FAYETTE COUNTY, GEORGIA 2025 UPDATE

HAZARD MITIGATION PLAN

PARTICIPATING JURISDICTIONS:

FAYETTE COUNTY
TOWN OF BROOKS
CITY OF FAYETTEVILLE
CITY OF PEACHTREE CITY
TOWN OF TYRONE
TOWN OF WOOLSEY

FAYETTE COUNTY, GA

Acknowledgements

This document was funded in part by the Hazard Mitigation Planning Grant awarded to the Fayette County Emergency Management Agency by the Georgia Emergency Management Agency (GEMA) to fulfill the requirements of the Federal Disaster Mitigation Act of 2000 (DMA 2000). Fayette County's Hazard Mitigation Plan 2020 was updated by the Fayette County Local Hazard Mitigation Planning Committee and was prepared by iParametrics. For additional information, please contact Fayette County Emergency Management Agency.

Brian Davis, Assistant Chief – Community Affairs and EMA Director
Fayette County Emergency Management Agency
140 West Stonewall Avenue, Suite 214
Fayetteville, Georgia 30214
bdavis@fayettecountyga.gov
770.305.5172

Local Hazard Mitigation Planning Committee

Brian Davis, Assistant Chief, Community Affairs and EMA Director, Fayette County Fire and Emergency Services

Consultant Team

iParametrics

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.

Fayette County and its municipalities realize the benefits achieved by the development and implementation of mitigation plans and strategies in their community. Fayette 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:
Fayette County
Town of Brooks
City of Fayetteville
City of Peachtree City
Town of Tyrone
Town of Woolsey

Table of Contents

Acronyms

Acronym	Full Word
AWIA	America's Water Infrastructure Act
CDC	Center for Disease Control and Prevention
DMA 2000	Federal Disaster Mitigation Act of 2000
DR	Major Disaster Declaration
EM	Emergency Declaration
EMAP	Emergency Management Accreditation Program
EMS | MC	EMS Management and Consultants
EPA	Environmental Protection Agency
FBI	Federal Bureau of Investigation
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FIS	Fire Intensity Scale
GDOT	Georgia Department of Transportation
GEMA	Georgia Emergency Management Agency
GFC	Georgia Forestry Commission
GIS	Geographic Informaton Systems
HAZMAT	Hazardous Materials
HMGP	Hazard Mitigation Grant Program
LHMPC	Local Hazard Mitigation Planning Committee
MMI	Modified Mercalli Intensity
NCEI	National Centers for Environmental Information
NFIP	National Flood Insurance Program
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRC	National Response Center
NWS	National Weather Service
PA	Public Assistance Grant Program
RCRAInfo	Resource Conservation and Recovery Act Information
SD	Substantial Damage
SFHA	Special Flood Hazard Area
SGSF	Southern Group of State Foresters
SI	Substantial Improvement
SPC	Storm Prediction Center
SPLOST	Special Purpose Local Option Sales Tax
THIRA	Threat and Hazard Identification and Risk Assessment
USDM	United States Drought Monitor
USGS	United States Geologic Survey
WUI	Wildland-Urban Interface

Resolution – Fayette County, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 Fayette County, Georgia, that:

Fayette County, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Fayette County Board of Commissioners in regular session this _____ day of _____, 2025.

_____

Chairperson

_____

County Clerk

Resolution – Town of Brooks, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 Town Council of Brooks, Georgia, that:

The Town of Brooks, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and Town Council of Brooks, Georgia in regular session this _____ day of _____, 2025.

_____

Mayor

_____

Town Clerk

Resolution – City of Fayetteville, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 City Council of Fayetteville, Georgia, that:

The City of Fayetteville, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and City Council of Fayetteville, Georgia in regular session this _____ day of _____, 2025.

_____

Mayor

_____

City Clerk

Resolution – City of Peachtree City, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 City Council of Peachtree City, Georgia, that:

The City of Peachtree City, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and City Council of Peachtree City, Georgia in regular session this _____ day of _____, 2025.

_____

Mayor

_____

City Clerk

Resolution – Town of Tyrone, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 Town Council of Tyrone, Georgia, that:

The Town of Tyrone, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and Town Council of Tyrone, Georgia in regular session this _____ day of _____, 2025.

_____

Mayor

_____

Town Clerk

Resolution – Town of Woolsey, Georgia

Fayette County Hazard Mitigation Plan 2025 to 2030

WHEREAS, Fayette 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 Fayette County Hazard Mitigation Plan 2025 to 2030 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 Town Council of Woolsey, Georgia, that:

The Town of Woolsey, Georgia, has adopted the Fayette County Hazard Mitigation Plan 2025 to 2030; and

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 Fayette County and its municipalities.

PASSED, APPROVED AND ADOPTED by the Mayor and Town Council of Woolsey, Georgia in regular session this _____ day of _____, 2025.

_____

Mayor

_____

Town Clerk

Chapter 1 Introduction

1.1 Summary of Updates for Chapter 1

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Fayette County Hazard Mitigation Plan 2020.

Chapter 1 Section	Updates
Introduction	Identification of mitigation goals
Authority	Verbiage updated
Funding	Verbiage updated
Scope	Verbiage updated
Purpose	No changes
Consistency with Federal and State Mitigation Policies	No changes
Planning Process	Restructured section (previous sections included "Plan Review", "Hazard Mitigation Plan Update Committee", "Public Participation") Updated to match the 2025 planning process
Multi-Jurisdictional Considerations	No changes
Incorporation of Existing Plans, Studies, and Resources	Updated with new plan, study, and resource incorporations

1.2 Introduction

The Fayette 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 the Georgis Emergency Management Agency (GEMA) and the Federal Emergency Management Agency (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. Fayette County's Local Hazard Mitigation Planning Committee (LHMPC) adopted the following goals during plan development:

- GOAL 1: Protect the public health and safety
- GOAL 2: Reduce and eliminate (to the extent possible) community exposure to natural and technological hazard events
- GOAL 3: Reduce loss and damage to private property and public infrastructure resulting from natural or technological hazards
- GOAL 4: Maintain continuity of public and private sector operations during and after hazard events
- GOAL 5: Respond promptly, appropriately, and efficiently in the event of natural or technological hazards

This plan complies with all requirements and scope of work as described in Fayette County's

Hazard Mitigation Grant application.

1.3 Authority

In the past, federal legislation has provided funding for disaster relief, recovery, and some hazard mitigation planning. The Federal Disaster Mitigation Act of 2000 (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 creates the framework for state, local, tribal and territorial governments to engage in hazard mitigation planning and to receive certain types of non-emergency disaster assistance.

State and local communities must have an approved mitigation plan in place prior to receiving certain mitigation grants, including the Hazard Mitigation Grant Program (HMGP) and Public Assistance Grant Program (PA). 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, Fayette County's Updated Hazard Mitigation Plan will be brought forth to each participating jurisdiction in Fayette 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.

1.4 Funding

Fayette County was awarded a Hazard Mitigation Planning Grant by FEMA through GEMA for the update of Fayette County's 2025 Hazard Mitigation Plan.

1.5 Scope

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

1.6 Purpose

The purpose of the Fayette County Hazard Mitigation Plan 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 Fayette 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.

1.7 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 community 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 Fayette County Hazard Mitigation Plan recognizes, adopts, incorporates, and endorses the following principles:

- Develop a strategic mitigation plan for Fayette 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.

The private sector is often an overlooked segment of the community during disasters. It is vital that this sector of a community 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 Fayette 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.

1.8 Planning Process

Requirement §201.6(c)(1)

The development of this Plan was guided by a collaborative, inclusive planning process that prioritizes broad community engagement and interagency coordination. Hazard mitigation planning is most effective when it reflects the diverse needs, capacities, and insights of the entire community, including local government staff and emergency managers, neighboring jurisdictions, private sector partners, nonprofit organizations, and the public.

This Plan recognizes that successful mitigation depends on understanding local risks, identifying shared vulnerabilities, and building partnerships that can carry mitigation actions forward before, during, and after disasters. To that end, the planning team made deliberate efforts to include a wide range of stakeholders in the planning process, drawing on local expertise and promoting transparency and trust. The contractor, iParametrics, had the primary responsibility for organizing and managing the Plan update as well as incorporating updates into the Plan document. The insights and content were primarily gathered through a series of meetings with the Fayette County project management team, the LHMPC, and the public.

1.8.1 Project Kick-Off Meeting

On January 28, 2025, the consultant, iParametrics, met with the Fayette County project management team to initiate the project kick-off. During the meeting, the attendees formally introduced themselves, reviewed the project scope, and discussed the project plan and timeline. A Hazard Mitigation Planning Specialist, Lucy Herring, from GEMA also attended as a resource for State requirements and expectations. The attendees also discussed the formulation of the LHMPC.

1.8.2 Local Hazard Mitigation Planning Committee

Requirement §201.6(b)(2)

The LHMPC served as the core advisory body responsible for guiding the development of this Plan update. Comprised of representatives various organizations, the committee brought together a diverse set of expertise and perspectives. Members provided valuable input on hazard identification, vulnerability assessments, and the selection and prioritization of mitigation actions. The LHMPC played a critical role in ensuring that the planning process was inclusive, data-driven, and aligned with the community's goals and regulatory frameworks. Appendix A includes the email invitation sent to stakeholders invited to participate on the LHMPC. Table 1-1 below lists the members that served on the 2025 Fayette County LHMPC.

Table 1-1. Members of the 2025 Fayette County Local Hazard Mitigation Planning Committee

Name	Organization	Title
Alan Jones	City of Fayetteville	Assistant City Manager
Anita Godbee	Fayette County Parks and Recreation Department	Director
Audrey Toney	Fayette County Public Schools	Assistant Superintendent, Operations
Beverlyn Ming	Georgia Department of Public Health, District 4	Nurse Manager
Brian Davis	Fayette County Fire and Emergency Services	Assistant Chief, Community Affairs and EMA Director
Brian Eubanks	Fayette County Sheriff's Office	Director, Field Operations Division
Bryan Clanton	Fayette County Marshal's Office	Deputy Marshal

Bryan D. Keller	Fayette County Environmental Management Department	Director
Caitlin Reul	Fayette County Department of Building Safety	Assistant Building Official
Cajen Rhodes	City of Fayetteville Public Services	Assistant Director
Chet Ripka	Fayette County 911 Communications	Operations Manager
Chris Hindman	City of Fayetteville Public Services	Director
Chris Peacock	City of Fayetteville Fire Department	Deputy Chief
Courtney Hassenzahl	Fayette County Environmental Management Department	Assistant Director
Deborah L Bell	Fayette County Board of Commissioners	Director, Planning and Zoning
Glenn Polk	Spalding County Office of Homeland Security and Emergency Management	Director
Janet Moon	Peachtree City Police Department	Chief of Police
Jeffrey Hill	Fayette County Fire and Emergency Services	Fire Chief
Katye Vogt	Fayette County 911 Communications	Director
Kenny Wright	Town of Woolsey	Councilman
Kim Toal	University of Georgia	Fayette County Extension Coordinator and ANR Agent
Lee Ann Bartlett	Fayette County Board of Assessors	Chief Appraiser
Lem Miller	Fayette County Marshal's Office	Chief Marshal
Leslie Nieber	Fayette County Department of Building Safety	Building Official/Director
Linda Black	City of Fayetteville Fire Department	Fire Chief
Matthew Scott Bergen	Fayette County Environmental Management Department	Utility Manager
Maurice Ungaro	Town of Brooks	Town Manager
Michael Jones	Fayette County Sheriff's Office	Assistant Director, Field Operations Division
Philip Mallon	Fayette County Public Works	County Engineer
Randy Mundy	Town of Tyrone Police Department	Chief of Police
Rob McCool	Fayette County Information Technology	Director
Sam Anglin	Peachtree City Fire Rescue	Division Chief
Scott Gray	City of Fayetteville Police Department	Chief of Police
Sheri Russo	Georgia Emergency Management Agency	Field Coordinator
Ted Lombard	Fayette County Public Schools	Coordinator for Safety, Athletics and Discipline
Terri Collins	Spalding County Fire Department	Fire and Emergency Management Planner
Tracy H. Thompson	Fayette County Animal Shelter	Animal Control Director
Van Brock	Town of Tyrone Police Department	Major
Vanessa Tigert	Fayette County Water System	Director
Vicky Chapman	Piedmont Fayette Hospital	Environment of Care and Safety Coordinator

The LHMPC met regularly throughout the planning process to provide input, review materials, and ensure alignment with local priorities. Key meetings and topics included (sign-in sheets are provided in Appendix A):

- April 2, 2025: The first LHMPC meeting was conducted to introduce the hazard mitigation planning process, discuss the list of hazards applicable to the planning area,

review the community profile and discuss changes since the last Update, and develop a plan for the public involvement strategy.
- June 4, 2025: The second LHMPC meeting was conducted to review the risk assessment and complete the vulnerability summary, discuss the capability assessment, and begin to review the mitigation actions from the previous Plan.
- July 10, 2025: The third LHMPC meeting was conducted to review the mitigation actions from the previous Plan, discuss the current Plan's mitigation strategy, including the mitigation goals and new mitigation actions, and discuss the Plan's implementation and maintenance.

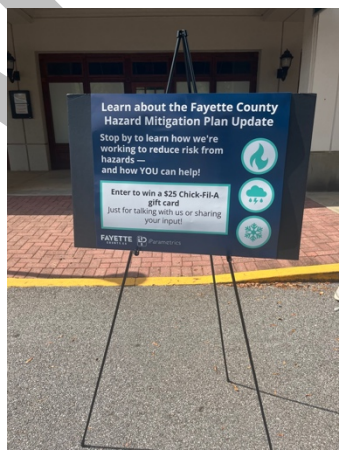
1.8.3 Public Participation and Additional Stakeholders

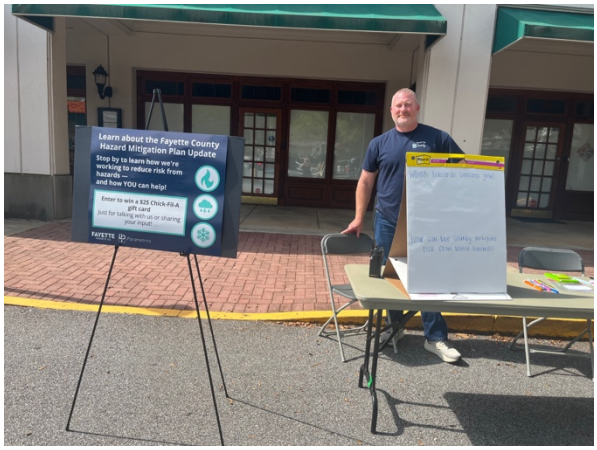
Requirement §201.6(b)(1)

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.

A list of public outreach initiatives and engagement with additional stakeholders is listed below:
- July 19, 2025: The LHMPC arranged for participation at the Fayette County Parks and Recreation's Cruisin' with Cars and Coffee event. The community event was hosted at the County's Administrative Complex, where participants could gather to see classic and new cars, while enjoying coffee from a local business. As part of the event, the project consultant and Fayette County EMA Director set up an informational table to educate participants on the Plan update and solicit feedback on the community's hazards of concerns and desired mitigation actions. All hazards that the public were concerned with, including wind and hazardous material release, were incorporated into the Plan. The public did not provide any additional mitigation actions during this event.

Figure 1-1. Pictures from the County's Cruisin' with Cars and Coffee event





- July 22, 2025: The Plan's project team virtually met with the president of the Fayette County Chamber of Commerce, Leonardo McClarty, CCE. The meeting introduced the Fayette County Chamber of Commerce to the purpose and planning process of the Plan and discussed how the Chamber of Commerce could become involved through the public comment period.

- INSERT DATES: After completion of the initial draft, the Plan was opened for public comment. The Plan was posted to the XX with an overview of hazard mitigation planning and a solicitation for feedback. Associated materials are included in Appendix A.
- INSERT DATES: During the public comment period, the draft Plan was also forwarded to neighboring jurisdictions for comment:
    - INSERT JURISDICTIONS

1.9 Multi-Jurisdictional Considerations

Requirement §201.6(c)(1)

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 5 years. Fayette County's most recent Hazard Mitigation Plan was developed in 2020 and approved by FEMA in 2021. The 2025 Mitigation Plan is the fourth 5-year update. This FEMA-approved 2025 Hazard Mitigation Plan makes Fayette County, City of Fayetteville, City of Peachtree City, Town of Brooks, Town of Tyrone and Town of Woolsey eligible for additional FEMA hazard mitigation grant opportunities.

As set forth by Georgia House Bill 489, the Emergency Management Agency is the implementing agency for projects pertaining to hazard mitigation. Fayette County is dedicated to work in the best interests of the County, as well as, its municipalities. A few mitigation strategies in Fayette County's 2025 Plan apply to a specific municipality. Unless noted otherwise, mitigation strategies apply equally to all jurisdictions. During the creation and update of this Plan, Fayette County Emergency Management Agency solicited and received participation from the following Fayette County municipalities: City of Fayetteville, City of Peachtree City, Town of Brooks, Town of Tyrone, and Town of Woolsey.

1.10 Incorporation of Existing Plans, Studies, and Resources

Requirement §201.6(b)(3)
State Requirement Element F3

Throughout the planning process, this Plan was informed by existing plans, studies, reports, and technical information. The planning team reviewed the resources outlined in Table 1-2. Note that the "Area of Incorporation" column within the table lists the initial area of incorporations that may also inform subsequent sections of the Plan; for example, the INSERT was reviewed and documented during the capability assessment, which then helped inform the mitigation actions.

