2011	23:35	Hail	1.00 in.	0	0	0.00K	0.00K
EELBECK	CHATTAHOOCHEE CO.	GA	06/02/2011	17:14	Hail	1.00 in.	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	01/30/2013	15:35	Thunderstorm Wind	50 kts. EG	0	0	1.50K	0.00K
IDA VESPER	CHATTAHOOCHEE CO.	GA	03/18/2013	18:36	Thunderstorm Wind	52 kts. EG	0	0	2.50K	0.00K
WOOLFOLK	CHATTAHOOCHEE CO.	GA	04/11/2013	22:15	Thunderstorm Wind	40 kts. EG	0	0	0.25K	0.00K
KASIHTA	CHATTAHOOCHEE CO.	GA	07/02/2015	13:25	Thunderstorm Wind	54 kts. MG	0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	02/15/2016	20:40	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
JAMESTOWN	CHATTAHOOCHEE CO.	GA	06/11/2016	15:55	Thunderstorm Wind	55 kts. EG	0	0	3.00K	0.00K
WOOLFOLK	CHATTAHOOCHEE CO.	GA	01/02/2017	18:25	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	06/03/2018	19:20	Thunderstorm Wind	50 kts. EG	0	0	4.00K	0.00K

<u>SHACK</u>	CHATTAHOOCHEE CO.	GA	07/03/2018	23:20	Thunderstorm Wind	50 kts. EG	0	0	8.00K	0.00K
<u>COTTAGE MILLS</u>	CHATTAHOOCHEE CO.	GA	05/09/2019	17:35	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>CUSSETA</u>	CHATTAHOOCHEE CO.	GA	05/09/2019	17:51	Thunderstorm Wind	50 kts. EG	0	0	10.00K	0.00K
<u>WOOLFOLK</u>	CHATTAHOOCHEE CO.	GA	06/07/2019	14:36	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
<u>CUSSETA</u>	CHATTAHOOCHEE CO.	GA	09/09/2019	14:49	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K
<u>SHACK</u>	CHATTAHOOCHEE CO.	GA	04/08/2020	17:30	Thunderstorm Wind	48 kts. MG	0	0	1.00K	0.00K
<u>SHACK</u>	CHATTAHOOCHEE CO.	GA	04/08/2020	17:40	Thunderstorm Wind	55 kts. EG	0	0	25.00K	0.00K
<u>GOBBLERS HILL</u>	CHATTAHOOCHEE CO.	GA	06/28/2020	19:29	Thunderstorm Wind	45 kts. EG	0	0	1.00K	0.00K

Flooding

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0	69.00K	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	07/13/2003	17:30	Flash Flood		0	0	5.00K	0.00K
CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	03/27/2005	06:00	Flood		0	0	0.00K	0.00K
COTTAGE MILLS	CHATTAHOOCHEE CO.	GA	12/14/2009	23:00	Flood		0	0	3.00K	0.00K
KASIHTA	CHATTAHOOCHEE CO.	GA	12/24/2015	09:45	Flash Flood		0	0	56.00K	0.00K
(LSF)LAWSON AAF FT B	CHATTAHOOCHEE CO.	GA	01/02/2017	20:30	Flash Flood		0	0	0.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	07/25/2017	12:00	Flash Flood		0	0	5.00K	0.00K

Winter Weather

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>T.Z.</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:								0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/02/2002	06:00	EST	Heavy Snow		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/28/2005	20:00	EST	Winter Storm		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	03/01/2009	14:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	02/12/2010	11:00	EST-5	Heavy Snow		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/28/2014	22:00	EST-5	Winter Storm		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/17/2018	04:00	EST-5	Winter Weather		0	0	0.00K	0.00K

Drought

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	0	0.00K	187.94K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	02/01/2000	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	04/01/2000	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	05/01/2000	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	06/01/2000	00:00	Drought		0	0	0.00K	187.94K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	07/01/2000	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	10/01/2000	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	10/01/2001	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	12/01/2001	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	04/01/2002	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	08/01/2002	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	01/01/2003	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	03/01/2004	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	05/01/2007	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	09/01/2007	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	10/01/2007	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	11/01/2007	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	12/01/2007	00:00	Drought		0	0	0.00K	0.00K
<u>CHATTAHOOCHEE (ZONE)</u>	CHATTAHOOCHEE (ZONE)	GA	09/01/2011	00:00	Drought		0	0	0.00K	0.00K

CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	10/01/2016	00:00	Drought		0	0	0.00K	0.00K
CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	11/01/2016	00:00	Drought		0	0	0.00K	0.00K
CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	12/01/2016	00:00	Drought		0	0	0.00K	0.00K
CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	01/01/2017	00:00	Drought		0	0	0.00K	0.00K
CHATTAHOOCHEE (ZONE)	CHATTAHOOCHEE (ZONE)	GA	10/15/2019	00:00	Drought		0	0	0.00K	0.00K

Tornadoes

<u>Location</u>	<u>County/Zone</u>	<u>St.</u>	<u>Date</u>	<u>Time</u>	<u>Type</u>	<u>Mag</u>	<u>Dth</u>	<u>Inj</u>	<u>PrD</u>	<u>CrD</u>
Totals:							0	9	1.082M	0.00K
FT BENNING	CHATTAHOOCHEE CO.	GA	11/15/2006	15:00	Tornado	F1	0	9	500.00K	0.00K
JAMESTOWN	CHATTAHOOCHEE CO.	GA	02/17/2008	17:05	Tornado	EF0	0	0	35.00K	0.00K
CENTRAL SPRINGS	CHATTAHOOCHEE CO.	GA	04/10/2009	20:46	Tornado	EF1	0	0	100.00K	0.00K
IDA VESPER	CHATTAHOOCHEE CO.	GA	04/10/2009	21:00	Tornado	EF1	0	0	150.00K	0.00K
OCHILLEE	CHATTAHOOCHEE CO.	GA	04/16/2011	03:50	Tornado	EF1	0	0	250.00K	0.00K
CUSSETA	CHATTAHOOCHEE CO.	GA	11/23/2014	15:37	Tornado	EF1	0	0	25.00K	0.00K
KASIHTA	CHATTAHOOCHEE CO.	GA	04/19/2015	09:26	Tornado	EF1	0	0	10.00K	0.00K
SHACK	CHATTAHOOCHEE CO.	GA	05/01/2017	09:07	Tornado	EF0	0	0	12.00K	0.00K
HEINEBURG VILLAGE	CHATTAHOOCHEE CO.	GA	04/05/2022	13:04	Tornado	EF1	0	0	0.00K	0.00K

Appendix C – Worksheet 3As

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Cusseta-Chattahoochee County

Hazard: Non-Spatially Defined Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	860	860	100.000%	54,053,328	54,053,328	100.000%	9,565	9,565	100%
Commercial	55	55	100.000%	6,787,050	6,787,050	100.000%	0	0	#DIV/0!
Industrial	5	5	100.000%	1,290,505	1,290,505	100.000%	0	0	#DIV/0!
Agricultural	97	97	100.000%	9,974,278	9,974,278	100.000%	0	0	#DIV/0!
Religious/ Non-profit	19	19	100.000%	1,303,723	1,303,723	100.000%	0	0	#DIV/0!
Government	49	49	100.000%	7,448,048	7,448,048	100.000%	0	0	#DIV/0!
Education	9	9	100.000%	23,319,753	23,319,753	100.000%	0	0	#DIV/0!
Utilities	18	18	100.000%	19,483,810	19,483,810	100.000%	0	0	#DIV/0!
Total	1,112	1,112	100.000%	123,660,496	123,660,496	100.000%	9,565	9,565	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|----------|----------|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | | N |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | | N |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | | N |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | | N |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | N |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

GEMA Worksheet #3a
Inventory of Assets
Jurisdiction: Cusseta-Chattahoochee County
Hazard: Wildfire Hazard

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	880	849	96.721%	54,053,328	53,361,948	98.721%	9,565	9,443	99%
Commercial	55	51	92.727%	6,787,050	6,293,446	92.727%	0	0	#DIV/0!
Industrial	5	5	100.000%	1,290,505	1,290,505	100.000%	0	0	#DIV/0!
Agricultural	97	97	100.000%	9,974,278	9,974,278	100.000%	0	0	#DIV/0!
Religious/ Non-profit	19	19	100.000%	1,303,723	1,303,723	100.000%	0	0	#DIV/0!
Government	49	46	93.878%	7,448,048	6,992,045	93.878%	0	0	#DIV/0!
Education	9	9	100.000%	23,319,753	23,319,753	100.000%	0	0	#DIV/0!
Utilities	18	18	100.000%	19,483,810	19,483,810	100.000%	0	0	#DIV/0!
Total	1,112	1,094	98.381%	123,660,495	122,019,509	98.673%	9,565	9,443	99%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|----------|----------|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | Y | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | | N |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | Y | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | Y | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | Y | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | Y | |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | N |

Appendix D – Documentation of Peer Review

Columbus Consolidated Government

Marion County

Russell County (AL)

Stewart County

Talbot County

Webster County

Appendix E – 2024 Cusseta-Chattahoochee County HAZUS Report