Table 1-2. Resources reviewed during the planning process to inform the Plan

Type	Name	Area of Incorporation
Handbook	Federal Emergency Management Agency Local Mitigation Planning Handbook	Entirety of Plan
Plan	2020 Fayette County Hazard Mitigation Plan	Entirety of Plan (baseline for the 2025 Plan)
Plan	State of Georgia 2024 Georgia Hazard Mitigation Strategy	Entirety of Plan
Dataset	Federal Emergency Management Agency National Flood Hazard Layer	Community Profile (historic declarations and obligations data)

	National Flood Insurance Program OpenFEMA Disaster Declarations Summaries OpenFEMA Public Assistance Projects Details	Risk Assessment
Dataset	United States Census Bureau Decennial Census American Community Survey	Community Profile
Dataset	Atlanta Regional Commission County Data Profiles	Community Profile
Dataset	Georgia Department of Labor Area Labor Profile	Community Profile
Dataset	Iowa State University Iowa Environmental Mesonet NWS Watch, Warning, and Advisories	Risk Assessment
Dataset	National Oceanic and Atmospheric Administration Historical Hurricane Tracks National Center for Environmental Information Storm Events Database	Risk Assessment
Report	University of Georgia Hazard Risk Analyses Supplement to the Fayette County Joint Hazard Mitigation Plan	Risk Assessment
Dataset	United States Drought Monitor	Risk Assessment
Dataset	Southern Group of State Foresters Southern Wildfire Risk Explorer	Risk Assessment
Dataset	Georgia Forestry Commission Georgia Historical State Wildfires Dashboard	Risk Assessment
Dataset	United States Geologic Survey Earthquake Catalog National Seismic Hazard Maps	Risk Assessment
Dataset	Centers for Disease Control and Prevention National Environmental Public Health Tracking Network	Risk Assessment
Dataset	United States Coast Guard National Response Center	Risk Assessment
Dataset	United States Environmental Protection Agency RCRAInfo Database	Risk Assessment
Dataset; Report	State of Georgia Environmental Protection Division Safe Dams Program	Risk Assessment
Dataset	Georgia Department of Transportation Crash Reporting	Risk Assessment
Plan	Fayette County Comprehensive Plan	Capability Assessment
Plan	Fayette County Local Emergency Operations Plan	Capability Assessment

Chapter 2 Fayette County Profile

2.1 Summary of Updates for Chapter 2

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Fayette County Hazard Mitigation Plan 2020.

Chapter 2 Section	Updates
Past Hazards and Notable Events	Previous information was carried over to Chapter 3 Table of FEMA-declared disasters was added This section was combined with "Past Notable Events" from last update
History	Verbiage updated
Demographics	Updated section to include additional data and updated data Added narrative to accompany visualizations and data tables
Economy	Updated section to include additional data and updated data Added narrative to accompany visualizations and data tables
Government	Verbiage updated
Transportation	No changes
Climate	No changes
Utilities	No changes
Municipalities	Verbiage updated
Community Changes	New section – not in 2020 Plan

2.2 Past Hazards and Notable Events

Fayette County, Georgia, has faced many and a diversity of natural hazards in its long history, including, but not limited to, severe thunderstorms, flooding, winter weather, tornadoes, hurricanes, and drought. Chapter 3 details the types of hazards relevant to Fayette County and includes an assessment of the location, extent, previous occurrences, and probability of each hazard type.

Since 1964, Fayette County has received 13 Presidential Disaster Declarations (Federal Emergency Management Agency (FEMA)-declared emergency and major disasters). The Emergency Declarations (EM) and Major Disaster Declarations (DR) are listed in Table 2-1.

Table 2-1. EM and DR Declarations for Fayette County (source: FEMA)

Disaster Number	Declaration Type	Declaration Date	Incident Type	Declaration Name
3616	EM	September 26, 2024	Tropical Storm	HURRICANE HELENE
4501	DR	March 29, 2020	Biological	COVID-19 PANDEMIC
3464	EM	March 13, 2020	Biological	COVID-19
4338	DR	September 15, 2017	Hurricane	HURRICANE IRMA
3387	EM	September 8, 2017	Hurricane	HURRICANE IRMA

Disaster Number	Declaration Type	Declaration Date	Incident Type	Declaration Name
4259	DR	February 26, 2016	Severe Storm	SEVERE STORMS AND FLOODING
4165	DR	March 6, 2014	Severe Ice Storm	SEVERE WINTER STORM
3368	EM	February 11, 2014	Severe Ice Storm	SEVERE WINTER STORM
3218	EM	September 5, 2005	Hurricane	HURRICANE KATRINA EVACUATION
1071	DR	October 10, 1995	Hurricane	HURRICANE OPAL
1033	DR	July 7, 1994	Tornado	TORNADOES, FLOODING TORRENTIAL RAIN (TROP STORM ALBERTO)
3097	EM	March 15, 1993	Snowstorm	SEVERE SNOWFALL, WINTER STORM
3044	EM	July 20, 1977	Drought	DROUGHT

2.3 History

Fayette County was enacted as a result of the Land Lottery Draw of 1821. The land was ceded from the Creek Indian Nation and 5 new counties were created: Fayette, Henry, Houston, Dooly, Monroe. Fayette is therefore an original county (not created from other counties) and the 49th county in Georgia. At its inception, Fayette County extended north to what is now Atlanta and east past the present-day location of Jonesboro. Over time, 4 counties were formed in part from its original boundaries: Campbell (now part of Fulton), DeKalb, Clayton, and Spalding. It is presumed that some of the early settlers, being veterans of the Revolutionary War, played a pivotal role in naming the county in honor of the Marquis de LaFayette, a French nobleman who fought alongside General George Washington during the war.

Fayetteville was named as the county seat in 1823 and the present-day courthouse in the town square was built in 1825. It remains the oldest courthouse in Georgia and is still in municipal use. Although there were a few small, named communities, Fayetteville remained the only city until the 1900s.

Fayette County holds historical significance in that during the Civil War, cavalry activity took place in the middle of the county. A Confederate wagon supply train comprising several hundred wagons was burned just two miles west of Fayetteville. The following day, one of the final cavalry skirmishes of the war took place nearby. These events were indirectly linked to the larger context of the Battle of Atlanta.

In addition, Fayette County has literary connections. In the 1930s, Margaret Mitchell spent time in Fayette County researching facts for her novel, *Gone with the Wind*. Her great-grandfather, Phillip Fitzgerald, came to Fayette County in the 1830s and the Fitzgeralds were the prototypes for the O'Hara in the book. They are buried in the Fayetteville City Cemetery. The Holliday family also hailed from Fayette County. Notably, one of John Henry "Doc" Holliday's cousins married into the Fitzgerald family, making the legendary figure of the Old West a "kissin' cousin" of Margaret Mitchell.

Peachtree City was officially incorporated in 1959 and is recognized as the only successful pre-planned city in the southeastern United States. A notable feature of its City Plaza is a water fountain, gifted by the Japanese companies that have established a presence in Peachtree City. Today, Fayette County encompasses 5 incorporated municipalities: Fayetteville, Peachtree City, Tyrone, Brooks, and Woolsey.

2.4 Demographics

Fayette County has a population of approximately 120,000 residents. Table 2-2 presents data on Fayette County's demographics and its changes between 2010 and 2023, while Figure 2-1 focuses on the changes that happened since the last Plan update in 2020. Table 2-3 compares the demographics of Fayette County to the demographics of the State of Georgia. Table 2-4 presents the population and changes within the incorporated municipalities in Fayette County.

Table 2-2. Demographic changes in Fayette County between 2010 and 2023 (source: Atlanta Regional Commission)

	2010	2023	Change
Total Population	105,344	120,689	15,345
Non-Hispanic White	69.6%	56.9%	-12.8%
Non-Hispanic Black or African American	18.9%	25.2%	6.3%
Non-Hispanic Asian	3.9%	4.7%	0.8%
Hispanic or Latino (any race)	5.7%	8.3%	2.6%
Median Age	41.2%	43.3	2.1
High School Graduate or Higher	93.6%	95.0%	1.4%
Bachelor's Degree or Higher	41.5%	48.1%	6.6%
Unemployment Rate	5.6%	3.7%	-1.9%
People Below Poverty	4.7%	5.5%	0.8%
Total Housing Units	40,205	45,896	5,691
Occupied Housing Units	93.7%	95.1%	1.4%
Owner-Occupied	84.5%	81.0%	-3.5%
Renter-Occupied	15.5%	19.0%	3.5%

Table 2-3. Demographic comparison between Fayette County and the State of Georgia (source: Atlanta Regional Commission)

	2019 to 2023		
	Fayette County	State of Georgia	Difference
Total Population	120,689	10,822,590	
Non-Hispanic White	56.9%	49.8%	7.1%
Non-Hispanic Black or African American	25.2%	31.0%	-5.8%
Non-Hispanic Asian	4.7%	4.3%	0.4%
Hispanic or Latino (any race)	8.3%	10.7%	-2.4%
Median Age	43.3	37.4	5.9
High School Graduate or Higher	95.0%	89.0%	6.0%
Bachelor's Degree or Higher	48.1%	34.2%	13.9%
Unemployment Rate	3.7%	5.1%	-1.4%
People Below Poverty	5.5%	13.5%	-8.0%
Total Housing Units	45,896	4,483,873	
Occupied Housing Units	95.1%	89.4%	5.7%
Owner-Occupied	81.0%	65.4%	15.6%
Renter-Occupied	19.0%	34.6%	-15.6%

Figure 2-1. Demographic changes in Fayette County since the last plan update in 2020 (source: American Community Survey)

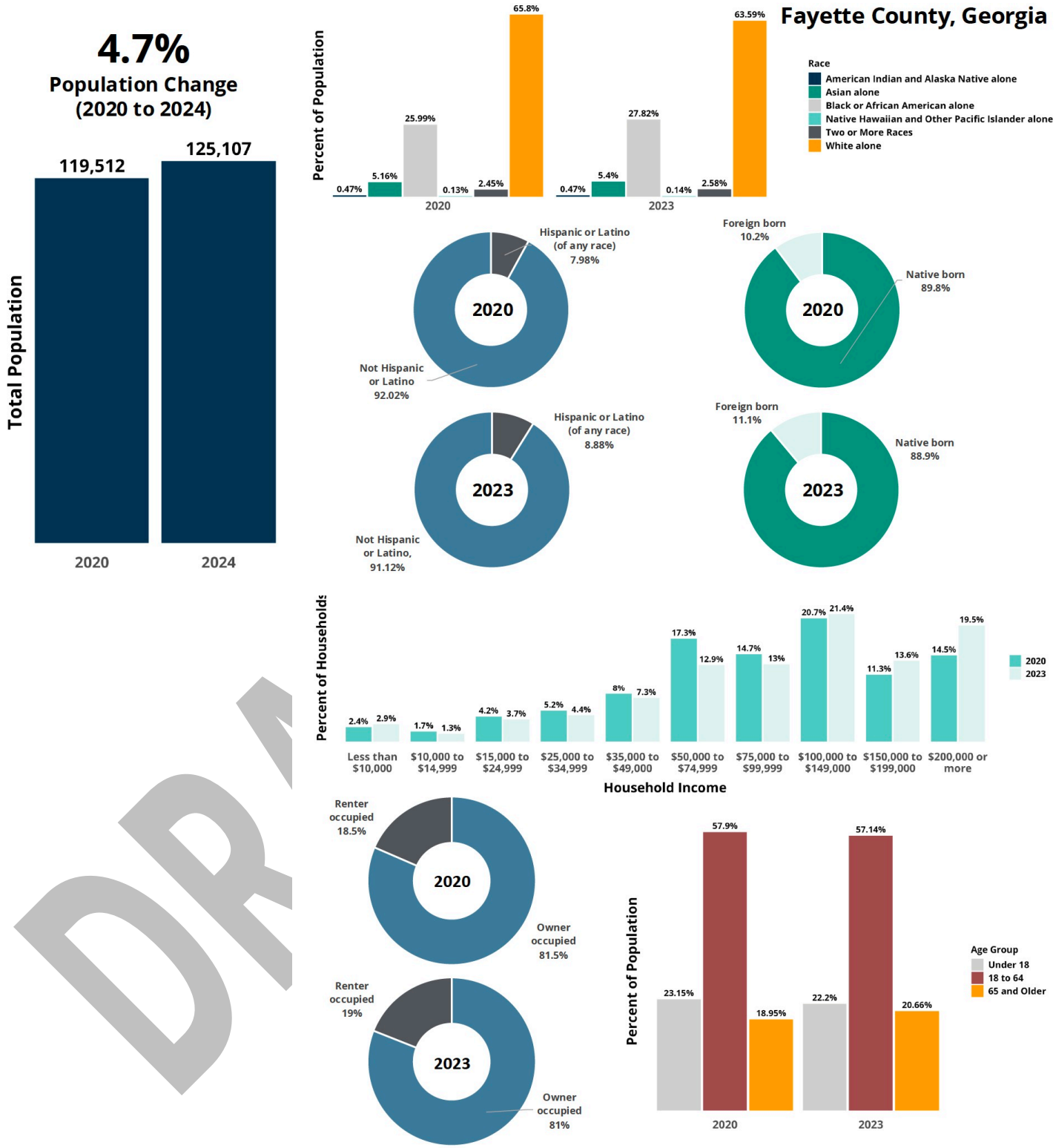


Table 2-4. Population changes in incorporated municipalities in Fayette County (source: US Census Bureau and American Community Survey)

	2000 Census	2010 Census	2020 American Community Survey	2023 American Community Survey	Population Change (2020 to 2023)
Brooks	553	524	507	693	36.7%
Fayetteville	11,148	15,945	17,902	19,364	8.2%
Peachtree City	31,580	34,364	35,844	38,977	8.7%
Tyrone	3,916	6,879	7,427	7,803	5.1%
Woolsey	175	158	195	253	29.7%

Fayette County has experienced steady growth and demographic shifts over the past decade, with a population increase of over 15,000 residents from 2010 to 2023. As of 2023, the county's total population stands at approximately 120,689, reflecting a 14.6% growth since 2010 and 4.7% growth since 2020. This growth has been accompanied by increased racial and ethnic diversity. While Non-Hispanic White residents remain the majority, their proportion has declined by nearly 13% since 2010. In contrast, the Non-Hispanic Black or African American population has grown by over 6%, and the Hispanic or Latino population has increased by 2.6% in that same period.

Educational attainment in Fayette County is notably high. 95.0% of adults have completed high school, and nearly half (48.1%) hold a bachelor's degree or higher - both significantly above the state averages. The county also boasts a relatively low unemployment rate of 3.7%, well below the state average, and a modest poverty rate of 5.5%, which is nearly 8% lower than the state's.

Housing growth has kept pace with the population, with 45,896 housing units reported in 2023, up from 40,205 in 2010. The vast majority (81.0%) of occupied housing units are owner-occupied, but the percentage of owner-occupied housing units over the past decade has decreased with renting becoming more prevalent.

When compared with the State of Georgia, Fayette County tends to skew older (median age of 43.3 versus 37.4 statewide). Further, the percentage of residents in Fayette County that are 65 and older has increased by about 2% between 2020 and 2023.

At the municipal level, all 5 incorporated areas of Fayette County have seen population growth since 2020. Between 2020 and 2023 almost all the county's population growth occurred in the incorporated areas of the county. Notably, Brooks and Woolsey have experienced significant percentage increases at 36.7% and 29.7%, respectively, highlighting changing development patterns even in the county's less densely populated areas.

2.5 Economy

Fayette County exhibits a dynamic and diversified economy, with significant contributions from both goods-producing and service-providing sectors. As analyzed above, the unemployment rate in Fayette County in 2023 was 3.7%, which is 1.9% less than the county's rate in 2010 and 1.4% below the State average of 5.1%. Based on 3rd quarter data from 2024, the economy has a higher dominance of service-producing industries, which is characteristic of many suburban counties with proximity to major metropolitan areas. However, goods-producing sectors still maintain a substantial presence and contribute meaningfully to employment and business diversity.

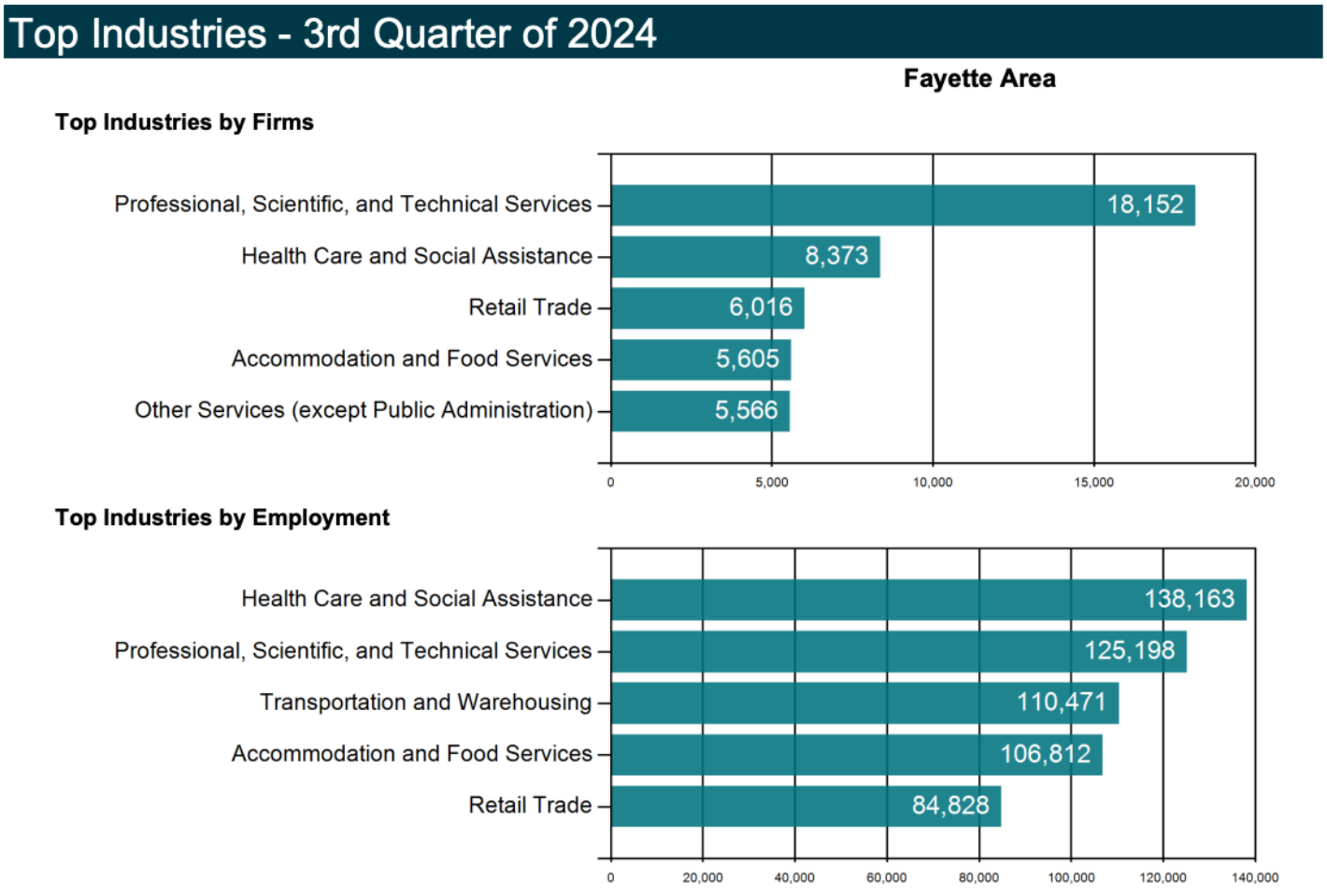
The service-producing sector constitutes the vast majority of employment and business activity in Fayette County, comprising industries that cater to both individual and commercial needs.

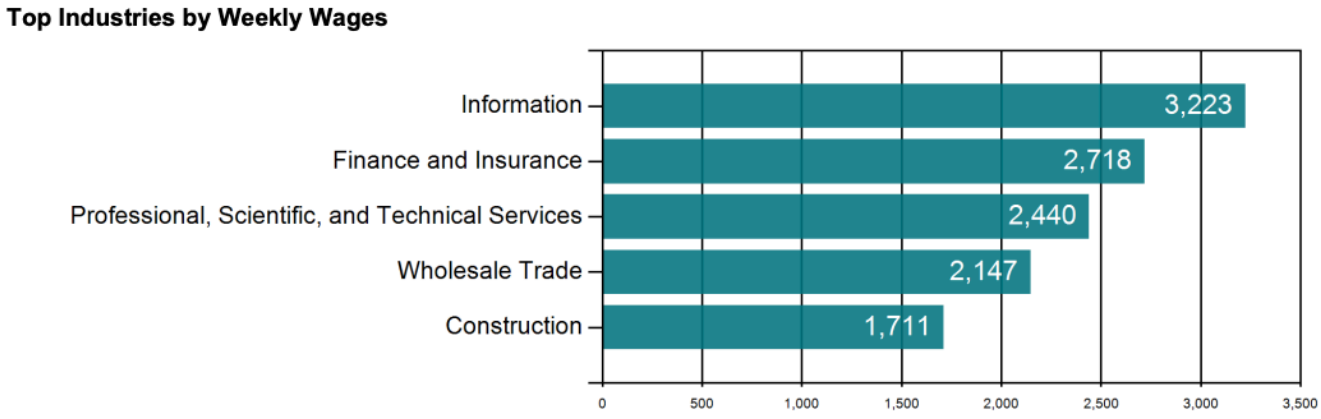
- Health Care and Social Assistance is the largest employer, with 6,580 employees across 611 establishments, reflecting the county's aging population and the demand for medical and care services.
- Accommodation and Food Services and Retail Trade also play pivotal roles, employing 6,781 and 6,666 people, respectively. These sectors support local consumption and tourism, particularly in hubs like Peachtree City and Fayetteville.
- Educational Services, Professional, Scientific, and Technical Services, and Finance and Insurance are also key service-oriented industries, with the latter two offering some of the highest average weekly wages (over $1,500), indicating their role in supporting a higher-income, skilled labor force.

While smaller in scale, the goods-producing sector remains vital to Fayette County's economy, particularly in construction and manufacturing.

- Construction is the largest goods-producing industry, with 3,038 employees spread across 399 firms. This reflects ongoing residential and commercial development within the county, driven by population growth and infrastructure needs.
- Manufacturing, while more limited in employment (1,759 employees), provides essential industrial output and contributes to economic diversity. The relatively smaller number of 93 manufacturing firms indicates a concentrated but stable industrial base.

Figure 2-2. Top industries in Fayette Area for 3rd quarter of 2024 (source: Georgia Department of Labor)





The ten largest private employers, in alphabetical order, in Fayette County include:

- Administaff Companies, Inc.
- Cooper Lighting, LLC
- Cornerstone Building Brands Service
- Gerresheimer Peachtree City US
- Hoshizaki America, Inc.
- Matsushita Electric Corp Of America
- Publix Super Markets, Inc.
- Rinnai America Corporation
- The Kroger Company
- Walmart

2.6 Government

Fayette County operates under a Commission-Administrator form of government, as defined in the County Charter. This structure includes a 5-member Board of Commissioners, with each commissioner elected from 1 of 5 geographic districts. Commissioners serve staggered 4-year terms, ensuring continuity in governance. While each commissioner is elected by their district, all serve the broader interests of the entire county. The daily operations of the county are managed by a County Administrator, who is appointed by the Board.

The Board of Commissioners holds legislative authority at the county level. Their primary responsibilities include:

- Enacting local laws (ordinances) to safeguard public health, safety, and welfare.
- Adopting an annual balanced budget that funds both county operations and allocates resources to the constitutional officers, other elected officials, the judiciary, and state-mandated programs funded at the local level.
- Ensuring the delivery of essential public services to residents.
- Setting the county millage rate annually, which partially funds the county budget. The Board also accepts the school district's millage rate and a state assessment, which is submitted to the Georgia Department of Revenue.

The Board introduces, deliberates, and enacts new ordinances while frequently updating existing ones to address evolving community needs. All ordinances require a public hearing, typically conducted during regular Commission meetings. The Board also passes numerous resolutions and proclamations throughout the year.

Generally, the Board is empowered to enact any local legislation deemed necessary for the well-being of the county, provided it does not conflict with state or federal laws, or infringe upon constitutional rights. All proposals are reviewed by legal counsel to ensure compliance before being brought to a public forum.

The Board of Commissioners provide many services that citizens expect through the revenues that are raised annually. These include:

- Emergency Services: Fire and ambulance services, E-911 dispatch, and emergency management.
- Community Services: Zoning and planning, code enforcement, building and vehicle maintenance, animal control, and public libraries.
- Infrastructure: Road maintenance and public works.
- State-Mandated Functions: Law enforcement, jail operations, Superior, Probate, Magistrate, and Juvenile Courts, tax assessment and collection, elections management, and the District Attorney's office (in partnership with neighboring counties).

2.7 Transportation

Fayette County's transportation system consists primarily of state highways and county-maintained roads. State highways 54, 74, 85, 92, 279, and 314 are major transportation routes that carry the majority of passenger and commercial traffic in and out of Fayette County. Congestion in these transportation corridors create traffic problems, primarily because of population growth. There are no interstate, federal highway, or mass transit systems servicing Fayette County.

Atlanta Regional Airport, near Peachtree City, has one paved 5000-foot runway that services charter and private aircraft. There are no commercial flights into or out of Atlanta Regional Airport. Additionally, Fayette County has five private airfields.

2.8 Climate

Fayette County, like much of Georgia, enjoys a temperate climate with 4 well-defined seasons: warm to hot summers; brisk fall temperatures; relatively brief, cool winters; and a warm spring season.

Table 2-5. Average monthly temperatures in the State of Georgia and Fayette County (Fahrenheit)

Month	State of Georgia Average Temperature	Fayette County Average Temperature
January	46	43
February	49	45
March	56	54
April	63	62
May	70	69
June	77	77
July	80	78
August	79	78
September	74	72
October	64	61
November	56	51
December	48	47

2.9 Utilities

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

Electrical power in Fayette County is provided by the Coweta-Fayette Electric Membership Corporate, which provides approximately 70% of the county's electrical service, and Georgia Power, which provides the remaining 30%.

Propane and natural gas are the primary sources of heating and cooking fuel for Fayette County's residents. Atlanta Gas Light is the primary natural gas provider in Fayette County. Some areas of Fayette County remain reliant on the delivery of propane as a fuel source for heat and cooking.

Fayette County has both private and public water systems. The Fayette County Water System is a public utility and is the largest water provider in the county. The system provides drinking water and water for fire protection for part of unincorporated Fayette County, Tyrone, Brooks, Woolsey, and Peachtree City. This system has a pumping capacity of 18 million gallons per day. The City of Fayetteville provides water and sewage services for their jurisdiction. Peachtree City Water and Sewer Authority provides sewage services to Peachtree City. Fayette County has 4 large reservoirs which serve as the main water sources for the Fayette County Water System. Additionally, the City of Fayetteville has 1 reservoir and a variety of wells that serve as the main water sources for the city's water system. Approximately 60% of Fayette County residents are connected either to a public or private pressurized water system. The remainder of citizens rely on wells located on their private property.

2.10 Municipalities

2.10.1 City of Fayetteville

Founded on March 28, 1823, Fayetteville became the county seat of Fayette County, which had been established two years earlier in 1821. Its location was selected by the county's first grand jury, and later that same year, it was incorporated by the Georgia State Legislature. Both the city and county were named in honor of the Marquis de Lafayette, a French hero of the American Revolutionary War.

Fayetteville experienced significant growth leading up to the Civil War and rebounded after Reconstruction. A key milestone occurred in 1888, when the Atlanta-Fort Valley railroad began operations through the city. That same year, Fayetteville was reincorporated as a city, with its boundaries extended to a one-mile radius from the historic courthouse.

Throughout its history, Fayetteville has been impacted by multiple natural disasters, including tornadoes, blizzards, ice storms, and flooding. Despite these challenges, the city has preserved much of its historical architecture, particularly around the historic courthouse square.

Today, Fayetteville serves as the administrative center of Fayette County, housing many county government offices. Notable attractions include the Historic Fayette County Courthouse, Southern Ground Amphitheater, Holliday-Dorsey-Fife House Museum, and the Historic Train Depot. The city is governed by a Mayor and a 5-member City Council, elected by residents. Municipal services include administrative operations, community and economic development, building inspections, fire and police protection, public works, solid waste, stormwater, and water and sewer services.

2.10.2 City of Peachtree City

Peachtree City's origins trace back to Woodland Era Indigenous peoples more than 12,000 years ago. The area later became historically significant through Chief William McIntosh, a Creek leader who, in 1821, ceded land – including future Fayette County territory – to the federal government. McIntosh's legacy is honored throughout the region, notably with the naming of McIntosh High School.

In the 1950s, real estate developers assembled over 12,000 acres to create a master-planned city. Chartered on March 9, 1959, Peachtree City was designed around distinct village centers, Aberdeen, Braelinn, Glenloch, Kedron, and Wilksmoor, each with dedicated amenities such as schools, shopping centers, and recreational spaces. Although originally envisioned to host 75,000 to 80,000 residents, the city's land use plan was revised in the 1970s to support 40,000 to 50,000.

Peachtree City is now recognized for its golf cart-friendly infrastructure, boasting over 100 miles of multi-use paths. It has become a hub for film and television productions, with credits including The Walking Dead and Sweet Home Alabama. Popular destinations include The Fred Amphitheater, Lake McIntosh Park, and the Commemorative Air Force Dixie Wing Museum.

The city is governed by a Mayor and 4 City Councilmembers, and provides comprehensive services including administration, engineering, planning and development, code enforcement, public safety (fire, EMS, and police), solid waste management, recreation, and library services.

2.10.3 Town of Brooks

Located in southern Fayette County, Brooks occupies land once traversed by Creek Nation trade routes. Originally known as Haistentown and later Sharon Grove, the community saw growth in the late 1800s with the arrival of the railroad. In 1871, local planter Hillery Brooks donated land for a train depot, lending his name to the settlement, which became known as Brooks Station, later shortened to Brooks in 1905.

By the early 20th century, Brooks had a thriving downtown supported by agriculture (primarily cotton). The town suffered economic hardship during the Depression and a devastating hailstorm in 1933, but rebounded over time. Growth resumed after World War II, fueled by proximity to Atlanta's aviation industry.

The town charter was reactivated in 1964, and today Brooks is governed by a Mayor and 5 Councilmembers. It provides administrative, sewer, and solid waste services. The town maintains a rural character, with a close-knit community and preserved historical charm.

2.10.4 Town of Tyrone

Tyrone's early roots lie in Creek Indian territory, with Scottish and Irish settlers arriving in the late 1800s, drawn by the landscape's resemblance to County Tyrone in Northern Ireland. The name "Tyrone" was adopted by the Birmingham and Atlantic Railroad in 1907, and the town was officially incorporated in 1911.

Today, Tyrone is a growing municipality that blends historical heritage with modern amenities. The town is governed by a Mayor and 4 Councilmembers, with a Town Manager overseeing daily operations. Services include administration, public safety, public works, planning and zoning, library services, sanitation, and environmental services.

2.10.5 Town of Woolsey

Established in 1893 and originally known as Woolseyville, the Town of Woolsey was founded by Dr. I.G. Woolsey, a physician, minister, and Civil War surgeon. The town emerged as an agricultural center in the late 1800s, with corn and cotton as staple crops. By the 1920s, Woolsey featured a variety of community establishments, including a bank, post office, library, general store, and one-room schoolhouse.

Though small, Woolsey has retained its rural and pastoral identity. The town celebrated its centennial in 1993, and today offers residents a peaceful lifestyle with modest commercial amenities, local small businesses, a fire station, and community institutions like Woolsey Baptist Church and the Masonic Lodge.

Woolsey is governed by a Mayor and 3 Councilmembers, who are elected by residents.

2.11 Community Changes

Requirement 201.6(d)(3)

Since the last Plan update, Fayette County has experienced or anticipates notable demographic, economic, and land use transformations, all of which have important implications for the county's vulnerability to natural and human-caused hazards.

2.11.1 Population Growth and Urbanization

Fayette County's population has continued to grow steadily, with particularly marked increases in its incorporated municipalities. As more people move into the county, the density of residential development increases, particularly in formerly low-density or rural zones. This change increases the county's vulnerability as it places added stress on transportation networks, utility systems, and emergency response capabilities. Further, population growth also leads to increased development in areas that may previously have served as natural buffers or open space, potentially exacerbating hazard risks and vulnerability.

2.11.2 Demographic Diversification and Housing Shifts

Fayette County's population has become increasingly diverse, with notable growth in communities of color and immigrant populations. This demographic shift brings both cultural vibrancy and new considerations for language access, culturally competent outreach, and equitable hazard communication in emergency preparedness efforts.

Simultaneously, there has been a measurable increase in the number of renter-occupied households, particularly in urbanizing nodes and near commercial hubs. Renters often face higher vulnerability in disaster scenarios due to limited control over building conditions, reduced access to insurance, and potential barriers to evacuation or recovery resources.

2.11.3 Land Use Changes and Development Trends

Major development projects are reshaping the land use landscape of Fayette County and introducing increased vulnerabilities:

- Data Center Construction: The emergence of data centers, constructed on land that was previously agricultural, residential, or vacant, marks a significant economic and infrastructure shift. These facilities are highly sensitive to power loss, flooding, and cyber-related hazards, and their presence introduces critical infrastructure risks not previously

dominant in the county. The growth of this sector will also likely contribute to increased population growth to meet employment demands with vulnerabilities detailed above.

- Future U.S. Soccer National Training Center: Fayette County is set to become the future home of the U.S. Soccer National Training Center, a nationally significant development that will increase tourism, traffic, and regional visibility. While the facility presents major economic and cultural benefits, it also creates new demands on transportation infrastructure, emergency services, and mass gathering safety protocols, especially during peak events and national programming.
- Trilith Development: The continued expansion of Trilith, a mixed-use development anchored by a major film studio, further transforms the county's profile. With its combination of residential neighborhoods, creative industry facilities, and commercial amenities, Trilith introduces urban-scale density and energy needs to what was once a more rural setting. The development intensifies vulnerability to service disruptions, transportation bottlenecks, and resource strain during emergencies.
- Fayetteville Town Center Development: The proposed 38-acre Town Center development along Grady Avenue aims to transform land into a mixed-use civic and residential hub featuring greenspace, municipal facilities, housing, and commercial amenities. As a central node for community engagement and urban revitalization, the development introduces increased population density and infrastructure demand. This shift presents vulnerabilities related to stormwater runoff, traffic congestion, and emergency access. Additionally, with expanded public gathering areas and event programming likely, the development will require enhanced public safety planning and hazard mitigation for mass gatherings and critical infrastructure resilience.

Chapter 3 Hazard Profiles

3.1 Summary of Updates for Chapter 3

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Fayette County Hazard Mitigation Plan 2020.

Chapter 3 Section	Updates
Risk Assessment	Chapter structure and THIRA process was updated to better reflect current Plan requirements, which is reflected in this section
Natural Hazard: Thunderstorm	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Winter Storm	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Flooding	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Tornado	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Drought	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Wildfire	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Earthquake	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Tropical Cyclone	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Natural Hazard: Extreme Temperature	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Hazardous Material	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated

Technological Hazard: Dam Failure	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Transportation Incident	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Terrorism	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Infrastructure Failure	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Emergent Infectious Disease	Structure updated to reflect updated THIRA process described in "Risk Assessment" Content revised and data updated
Technological Hazard: Cyberattack	New section – not in 2020 Plan
Vulnerability Summary	New section – not in 2020 Plan

3.2 Risk Assessment

Requirement 201.6(c)(2)(i)

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

- Hazard Identification: The LHMPC undertook a comprehensive review to identify hazards considered relevant and impactful to Fayette County. The LHMPC grounded their selections in a combination of local knowledge, past hazard events, existing planning documents, and state-level guidance. The LHMPC identified 9 natural hazards and 7 technological hazards for this Hazard Mitigation Plan.

  The 9 natural hazards remain consistent with the 2020 Plan. In comparing the hazard inventory to the inventory in the 2024 Georgia Hazard Mitigation Strategy, Fayette County omitted the following hazards:
  - Coastal Hazards (storm surge, coastal flooding): Fayette County is an inland jurisdiction with no exposure to risks such as storm surge, saltwater intrusion, or coastal erosion.
  - Geologic Hazards (sinkhole, landslide): The LHMPC based the omission on the 2024 Georgia Hazard Mitigation Strategy's hazard maps (Figure 2.92 and Figure 2.93), which show low potential for such hazards in Fayette County. Historical occurrence and local geological assessments corroborated this conclusion.

  However, 1 technological hazard, cyberattack, was added. The inclusion of cyberattack acknowledges the growing risk posed by the hazard to local government systems, public infrastructure, and community services. The LHMPC recognized that as Fayette County

continues to digitize its operations and rely more heavily on interconnected technologies, it must also prepare for potential disruptions caused by malicious cyber activity.

- Hazard Profile: Each hazard was profiled with the following sections:
  - Hazard Description: This section defines the hazard type and introduces any scales that may be used to classify the severity of the hazard.
  - Location and Extent: This section details the geographic area within the county that could be affected by the hazard and the expected range of intensity.
  - Previous Occurrences: This section lists any historical occurrences recorded in Fayette County.
  - Probability: This section evaluates the probability of each hazard using historical data as well as future condition data (e.g. land use change, population change, etc.). In some cases, probability levels were determined using the following scale:
    - Unlikely: Occurring every 50 years or less
    - Somewhat Likely: Occurring every 20 to 50 years
    - Likely: Occurring every 5 to 20 years
    - Highly Likely: Occurring every 1 to 5 years
    - Extremely Likely: Occurring every 1 year or more
  - Impacts: This section details the likely impacts (e.g. to people, infrastructure, economy, etc.) given a hazard occurrence and addresses how impacts may change with future conditions (e.g. land use change, population change, etc.).
  - Multi-Jurisdictional Considerations: Each jurisdiction was considered when determining the potential hazard impact.

- Vulnerability Summary: The above sections in the risk assessment evaluate the hazards, vulnerable assets and potential impacts and losses. This section summarizes the information through a series of problem statements to help the community understand its most significant risks and vulnerabilities. This section is key in informing the mitigation strategy.

3.3 Natural Hazards

3.3.1 Thunderstorm

3.3.1.1 Hazard Description

This section focuses on thunderstorms, including high wind, lightning, and hail. Other elements of thunderstorms, such as tornadoes and flooding, are addressed in their own sections later in this Plan.

Thunderstorms

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. 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.

High Wind

Straight-line winds are powerful outflow winds that emanate from a thunderstorm, moving in a straight path at the surface, distinct from the rotational winds of a tornado. These winds result from the rapid downward movement of cool air hitting the ground and spreading out in all directions. The Beaufort Scale is commonly used to measure wind speed and potential damage correlations.

Table 3-1. Beaufort scale (source: National Oceanic and Atmospheric Administration (NOAA))

Beaufort Number	Wind Speed (mph)	Effects on Land	Effects on Water
0	Under 1	Calm, smoke rises vertically	Sea surface smooth and mirror-like
1	1-3	Smoke drift indicates wind direction, vanes do not move	Scaly ripples, no foam crests
2	4-7	Wind felt on face, leaves rustle, vanes begin to move	Small wavelets, crests glassy, no breaking
3	8-12	Leaves, small twigs in constant motion. Light flags extended.	Large wavelets, crests begin to break, scattered whitecaps
4	13-18	Dust, leaves, and loose paper raised up; small branches move	Small waves (1-4 feet) becoming longer, numerous whitecaps
5	19-24	Small trees begin to sway	Moderate waves (4-8 feet) taking longer form, many whitecaps, some spray
6	25-31	Large branches of trees in motion, whistling heard in wires	Larger waves (8-13 feet), whitecaps common, more spray
7	32-38	While trees in motion, resistance felt in walking against the wind	Sea heaps up, waves 13-19 feet, white foam streaks off breakers
8	39-46	Twigs and small branches broken off trees	Moderately high (18-25 feet) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks
9	47-54	Slight structural damage occurs, slate blown from roofs	High waves (23-32 feet), sea begins to roll, dense streaks of foam, spray reduces visibility
10	55-63	Seldom experienced on land, trees broken, structural damage occurs	Very high waves (29-41 feet) with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility

Beaufort Number	Wind Speed (mph)	Effects on Land	Effects on Water
11	64-72	Very rarely experienced on land, usually with widespread damage	Exceptionally high (37-52 feet) waves, foam patches cover sea, visibility more reduced
12	73 or higher	Violence and destruction	Air filled with foam, waves over 45 feet, sea completely white with driving spray, visibility greatly reduced

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. There is currently no scale to measure the severity of lightning strikes.

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.

Table 3-2. Typical damage experienced with varying hailstone sizes (source: Tornado and Storm Research Organization)

Intensity Category	Diameter (inches)	Size Description	Typical Damage Impacts
Hard Hail	0.2-0.4	Pea	No damage
Potentially Damaging	0.4-0.6	Mothball	Slight general damage to plants, crops
Significant	0.6-0.8	Grape	Significant damage to crops and vegetation
Severe	0.8-1.2	Walnut	Severe damage to crops, damage to glass and plastic, paint and wood scored
Severe	1.2-1.6	Ping pong ball	Widespread glass damage, vehicle bodywork damage
Destructive	1.6-2.0	Golf ball	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
Destructive	2.0-2.4	Hen's egg	Bodywork of grounded aircraft dented, brick walls pitted
Destructive	2.4-3.0	Baseball	Severe roof damage, risk of serious injuries
Super Hailstorms	3.6-3.9	Large orange	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open
Super Hailstorms	4.0+	Grapefruit	Extensive structural damage. Risk of severe or even fatal injuries to persons caught in the open

In terms of magnitude, the National Weather Service (NWS) 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 NWS chose these measures of severity as parameters more capable of producing considerable damage. Therefore, these are measures of magnitude that may project intensity.

3.3.1.2 Location and Extent

Severe thunderstorms are not spatially confined to any location in Fayette County; therefore, the entire county is equally at risk of severe thunderstorms. Thunderstorms have occurred during all parts of the day and night and in every month in Fayette County. Severe thunderstorms are the most frequently occurring natural hazard in Fayette County. Many of these storms include high winds, lightning, and hail. Hail up to 4.5 inches was recorded in Fayette County on several occasions, most recently in 1988. Thunderstorm winds of 85 mph have been reported on many occasions in Fayette County, with the most recent occurring in 2015. According to 2024 Georgia Hazard Mitigation Strateg, Fayette County has an average hazard wind score of 1 (<90 mph gust) and wind speed gust 50 year return interval of 60 to 68 mph.

3.3.1.3 Previous Occurrences

While there have been dozens of documented thunderstorm events affecting Fayette 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 23 thunderstorm events were recorded between 1970 and 1990, likely a vast underestimation of actual events.

Between 1985 and 2024, 249 thunderstorm events were recorded in the NOAA National Centers for Environmental Information (NCEI) Storm Events Database in Fayette County (Figure 3-1). This number includes 66 hail events and 48 lightning events. Table 3-3 lists the events from the Database that occurred since the last Plan update in 2020.

Figure 3-1. Previous occurrences of thunderstorm events in Fayette County (1985 to 2024) (source: NOAA)

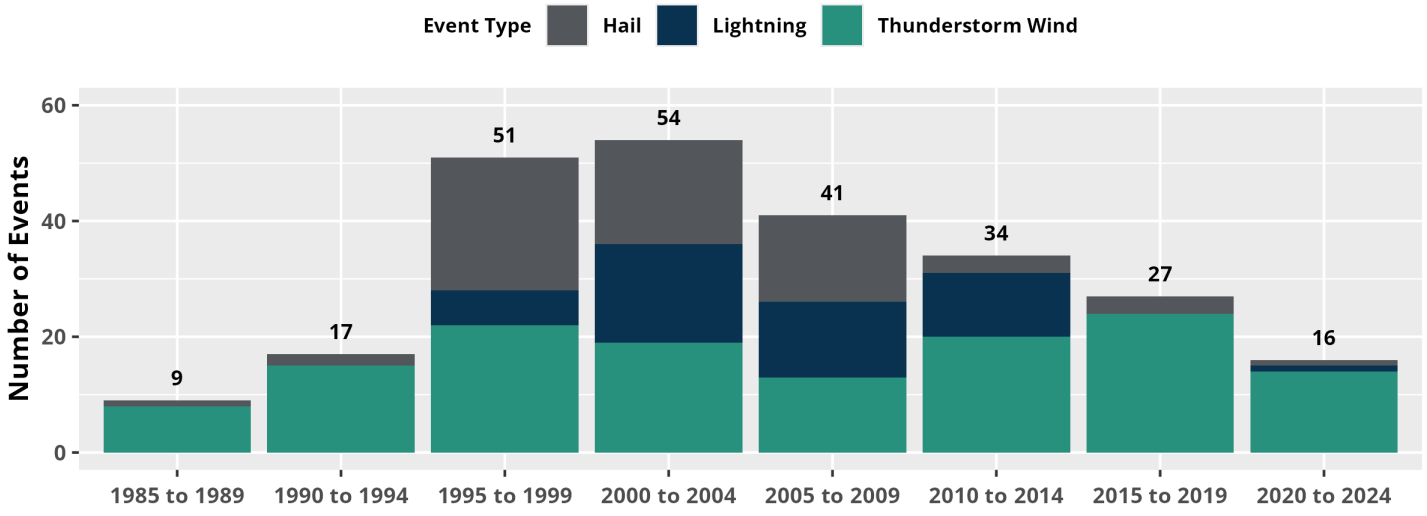


Table 3-3. Previous occurrences of thunderstorm events in Fayette County (2020 to 2024) (source: NOAA)

Location	Begin Date	Begin Time	Event Type	Magnitude (mph for wind; inches for hail)
FAYETTEVILLE	08/17/2024	1915	Thunderstorm Wind	39
SHAKE RAG	08/17/2024	1915	Thunderstorm Wind	39
PEACHTREE CITY	08/17/2024	1932	Thunderstorm Wind	52
LEES MILL	07/30/2024	1950	Thunderstorm Wind	43

Location	Begin Date	Begin Time	Event Type	Magnitude (mph for wind; inches for hail)
KENWOOD	07/30/2024	1950	Thunderstorm Wind	43
KENWOOD	07/30/2024	1955	Thunderstorm Wind	52
KENWOOD	07/30/2024	1959	Thunderstorm Wind	52
WOOLSEY	07/30/2024	2000	Thunderstorm Wind	43
FAYETTEVILLE	07/30/2024	2000	Thunderstorm Wind	48
TYRONE	07/30/2024	2005	Thunderstorm Wind	39
BROOKS	07/30/2024	2020	Thunderstorm Wind	52
TYRONE	05/27/2024	740	Thunderstorm Wind	39
FAYETTEVILLE	05/27/2024	745	Thunderstorm Wind	39
WOOLSEY RUST ARPT	05/27/2024	750	Thunderstorm Wind	39
FAYETTEVILLE	05/27/2024	750	Thunderstorm Wind	39
BROOKS	05/27/2024	1725	Thunderstorm Wind	39
WOOLSEY RUST ARPT	02/28/2024	1620	Thunderstorm Wind	39
FAYETTEVILLE	08/15/2023	1401	Thunderstorm Wind	43
LEES MILL	08/15/2023	1339	Lightning	
STARRS MILL	08/07/2023	435	Thunderstorm Wind	52
CLOVER	08/07/2023	1625	Thunderstorm Wind	52
SHAKE RAG	08/07/2023	1630	Thunderstorm Wind	52
FAYETTEVILLE	08/07/2023	1645	Thunderstorm Wind	52
LEES MILL	08/07/2023	1700	Thunderstorm Wind	4
KENWOOD	08/07/2023	1700	Thunderstorm Wind	52
KENWOOD	08/07/2023	1705	Thunderstorm Wind	52
LEES MILL	08/06/2023	1340	Thunderstorm Wind	43
FAYETTEVILLE	08/06/2023	1412	Thunderstorm Wind	43
STARRS MILL	08/06/2023	1422	Thunderstorm Wind	43
TYRONE	06/25/2023	1810	Thunderstorm Wind	52
ABERDEEN	06/11/2023	1700	Thunderstorm Wind	52
SHAKE RAG	06/11/2023	1706	Thunderstorm Wind	52
PEACHTREE CITY	06/11/2023	1706	Thunderstorm Wind	52
LEES MILL	01/12/2023	1606	Thunderstorm Wind	52
CLOVER	01/12/2023	1606	Thunderstorm Wind	56
ABERDEEN	01/12/2023	1607	Thunderstorm Wind	61
SHAKE RAG	01/12/2023	1608	Thunderstorm Wind	52
STARRS MILL	01/12/2023	1613	Thunderstorm Wind	52
FAYETTEVILLE	01/12/2023	1613	Thunderstorm Wind	52
WOOLSEY	06/24/2022	2120	Thunderstorm Wind	43
CLOVER	06/15/2022	1716	Thunderstorm Wind	52

Location	Begin Date	Begin Time	Event Type	Magnitude (mph for wind; inches for hail)
ABERDEEN	06/15/2022	1723	Thunderstorm Wind	52
CLOVER	06/15/2022	1710	Hail	1
PEACHTREE CITY	06/15/2022	1716	Hail	1.25
PEACHTREE CITY	12/30/2021	924	Thunderstorm Wind	52
PEACHTREE CITY	12/30/2021	928	Thunderstorm Wind	52
BROOKS	01/26/2021	604	Thunderstorm Wind	50
TYRONE	08/12/2020	1431	Thunderstorm Wind	50
PEACHTREE CITY	07/25/2020	1448	Thunderstorm Wind	50
FAYETTEVILLE	07/15/2020	1532	Thunderstorm Wind	50
HARP	07/09/2020	1746	Thunderstorm Wind	50
FAYETTEVILLE	06/21/2020	1658	Thunderstorm Wind	45
ABERDEEN	03/31/2020	1024	Thunderstorm Wind	55

3.3.1.4 Probability

Severe thunderstorms are the most frequently occurring natural hazard in Fayette County. The probability of severe thunderstorms is extremely likely (occurring every 1 year or more).

3.3.1.5 Impacts

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

Most of the available information relating to severe thunderstorm events in Fayette County fails to describe damage estimates in any detail, and these numbers are thought to be a gross underestimation of actual past damages. 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.

The impacts of thunderstorms can include strong winds, heavy rainfall leading to localized flooding, lightning strikes causing fires and power outages, hail damage to structures and vehicles, and disruptions to critical infrastructure, such as transportation and utilities. Severe thunderstorms may also contribute to cascading hazards, such as fallen trees blocking emergency access routes or secondary flooding from overwhelmed stormwater systems.

Urbanized areas such as Fayetteville and Peachtree City, with dense residential and commercial developments, face heightened risks of property damage and localized flooding. Meanwhile, rural areas, including Brooks and Woolsey, may experience less structural damage but remain vulnerable to agricultural losses and power outages caused by downed trees and utility lines.

Fayette County's population is steadily increasing, particularly within incorporated areas, with projected growth continuing to urbanize previously undeveloped or rural zones. This trend is expected to increase impervious surfaces, such as roadways and rooftops, which will exacerbate stormwater runoff and the potential for flash flooding during thunderstorms. New developments, like the U.S. Soccer National Training Center, the Trilith community, and

proposed Town Center development adjacent to the City of Fayetteville's City Center Park, will introduce additional infrastructure, population densities, and open green space that are vulnerable to lightning strikes, hail damage, and storm-related disruptions. The construction of data centers on former agricultural land further compounds the risks, as these critical facilities are highly sensitive to power disruptions and water damage.

3.3.1.6 Multi-Jurisdictional Considerations

While thunderstorms present a county-wide threat, the specific impacts and vulnerabilities can vary somewhat between Fayette County's jurisdictions due to differing community characteristics

- Fayetteville and Peachtree City: As urban hubs, these cities have a higher density of residential, commercial, and critical infrastructure, making them more susceptible to property damage, stormwater system overload, and traffic disruptions during thunderstorms. Peachtree City's extensive golf cart path network may also face accessibility challenges from debris or flooding.
- Tyrone: Tyrone's mix of residential neighborhoods and expanding commercial areas makes it moderately vulnerable to both infrastructure damage and localized flash flooding. Continued growth will require proactive planning to ensure that stormwater systems can handle increased runoff.
- Brooks and Woolsey: These smaller towns retain a largely rural character. While less dense development reduces overall exposure, widespread power outages due to downed trees and communication disruptions remain major concerns. Agricultural activities in these areas are also highly susceptible to hail and heavy rain damage.

3.3.2 Winter Storm

3.3.2.1 Hazard Description

Winter storm events consist of storm events in which the main types of precipitation are snow, sleet, or freezing rain:

- Snow: Snowflakes are collections of ice crystals that cling to each other as they fall toward the ground. Precipitation continues to fall as snow when the temperature remains at or below 32°F from the cloud base to the ground.
- Sleet: Sleet occurs when snowflakes only partially melt when they fall through a shallow layer of warm air. These slushy drops refreeze as they next fall through a deep layer of freezing air above the surface, and eventually reach the ground as frozen rain drops that bounce on impact.
- Freezing Rain: Freezing rain occurs when snowflakes descend into a warmer layer of air and melt completely. When these liquid water drops fall through another thin layer of freezing air just above the surface, they don't have enough time to refreeze before reaching the ground. Because they are "supercooled," they instantly refreeze upon contact with anything that that is at or below 32°F, creating a glaze of ice on the ground, trees, power lines, or other objects.

The Peachtree City NWS local weather forecast office abides by the following criteria for a winter storm:

- ½ inch or greater of sleet
- ¼ inch of greater of freezing rain
- 2 inches or greater of snow

The Peachtree City NWS local weather forecast office issues the following watches, warnings, and advisories related to winter storm events:

- Winter Storm Watch: When there is a 50% or greater chance of conditions favorable for a winter storm within 12 to 24 hours.
- Winter Weather Advisory: When there is an 80% or greater chance winter precipitation that causes an inconvenience, but does not meet warning criteria within 36 hours.
- Winter Storm Warning: When there is an 80% or greater chance of conditions favorable for a winter storm within 36 hours.
- Ice Storm Warning: When there is an 80% or greater chance of ¼ inch or more of freezing rain within 36 hours.
- Blizzard Warning: When there is an 80% or greater chance of blizzard conditions within 36 hours. Bizzard conditions consist of sustained wind speeds (or gusts) of at least 35 mph, and considerable falling or blowing snow causing a reduction of visibilities to less than ¼ mile for at least 3 hours.

A winter storm watch or warning and ice storm warning can also be issued at forecaster and emergency management discretion when significant impacts are expected but the snow, sleet, or freezing rain criteria are not necessarily met.

The Winter Storm Severity Index is a classification system used to communicate impacts from winter storms using NWS forecast data.

Table 3-4. Winter Storm Severity Index scale (NOAA)

Rating	Potential Impacts
No Impacts	Impacts not expected.
Limited Impacts	Rarely a direct threat to life and property. Typically results in little inconveniences.
Minor Impacts	Rarely a direct threat to life and property. Typically results in an inconvenience to daily life.
Moderate Impacts	Often threatening to life and property, some damage unavoidable. Typically results in disruptions to daily life.
Major Impacts	Extensive property damage likely, life saving actions needed. Will likely result in major disruptions to daily life.
Extreme Impacts	Extensive and widespread severe property damage, life saving actions will be needed. Results in extreme disruptions to daily life.

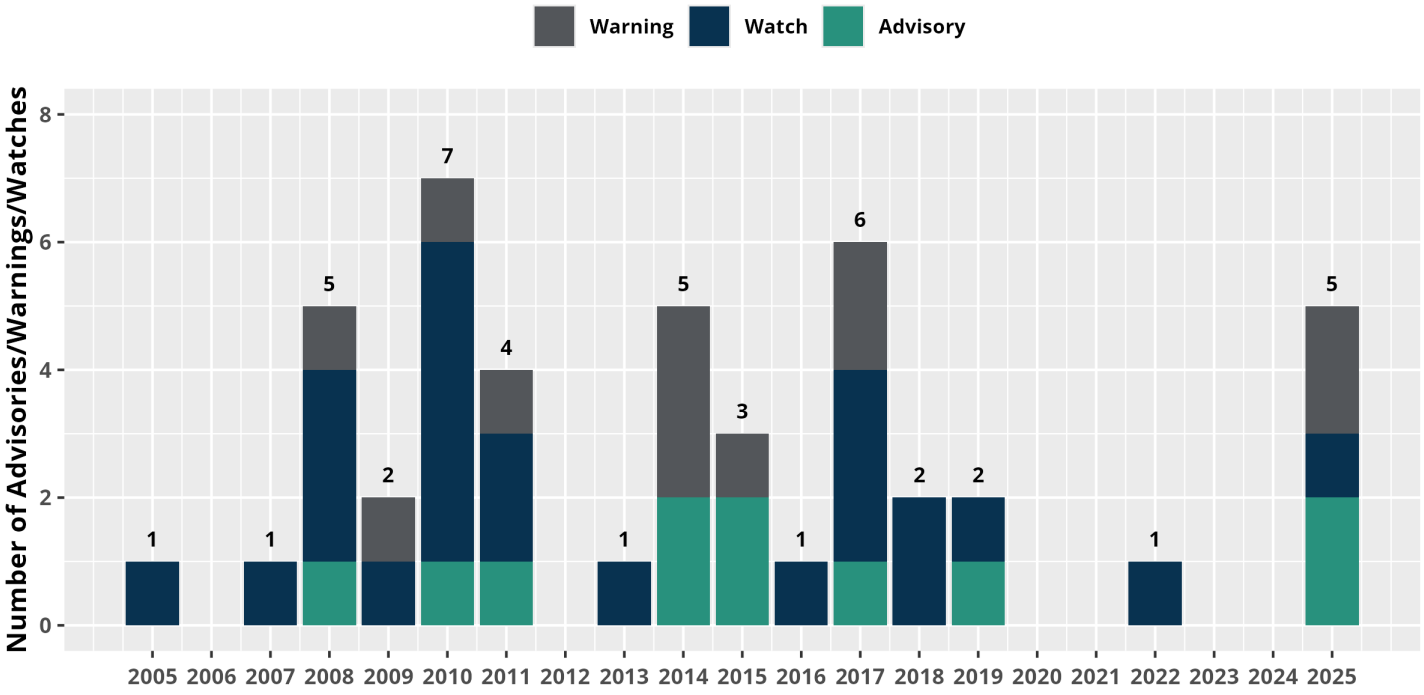
3.3.2.2 Location and Extent

Winter storms are a county-wide hazard and are not spatially confined within Fayette County. 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. While not common, winter storms in Fayette County can reach extreme levels.

3.3.2.3 Previous Occurrences

Individual events of winter storms 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. Figure 3-2 below shows the number of winter storm-related watches, advisories, and warnings issued to Fayette County between 2005 and April 2025.

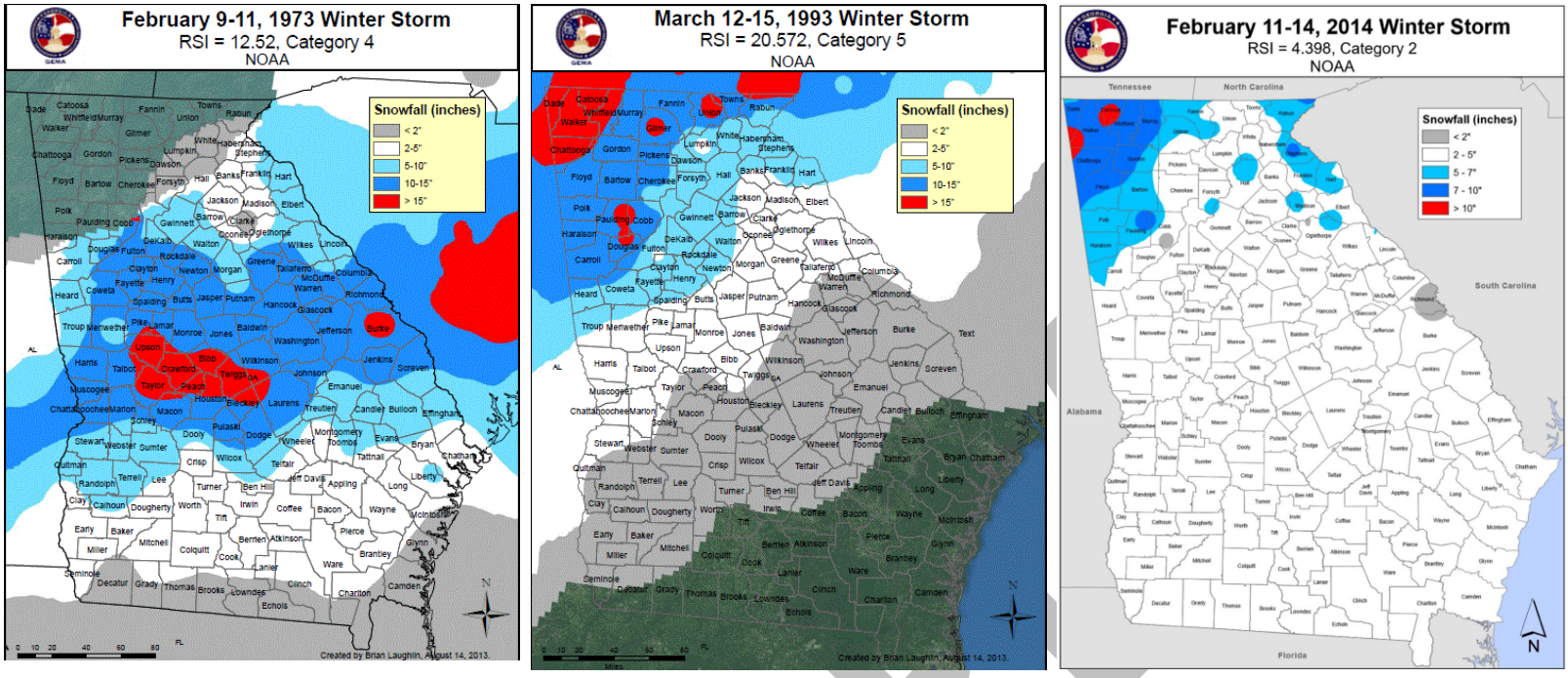
Figure 3-2. Winter storm-related watches, advisories, and warnings issued to Fayette County's forecast zone between 2005 and April 2025 (source: Iowa State University Environmental Mesonet)



The following lists the notable winter storm events that have impacted Fayette County:

- February 1973: In February 1973, a rare and powerful winter storm, known as "The Great Southeastern Snowstorm," blanketed central Georgia, including Fayette County, with significant snowfall. While the heaviest accumulations were recorded in areas like Macon (16.5 inches) and Thomaston (19.3 inches), Fayette County experienced substantial snow (10 to 15 inches) that disrupted transportation and daily activities. The storm's intensity led to widespread road closures and power outages, prompting the Georgia National Guard to assist in relief efforts across affected regions.
- March 1993: Known as the "Storm of the Century," this massive storm impacted much of the eastern United States, including Fayette County. The storm brought heavy snowfall, with areas in north Georgia receiving up to 35 inches. Fayette County faced significant disruptions due to snow-covered roads and power outages. The storm's severity led to the mobilization of emergency services and highlighted the region's vulnerability to rare but impactful winter weather events.
- January 2014: A sudden snowstorm in January 2014, known as "Snowmageddon," led to widespread chaos across metro Atlanta and surrounding areas, including Fayette County. Though snowfall totals were modest, the timing during peak travel hours resulted in massive traffic gridlocks, with many commuters stranded for hours. The event underscored the challenges of responding to unexpected winter weather in regions unaccustomed to such conditions.

Figure 3-3. Snowfall estimates for notable winter storms in Fayette County (source: 2024 Georgia Hazard Mitigation Strategy)



3.3.2.4 Probability

Winter storms in Fayette County are highly likely (occurring every 1 to 5 years). Notable and more severe winter storms though are likely (occurring every 5 to 20 years).

3.3.2.5 Impacts

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

Winter storms, though relatively infrequent in Fayette County, have historically caused significant disruptions when they do occur. Destructiveness in the southern states is often amplified due to the lack of preparedness and response measures. Previous events demonstrate that even a few inches of snow or ice can critically impact infrastructure, transportation, utilities, and public safety across the county.

Winter storms in Fayette County can cause major impacts, including, hazardous road conditions leading to vehicle accidents and traffic standstills, power outages caused by downed trees and ice-laden power lines, disruption of emergency services, school and business closures, and increased risks to vulnerable populations, particularly older adults and those with mobility challenges. Given the county's transportation network, which relies heavily on state highways and local roads without mass transit options, even minor icing events can severely restrict mobility. Further, due to the county's elevation changes, many highways have steep grades that can become dangerous during icy conditions. The large number of trees in Fayette County can also become a hazard when the tree limbs become weighed down with snow and ice and begin to break and fall to the ground, potentially damaging private property, public property, or injuring people and animals.

Additionally, the county's utility infrastructure, while robust, faces heightened vulnerability during severe winter storms due to overhead power lines and the prevalence of large, mature trees. Rural areas with lower redundancy in power grids can experience prolonged outages following storm events.

Fayette County is experiencing steady population growth, particularly within its incorporated municipalities. Increased development is replacing rural or open land with denser residential and commercial construction, potentially compounding vulnerabilities:

- Demographic shifts, including an aging population, may lead to greater numbers of residents who are particularly vulnerable to cold temperatures and power outages.
- Land use changes, such as the construction of data centers and major development projects, introduce critical infrastructure that is highly sensitive to utility disruptions caused by winter weather.
- Tourism and mass gathering risks will grow with projects like the U.S. Soccer National Training Center, requiring enhanced emergency planning for winter weather events that coincide with large events.

3.3.2.6 Multi-Jurisdiction Considerations

Winter storms present a county-wide threat, but the extent and nature of impacts can vary across Fayette County's municipalities based on factors such as development patterns, infrastructure resilience, and population density.

- Fayetteville and Peachtree: As the most urbanized jurisdictions, Peachtree City and Fayetteville face heightened risks from transportation disruptions due to their concentration of commercial centers, government offices, and schools. Peachtree City's extensive golf cart path network, while beneficial for mobility in normal conditions, can be dangerous during icy events. These cities also host critical facilities (e.g., hospitals, emergency services) that require uninterrupted access during winter storms.
- Tyrone: Tyrone's mix of suburban development and open land suggests moderate vulnerability. Road closures and utility disruptions could isolate neighborhoods, especially newer residential developments built without redundant road connections.
- Brooks and Woolsey: The rural nature of Brooks and Woolsey offers some resilience against traffic-related issues but increases risks related to prolonged power outages and access to emergency services. Sparse road networks and older housing stock, which may lack modern insulation or heating systems, elevate vulnerability for residents.

3.3.3 Flooding

3.3.3.1 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.

Floods can be classified as 1 of 3 types: upstream floods, downstream floods, or coastal floods:

- Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can

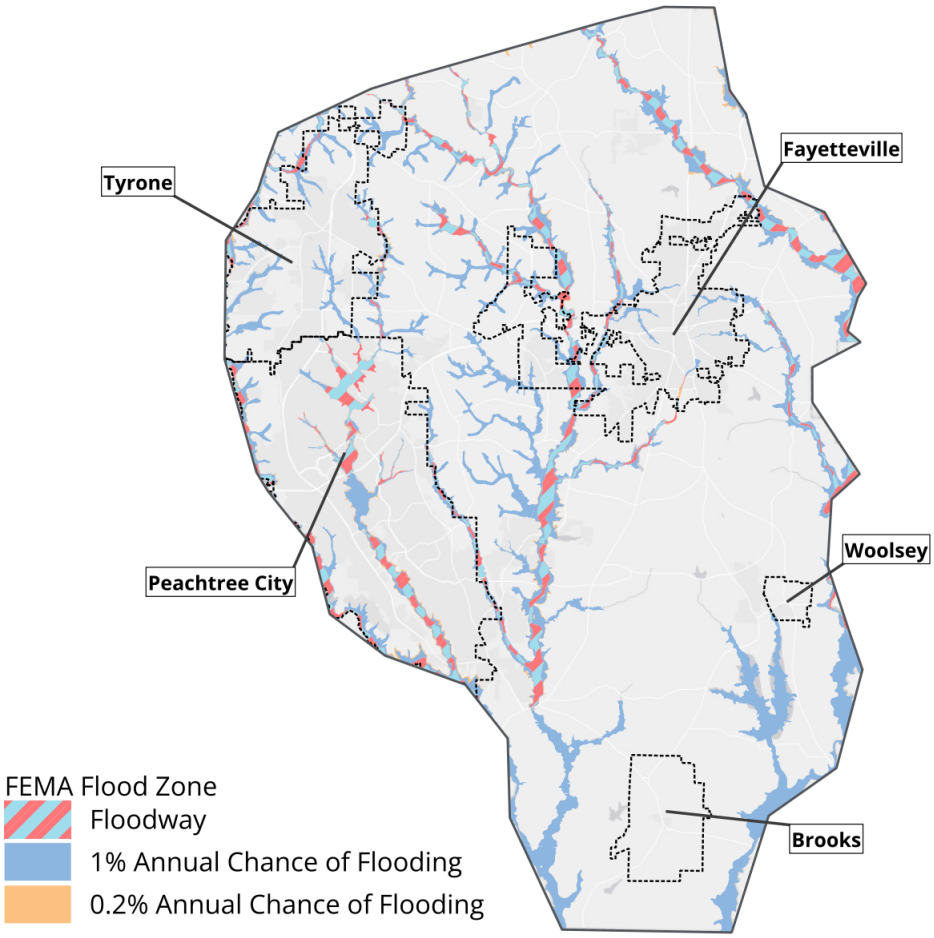
occur at any time of the year in Georgia, but they are most common in the spring and summer months.

- Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage
- Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings.

3.3.3.2 Location and Extent

Flood events within Fayette County are typically associated with areas of special flood hazard as identified on Flood Rate Insurance Maps (FIRMs) published by the Federal Emergency Management Agency (FEMA). The flood maps delineate areas of high, moderate, and low flood risk by indicating areas of inundation under different flooding return periods (e.g. 100-year, 500-year floods). Fayette County is within the 100-year and 500-year floodplains depending on the location, as shown in Figure 3-4.

Figure 3-4. FEMA flood zones in Fayette County (source: FEMA)



The extent of flooding within Fayette County can also be presented using depth of flood information. NOAA provides historical crest (when available), flood stage category levels, and flood impacts for 6 gauges within the county. The below figures provide this information for the following gauges:

- Flat Creek below Lake Kedron Dam (Peachtree City)
- Line Creek below GA 54 near Peachtree City (Peachtree City)
- Flat Creek at Lake Peachtree Tailrace (Peachtree City)
- Line Creek below Lake McIntosh (Peachtree City)
- Horton Creek below Lake Horton Dam (Fayette County)
- Flint River at Woolsey Road near Woolsey (Fayette County)

Figure 3-5. Flood stage category levels, and impacts for the Flat Creek below Lake Kedron Dam gauge (source: NOAA)

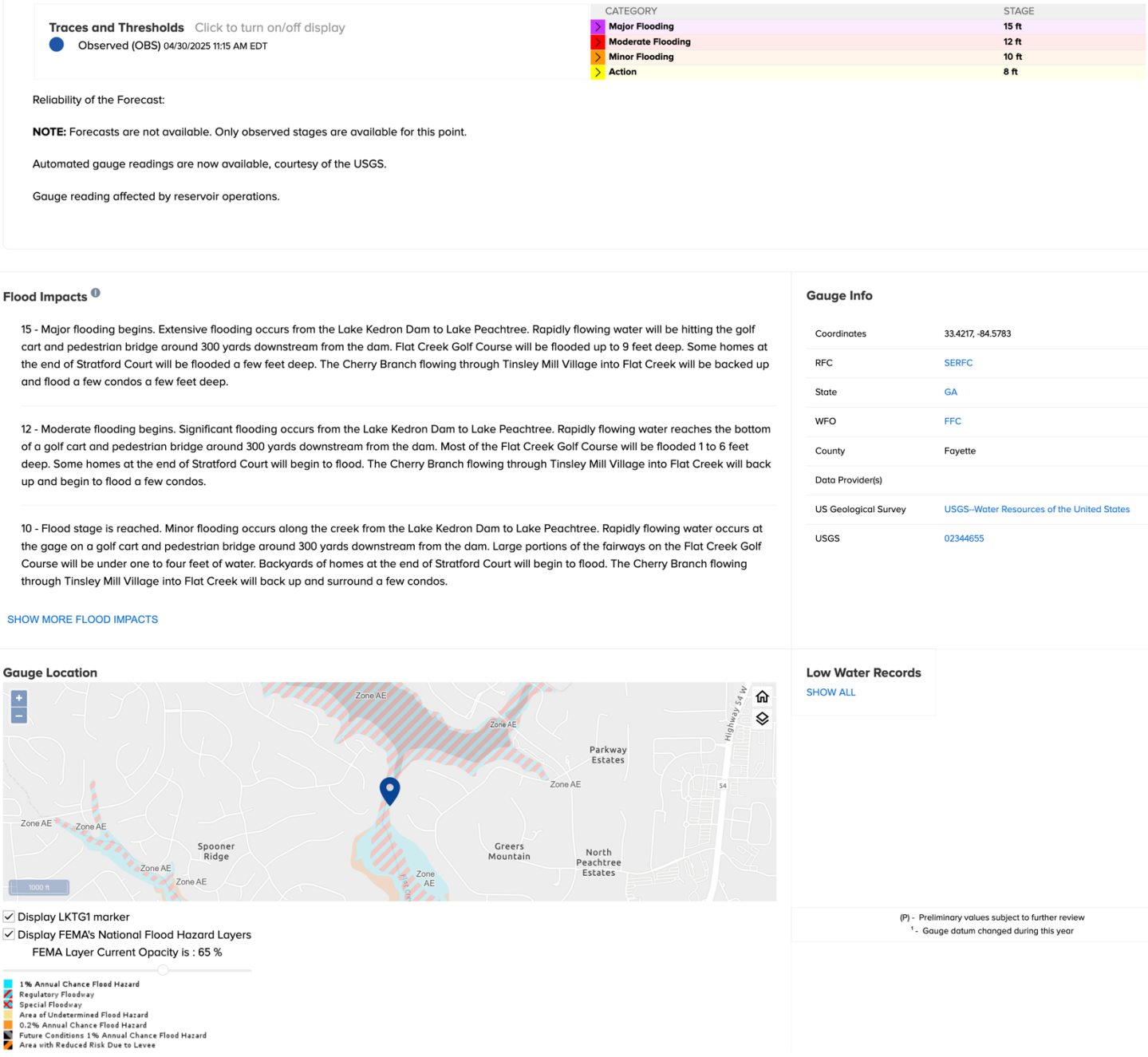


Figure 3-6. Historic crest, flood stage category levels, and impacts for the Line Creek below GA 54 near Peachtree City gauge (source: NOAA)

Traces and Thresholds Click to turn on/off display

Observed (OBS) 04/30/2025 11:00 AM EDT

CATEGORY	STAGE
Major Flooding	18 ft
Moderate Flooding	15 ft
Minor Flooding	12 ft
Action	10 ft

Reliability of the Forecast:

NOTE: Forecasts are not available. Only observed stages are available for this point.

Automated gauge readings are now available, courtesy of the USGS.

Flood Impacts

18 - Major flooding begins. Widespread inundation flooding occurs in the woodlands along the creek upstream and downstream from the gage just below Georgia Highway 54. Residential yards on Wynnmeade Parkway around Wynns Pond will be flooded up to 6 feet deep. The flood waters will be a few feet deep in several of the homes. The significant flow into Lake McIntosh causes large portions of the Planterra Ridge Golf Course to be flooded several feet deep.

15 - Moderate flooding begins. Significant flooding occurs in the woodlands along the creek upstream and downstream from the gage just below Georgia Highway 54. Residential yards on Wynnmeade Parkway around Wynns Pond will be flooded up to 3 feet deep. The flood waters will be reach the foundations of a few homes. The significant flow into Lake McIntosh causes large portions of the Planterra Ridge Golf Course to flood.

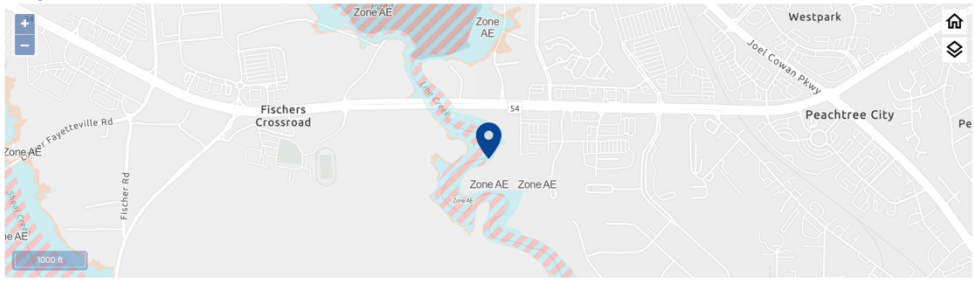
14 - Minor flooding continues to expand into the woodlands along the creek upstream and downstream from the gage just below Georgia Highway 54. This includes the residential yards on Wynnmeade Parkway around Wynns Pond just north of the highway. The flood waters will be up to two feet deep and be approaching the foundations of a few homes. The significant flow into Lake McIntosh causes portions of the Planterra Ridge Golf Course to flood.

SHOW MORE FLOOD IMPACTS

Gauge Info

Coordinates	33.3956, -84.6069
RFC	SERFC
State	GA
WFO	FFC
County	Fayette
Data Provider(s)	
US Geological Survey	USGS--Water Resources of the United States
USGS	02344605

Gauge Location



Display PHCG1 marker

Display FEMA's National Flood Hazard Layers

FEMA Layer Current Opacity is : 65 %

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee

Recent Crests

1. 12.82 ft on 09-27-2024
2. 12.54 ft on 04-19-2019
3. 15.03 ft on 12-28-2018
4. 13.09 ft on 08-03-2018
5. 13.62 ft on 12-25-2015

SHOW ALL

Historic Crests

1. 15.03 ft on 12-28-2018
2. 13.62 ft on 12-25-2015
3. 13.09 ft on 08-03-2018
4. 12.82 ft on 09-27-2024
5. 12.54 ft on 04-19-2019

SHOW ALL

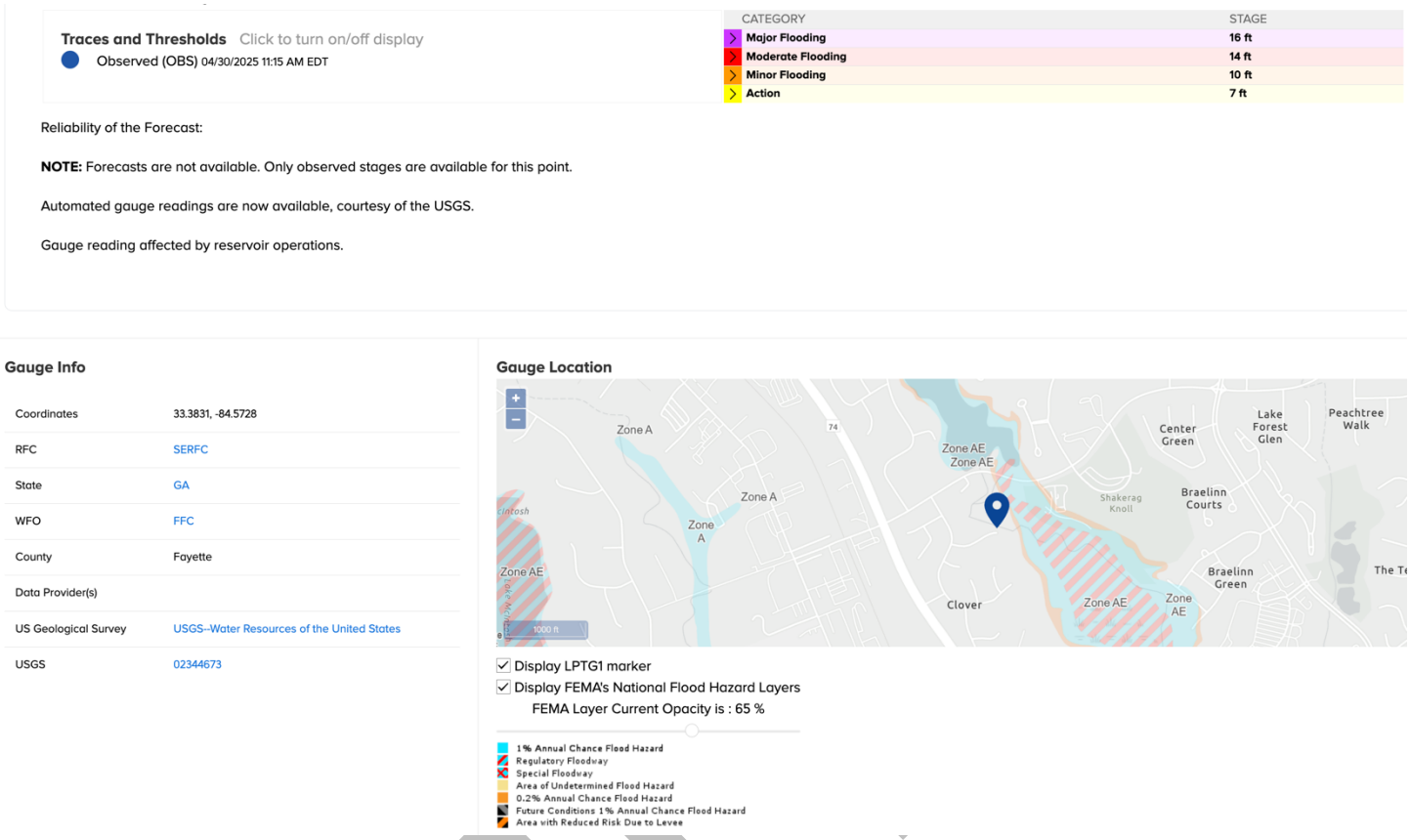
Low Water Records

SHOW ALL

(P) - Preliminary values subject to further review

[1] - Gauge datum changed during this year

Figure 3-7. Flood stage category levels for the Flat Creek at Lake Peachtree Tailrace gauge (source: NOAA)



Traces and Thresholds Click to turn on/off display

Observed (OBS) 04/30/2025 11:15 AM EDT

CATEGORY	STAGE
Major Flooding	16 ft
Moderate Flooding	14 ft
Minor Flooding	10 ft
Action	7 ft

Reliability of the Forecast:

NOTE: Forecasts are not available. Only observed stages are available for this point.

Automated gauge readings are now available, courtesy of the USGS.

Gauge reading affected by reservoir operations.

Gauge Info

Coordinates	33.3831, -84.5728
RFC	SERFC
State	GA
WFO	FFC
County	Fayette
Data Provider(s)	
US Geological Survey	USGS--Water Resources of the United States
USGS	02344673

Gauge Location

Display LPTG1 marker

Display FEMA's National Flood Hazard Layers

FEMA Layer Current Opacity is : 65 %

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee

Figure 3-8. Historic crest, flood stage category levels, and impacts for the Line Creek below Lake McIntosh gauge (source: NOAA)

Traces and Thresholds Click to turn on/off display

Observed (OBS) 04/30/2025 12:00 PM EDT

CATEGORY	STAGE
Major Flooding	17 ft
Moderate Flooding	14 ft
Minor Flooding	10 ft
Action	8 ft

Reliability of the Forecast:

NOTE: Forecasts are not available. Only observed stages are available for this point.

Automated gauge readings are now available, courtesy of the USGS.

Gauge reading affected by reservoir operations.

Flood Impacts

12 - Minor flooding continues to expand into the woodlands along the creek downstream from the gage on the tailwater side of Lake McIntosh Dam. Portions on the west side of the Falcon Field Airport property will be flooded. Portions of baseball fields will begin to flood on the south end of the Baseball and Soccer Complex off of Georgia Highway 74. A portion of the Fayette County Water Treatment Plant near the fields will begin to flood also.

10 - Flood stage is reached. Minor flooding begins in the woodlands along the creek downstream from the gage on the tailwater side of Lake McIntosh Dam. Low lying portions on the west side of the Falcon Field Airport property will begin to flood.

8 - Bankfull conditions occur along the creek downstream from the gage on the tailwater side of Lake McIntosh Dam.

Gauge Info

Coordinates	33.3573, -84.5826
RFC	SERFC
State	GA
WFO	FFC
County	Fayette
Data Provider(s)	
US Geological Survey	USGS--Water Resources of the United States
USGS	02344630

Gauge Location

Display LMCG1 marker

Display FEMA's National Flood Hazard Layers

FEMA Layer Current Opacity is : 65 %

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee

Recent Crests

1. 10.13 ft on 02-13-2025
2. 11.82 ft on 09-27-2024
3. 10.07 ft on 03-09-2024
4. 10.67 ft on 02-12-2024
5. 10.41 ft on 02-19-2020

SHOW ALL

Historic Crests

1. 12.36 ft on 12-28-2018
2. 11.82 ft on 09-27-2024
3. 11.35 ft on 12-25-2015
4. 11.30 ft on 08-03-2018
5. 10.77 ft on 04-19-2019

SHOW ALL

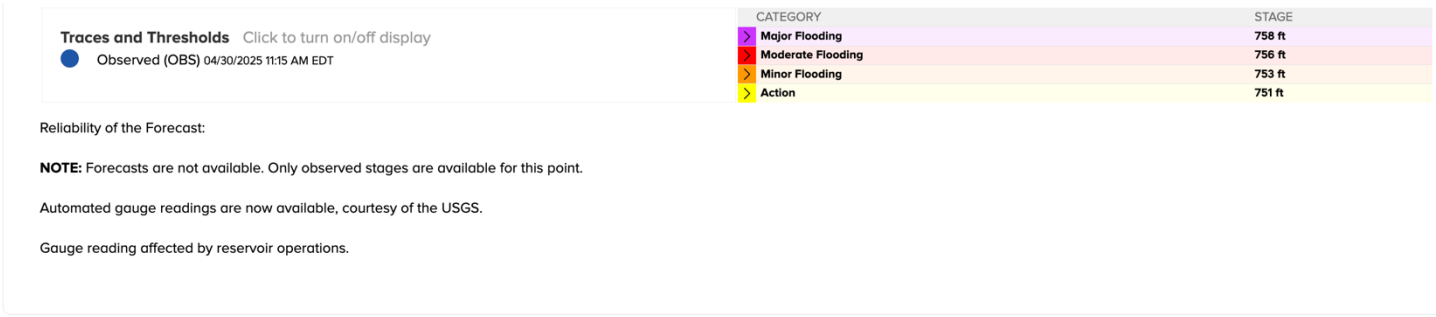
Low Water Records

SHOW ALL

(P) - Preliminary values subject to further review

[1] - Gauge datum changed during this year

Figure 3-9. Flood stage category levels, and impacts for the Horton Creek below Lake Horton Dam gauge (source: NOAA)



Traces and Thresholds Click to turn on/off display

Observed (OBS) 04/30/2025 11:15 AM EDT

CATEGORY	STAGE
Major Flooding	758 ft
Moderate Flooding	756 ft
Minor Flooding	753 ft
Action	751 ft

Reliability of the Forecast:

NOTE: Forecasts are not available. Only observed stages are available for this point.

Automated gauge readings are now available, courtesy of the USGS.

Gauge reading affected by reservoir operations.

Flood Impacts

758 - Major flooding begins. Extensive flooding occurs along the creek downstream from the Lake Horton Dam to the Flint River. The dirt service road next to the USGS tailwater gage will be under 7 feet of water. The flood waters will have topped the Lowery Road bridge and county officials will have it closed. The USGS gage house will be under two feet of water with a loss of data transmission. A home at the end of Cheshire Circle will be flooded.

757 - Significant flooding expands along the creek downstream from the Lake Horton Dam to the Flint River. The dirt service road next to the USGS tailwater gage will be under 6 feet of water. The flood waters will be hitting the Lowery Road bridge with possible erosion to the sides. The road will begin to flood and county officials will likely have it closed. The USGS gage house will be under a foot of water with a loss of data transmission. A home at the end of Cheshire Circle will begin to flood.

756 - Moderate flooding begins. Significant flooding occurs along the creek downstream from the Lake Horton Dam to the Flint River. The dirt service road next to the USGS tailwater gage will be under 5 feet of water. The water level will reach the bottom of the Lowery Road bridge and county officials may have it closed. Flood waters will have submerged the USGS gage house with a loss of data transmission. A large portion of the yard of a home at the end of Cheshire Circle will be flooded.

SHOW MORE FLOOD IMPACTS

Gauge Info

Coordinates	33.3186, -84.4186
RFC	SERFC
State	GA
WFO	FFC
County	Fayette
Data Provider(s)	
US Geological Survey	USGS--Water Resources of the United States
USGS	02344423

Gauge Location

Display LHBG1 marker

Display FEMA's National Flood Hazard Layers

FEMA Layer Current Opacity is : 65 %

1% Annual Chance Flood Hazard
Regulatory Floodway
Special Floodway
Area of Undetermined Flood Hazard
0.2% Annual Chance Flood Hazard
Future Conditions 1% Annual Chance Flood Hazard
Area with Reduced Risk Due to Levee

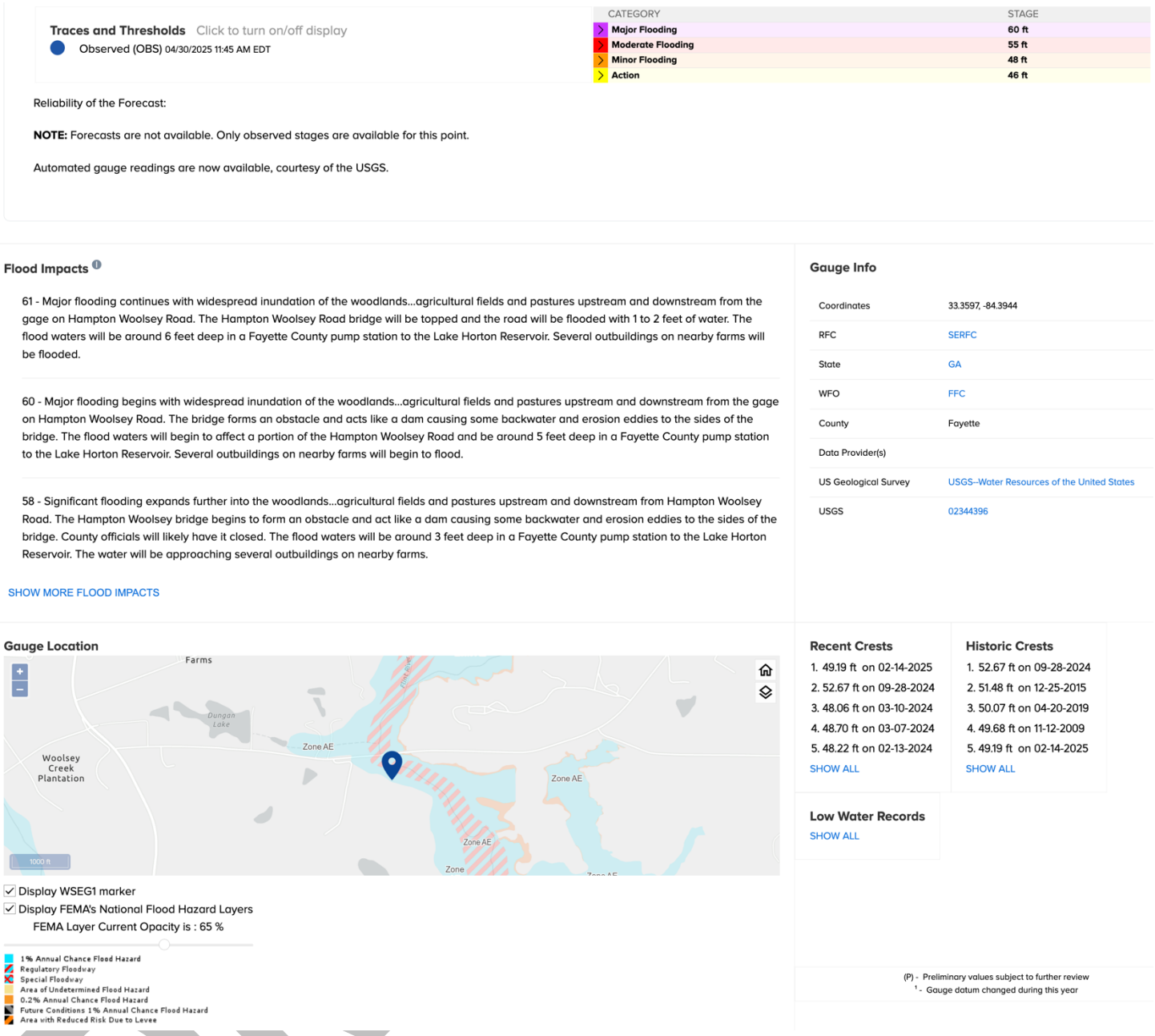
Low Water Records

SHOW ALL

(P) - Preliminary values subject to further review

[1] - Gauge datum changed during this year

Figure 3-10. Historic crest, flood stage category levels, and impacts for the Flint River at Woolsey Road near Woolsey gauge (source: NOAA)



3.3.3.3 Previous Occurrences

Between 1975 and 2024, 24 flood and flash flood events were recorded in the NOAA NCEI Storm Events Database in Fayette County (Table 3-5).

Table 3-5. Previous occurrences of flooding events in Fayette County (1975 to 2024) (source: NOAA)

Location	Begin Date	Begin Time	Event Type
COUNTYWIDE	01/27/1996	30	Flash Flood
FAYETTE (ZONE)	02/27/1997	2200	Flood
PEACHTREE CITY	06/03/1999	900	Flood

Location	Begin Date	Begin Time	Event Type
COUNTYWIDE	07/31/2000	1630	Flood
FAYETTEVILLE	10/06/2002	2245	Flood
COUNTYWIDE	03/20/2003	200	Flash Flood
COUNTYWIDE	05/07/2003	1915	Flash Flood
FAYETTEVILLE	06/17/2003	345	Flash Flood
FAYETTE (ZONE)	09/07/2004	200	Flood
COUNTYWIDE	09/16/2004	1546	Flash Flood
FAYETTE (ZONE)	03/27/2005	1600	Flood
FAYETTE (ZONE)	06/05/2005	1650	Flood
FAYETTE (ZONE)	07/06/2005	2000	Flood
PEACHTREE CITY	07/06/2005	2000	Flash Flood
FAYETTE (ZONE)	07/11/2005	0	Flood
COUNTYWIDE	07/11/2005	300	Flash Flood
PEACHTREE CITY	01/24/2010	1800	Flood
ABERDEEN	09/22/2011	1615	Flash Flood
HARP	06/05/2013	2130	Flash Flood
ABERDEEN	12/24/2015	1050	Flash Flood
CLOVER	12/30/2015	1420	Flash Flood
ABERDEEN	06/08/2019	1130	Flash Flood
PEACHTREE CITY	12/30/2021	1100	Flash Flood
LEES MILL	12/30/2021	1100	Flash Flood

Specific flood details and damages are limited, but the following lists notable flooding events within Fayette County:

- 1994: In July 1994, the remnants of Tropical Storm Alberto stalled over Georgia, producing widespread and prolonged rainfall across the state, including Fayette County. The county experienced an estimated 10 to 14 inches of rainfall, contributing to severe overbank flooding, road closures, and culvert washouts. This event was part of a larger regional disaster, during which 31 flood-related deaths were recorded across Georgia, primarily from drowning in vehicles. The scale and severity of the 1994 flooding remain among the most impactful in Georgia's recorded history.
- 2002: In 2002, a heavy rainfall event led to flooding at the Stonewall Village Complex. 2 apartments had approximately 1 foot of water inside the apartment at the flood's peak. A car was also flooded in downtown Fayetteville as a result of this flood. Flood gage information just outside the city limits of Fayetteville indicate that flood waters would be at least 1 foot deep in Brookshire Drive and Sherwood Road due to flooding from Whitewater Creek when Major flood stage is reached (25 feet). This depth would lead to some homes on those roadways being inundated with up to 3 feet of water.
- 2009: In September 2009, Fayette County experienced significant rainfall as part of the historic Georgia floods, which brought record-breaking precipitation across the Atlanta region. Parts of the county received 6 to 10 inches of rain over a 48-hour period,

overwhelming drainage systems and resulting in localized flash flooding, road closures, and several reports of water entering homes and businesses.

- 2015: This flooding event caused over $1 million in reported damages. Most of the damages associated with this event were related to Whitewater Creek. The flood gage on Whitewater Creek at Starr's Mill hit 15.9 feet, which is nearly 6 feet above flood stage. Most of the Starr's Mill Park was flooded and several roads and culverts were washed out.
- 2021: On December 30, 2021, Fayette County along with much of North Georgia experienced a line of severe storms that caused flooded roads, downed trees and power lines. The closest University of Georgia weather station to Fayette County, located in Jonesboro, recorded 4.06 inches in the 24-hour period.
- 2024: In March 2024, Fayette County experienced significant rainfall leading to flash flooding conditions. On March 13, a 14-year-old boy was rescued by firefighters after becoming trapped in floodwaters at Line Creek Nature Area in Peachtree City. The incident occurred during a torrential downpour, and flood warnings were issued by the National Weather Service for Fayette County. The swift response by emergency services prevented potential tragedy.

3.3.3.4 Probability

Based on historical data, the probability of flooding Fayette County is highly likely (occurring every 1 to 5 years).

3.3.3.5 Impacts

Impacts to Fayette County from flooding (riverine flooding) were analyzed using FEMA's Hazus-MH software, a powerful disaster risk assessment tool based on geographic information systems (GIS). The full report from the analysis can be found in Appendix B.

Buildings in Fayette County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 3-6 provides a summary of the potential flood-related building damage in Fayette County by jurisdiction that might be experienced from the 1% flood.
Figure 3-11 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 3-12 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 3-6. Fayette County riverine flooding 1% building losses

Occupancy	Total Buildings in the Jurisdiction	Total Buildings Damaged in the Jurisdiction	Total Building Exposure in the Jurisdiction	Total Losses to Buildings in the Jurisdiction	Loss Ratio of Exposed Buildings to Damaged Buildings in the Jurisdiction
Fayetteville					
Residential	6,304	119	$1,800,709,650	$8,144,562	0.45%
Commercial	953	11	$715,032,101	$421,337	0.06%
Industrial	147	3	$61,567,601	$349,253	0.57%
Peachtree City					
Residential	13,329	249	$3,739,456,597	$16,240,115	0.43%

Industrial	259	21	$279,937,433	$620,639	0.22%
Commercial	678	5	$468,069,073	$965,416	0.21%
Tyrone					
Commercial	220	8	$100,358,088	$874,845	0.87%
Residential	2,742	121	$828,758,879	$11,060,720	1.33%
Industrial	93	2	$36,966,886	$1,192,378	3.23%
Unincorporated					
Commercial	348	21	$270,110,159	$9,467,556	3.51%
Industrial	196	15	$72,717,986	$2,207,361	3.04%
Residential	19,664	544	$5,713,157,958	$51,918,990	0.91%
County Total					
	44,933	1,119	$14,086,842,412	$103,463,172	

Figure 3-11. Fayette County potential loss ratios of total building exposure to losses sustained to buildings from the 1% riverine flood by 2010 census block

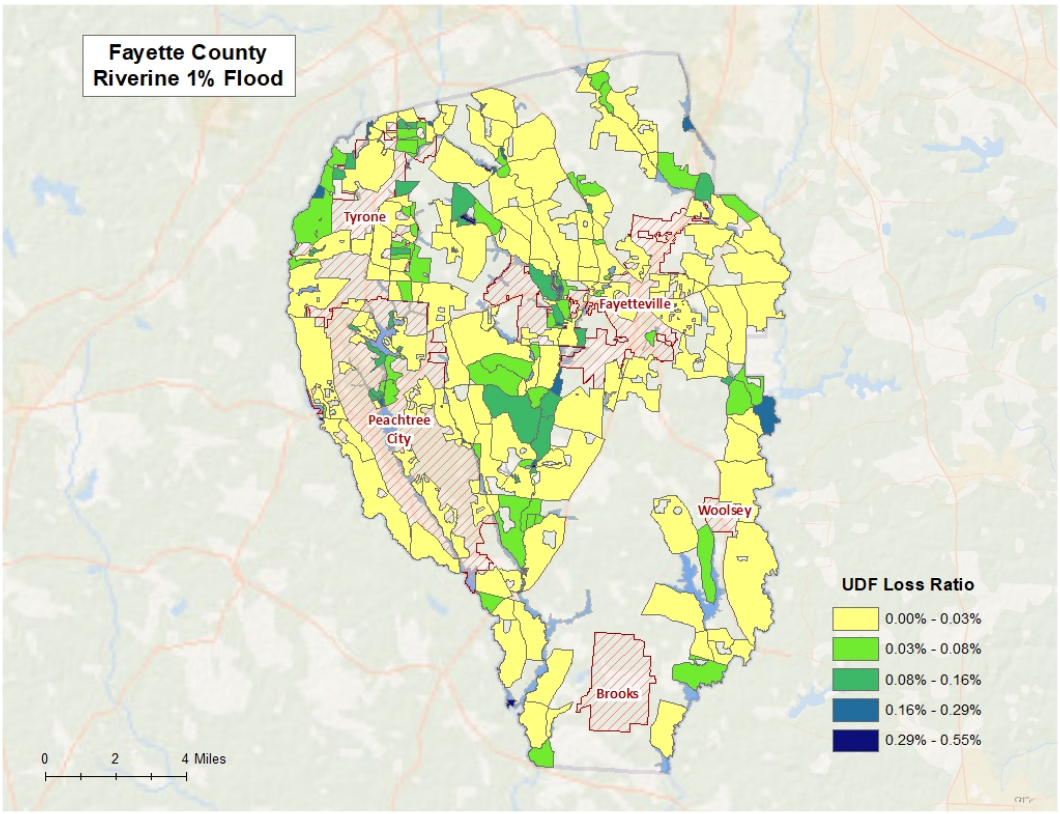
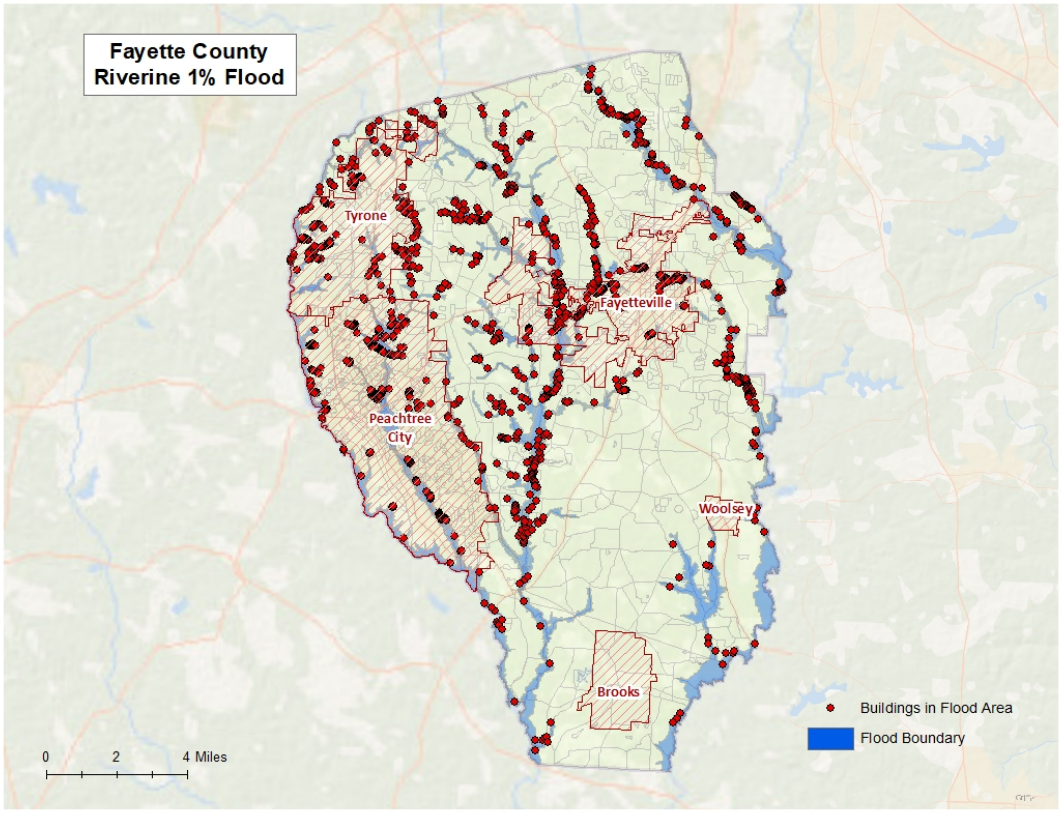


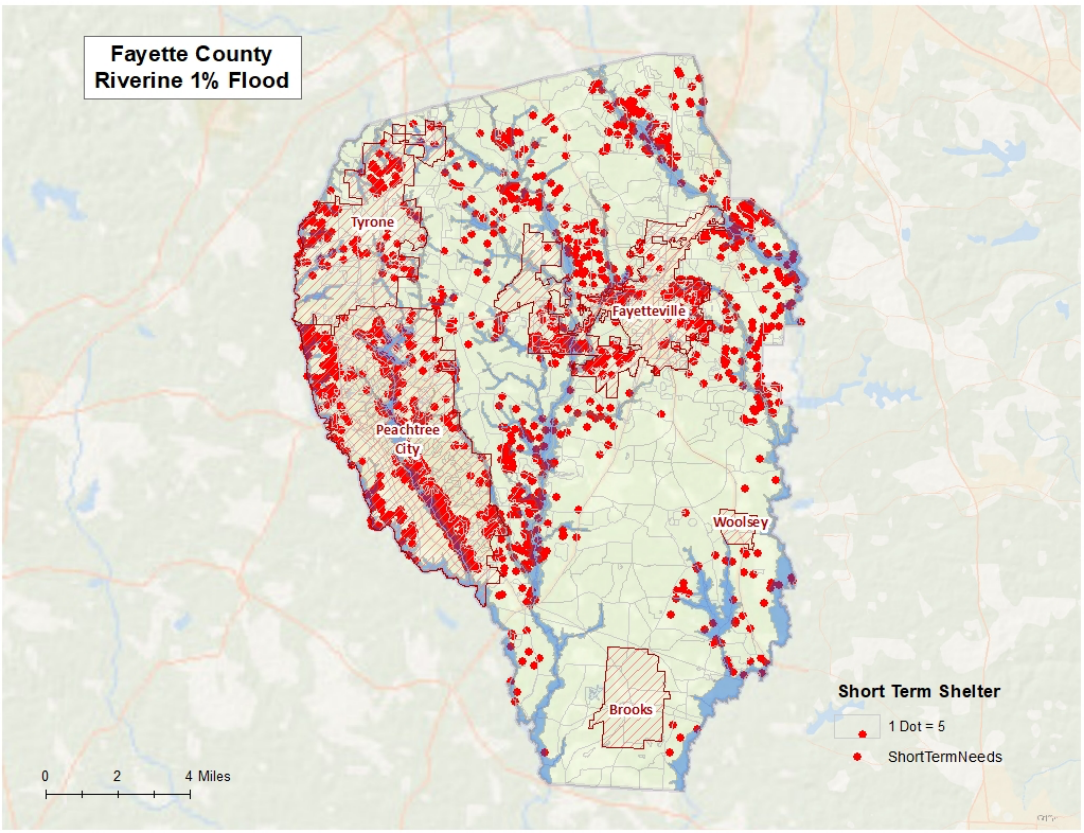
Figure 3-12. Fayette County damaged buildings in riverine floodplain (1% flood)



An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis identified no essential facility that were subject to damage in the Fayette County riverine 1% probability floodplain.

Hazus-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 3,115 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 9,345 individuals, of which 7,664 may require short term publicly provided shelter. The results are mapped in Figure 3-13.

Figure 3-13. Riverine 1% estimated flood shelter requirements in Fayette County



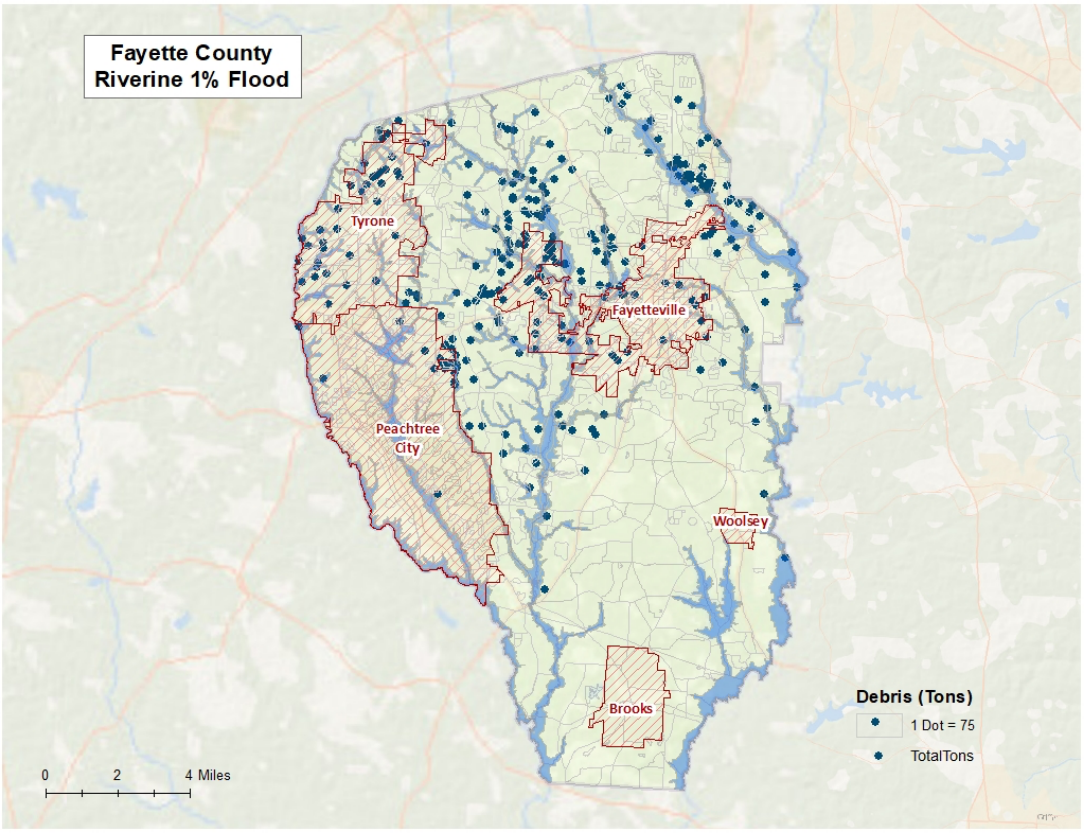
Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 22,063 tons of debris might be generated (Finishes: 7,334 tons; Structural: 7,279 tons; Foundations: 7,450 tons). The results are mapped in Figure 3-14.

Figure 3-14. Riverine 1% flood debris weight (tons) in Fayette County



With a growing population and ongoing development, especially in incorporated areas and commercial corridors, the county's exposure to flood risk is expected to rise:

- Increased development in previously undeveloped areas will likely exacerbate runoff volumes and stress drainage systems.
- Land use changes, such as the construction of the Trilith development and the U.S. Soccer National Training Center, create large impervious footprints that accelerate stormwater runoff.
- Shifts toward denser housing, including multifamily or mixed-use developments, concentrate risk and increase the number of structures potentially impacted in a single flood event.

3.3.3.6 Multi-Jurisdictional Considerations

During a large-scale flood event, many portions of Fayette 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 Line Creek, Whitewater Creek, Morning Creek, and the Flint River and their tributaries and distributaries.

Flood risk and impacts vary across Fayette County's municipalities, in part due to topography, development patterns, and the extent of FEMA-designated floodplains.

- Fayetteville and Peachtree City: Both cities have significant development in areas adjacent to streams and low-lying land, which increases vulnerability to localized flooding. Peachtree City's extensive lake and pond systems can act as temporary buffers but also pose overflow risks if upstream infrastructure is overwhelmed. Fayetteville has several neighborhoods and facilities near mapped flood zones, requiring close attention to

drainage capacity and emergency evacuation planning. FEMA flood zones traverse these areas, and new development near these zones necessitates strict compliance with floodplain ordinances.

- Tyrone: The Town has FEMA 1% annual chance flood zones mapped within its jurisdiction, especially in areas where stream corridors are bordered by recent or ongoing development.
- Brooks and Woolsey: These towns are more rural and have no or very limited FEMA 1% annual chance flood zones, but they still face flood risks from localized drainage issues.

3.3.3.7 NFIP Compliance

Requirement 201.6(c)(2)(ii)
Requirement 201.6(c)(3)(ii)

Fayette County and all jurisdictions within this Plan participate in the National Flood Insurance Program (NFIP) and follow the program's guidelines to ensure future development is carried out in the best interests of the public. The county (CID No. 130432) first entered the NFIP on July 5, 1983. Table 3-7 lists the participation dates for the remaining jurisdictions within this Plan. All jurisdictions within this Plan have adopted the latest effective FIRM dated September 26, 2008.

Table 3-7. NFIP participation statuses and dates for Fayette County and its municipalities

Jurisdiction	Participating?	Participation Date	Responsible Designee or Agency
Fayette County	Yes	7/5/1983	Environmental Management Department
Brooks	Yes	6/27/2000	Town Manager
Fayetteville	Yes	8/4/1988	City Manager
Peachtree City	Yes	12/1/1977	City Engineer
Tyrone	Yes	3/1/1984	Town Manager
Woolsey	Yes	4/10/1997	Fayette County Environmental Management Department

Fayette County implements and enforces its floodplain management regulations through a robust framework outlined in its Floodplain Management Ordinance. The county regulates and permits development in Special Flood Hazard Areas (SFHAs) through the following:

- Administered by Environmental Management Department: The Fayette County Environmental Management Department is designated as the authority responsible for administering and enforcing floodplain regulations. The department reviews permit applications, conducts inspections, ensures compliance with construction and floodproofing standards, and maintains records of development within SFHAs.
- Permit Requirements: No development activity is permitted within the floodplain without prior approval and an approved Floodplain Management Plan. This plan must include detailed site plans, base flood and future-conditions elevations, floodplain boundaries, and design certifications from registered professionals.
- Construction and Design Standards: All new construction and substantial improvements within SFHAs must meet strict elevation and structural criteria. For example, new

buildings must be elevated at least three feet above the Base Flood Elevation (BFE) or one foot above the future-conditions flood elevation, whichever is higher. Flood-resistant materials and methods are required, and enclosures below the lowest floor must be designed to allow the passage of floodwaters.

- Inspections and Compliance Monitoring: During and after construction, applicants must submit certified Elevation or Floodproofing Certificates to confirm that elevations and design requirements have been met. Any deficiencies result in stop-work orders until corrected. Failure to comply may result in revocation of permits or penalties.
- Prohibited and Conditional Activities: Certain activities such as encroachments in the regulatory floodway are generally prohibited unless it can be demonstrated through engineering analysis that they will not raise flood elevations. Subdivisions must be designed to minimize flood risks and provide adequate drainage and stormwater management.
- Enforcement Tools: Enforcement mechanisms include stop work orders, withholding of certificates of occupancy, permit suspension or revocation, and civil or criminal penalties. These ensure that all development complies with the ordinance's standards.

Table 3-7 identifies the designee or agency that implements the addressed commitments and requirements of the NFIP for each jurisdiction.

Fayette County also administers and oversees the process of substantial improvement (SI)/substantial damage (SD) regulations post disaster. Assessment of damages after a disaster helps in community resiliency and future mitigation strategies. Implementing existing guidelines and local regulations such as building codes, zoning ordinances, and disaster management plans continues to help these communities recover from natural disasters. These SI/SD regulations are administered by:

- Performing damage assessments after each hazard event; informing property owners of how to apply for permits for repairs and determining if the damage that has occurred qualifies as substantial damage.
- Reviewing permit applications for buildings located within the special flood hazard area to determine if the work being requested constitutes SI or SD repairs, and ensuring all requirements are addressed.
- Reviewing cost estimates of the proposed work to ensure they are reasonable using current market value of the structure and its characteristics, while excluding land value. Using the market value to determine if the proposed improvements meet SI requirements or using market value prior to the damage to determine if repairs meet SD requirements.
- Conducting field inspections during construction to ensure it complies with issued permits and work with owners to correct any violations found.
- Retaining all FIRMs and maintaining all SFHA permits. Both accessible by the general public.
- Coordinating with property owners and insurance adjusters on all NFIP flood insurance claims and Increased Cost of Compliance coverage.

There are 12 repetitive loss residential properties identified in Fayette County (3 in the City of Fayetteville, 6 in the City of Peachtree City, 1 in the Town of Tyrone, 2 in unincorporated Fayette County). 11 of the properties are single-family homes, while 1 property is a multi-family unit (2 to 4 family unit).

3.3.4 Tornado

3.3.4.1 Hazard Description

A tornado is a violently rotating column of air in contact with the ground, typically visible only when it picks up condensation, dust, or debris. While many tornadoes exhibit the classic funnel-shaped appearance, exceptionally large tornadoes may not. Instead, they can appear as a broad, turbulent cloud base or a heavy rain shaft extending from a thunderstorm.

Most significant tornadoes, those that are stronger and longer-lived, form in the right rear quadrant of large thunderstorm systems. These tornadoes originate at high altitudes, between 15,000 and 30,000 feet, and descend toward the surface as funnel clouds or rotating columns of air. In contrast, weaker and shorter-lived tornadoes may form along the leading edge of a single thunderstorm and generally cause more limited damage.

Compared to other meteorological hazards like tropical cyclones or winter storms, tornadoes are relatively localized events. The area of impact typically ranges from a few hundred yards to 1 or 2 miles wide, making their spatial footprint much smaller than other widespread storm systems.

There is no defined tornado season, but the majority of tornadoes in Fayette County and surrounding regions occur between February and June, spanning from early spring to mid-summer. Tornadoes have a rapid onset, with minimal warning time. In many cases, the first visible indicator is a descending funnel cloud, which may only appear minutes before touchdown. This short lead time poses significant challenges for evacuation and sheltering, though modern meteorological warning systems strive to improve early detection and alerting.

Tornadoes also vary widely in duration. While the time a tornado impacts a specific location may last only a few minutes, the full event (from formation to dissipation) can last up to several hours. The frequency and intensity of tornadoes are highly variable and lack a consistent pattern, making them difficult to predict on a seasonal or annual basis.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 3-8.

Table 3-8. Enhanced Fujita tornado rating (source: NOAA Storm Prediction Center (SPC))

Scale	Wind Speed (mph)	Relative Frequency	Potential Damage
EF0	65 to 85	53.5%	Light. Peels surface off some roofs; some damage to gutters or siding; branches broken off trees; shallow-rooted trees pushed over. Confirmed tornadoes with no reported damage.
EF1	86 to 110	31.6%	Moderate. Roofs severely stripped; mobile homes overturned or badly damaged; loss of exterior doors; windows and other glass broken.
EF2	111 to 135	10.7%	Considerable. Roofs torn off well-constructed houses; foundations of frame homes shifted; mobile homes complete destroyed; large trees snapped or uprooted; light object missiles generated; cars lifted off ground.

EF3	136 to 165	3.4%	Severe. Entire stores of well-constructed houses destroyed; severe damage to large buildings such as shopping malls; trains overturned; trees debarked; heavy cars lifted off the ground and thrown; structures with weak foundations blown away some distance.
EF4	166 to 200	0.7%	Devastating. Well-constructed houses and whole frame houses completely leveled; cars thrown, and small missiles generated.
EF5	> 200	< 0.1%	Explosive. Strong frame houses leveled off foundations and swept away; automobile-sized missiles fly through the air in excess of 300 ft.; steel reinforced concrete structure badly damaged; high rise buildings have significant structural deformation.

3.3.4.2 Location and Extent

All areas within Fayette 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. Historically, Fayette County has experienced a tornado that reached EF4 intensity on the Enhanced Fujita Scale, and while such high-end events are rare, tornadoes of any intensity (from EF0 to EF5) are possible.

3.3.4.3 Previous Occurrences

NOAA's SPC maintains a severe report database, which maps tornado paths from 1950 to 2023. Figure 3-15 and Table 3-9 map and list the tornado events that intersected the county between 1950 and 2023. The 12 events ranged in intensity from EF0 to EF4.

Figure 3-15. Tornado paths in and around Fayette County (1950 to 2023) (source: NOAA SPC)

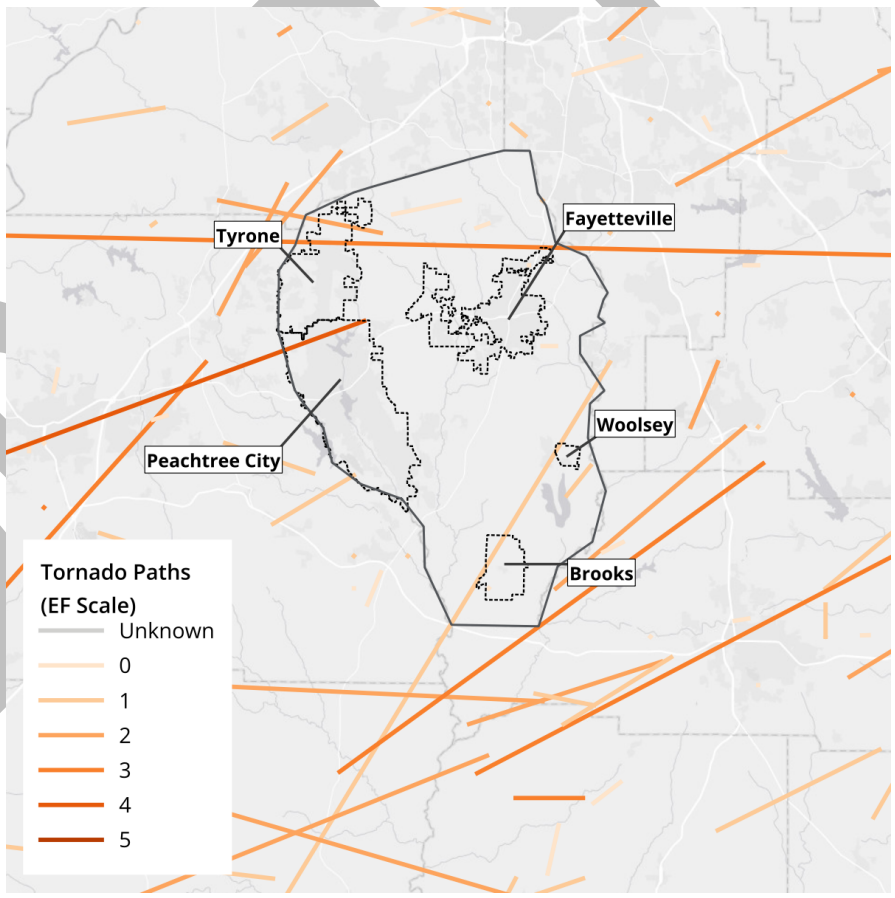


Table 3-9. Tornado events within Fayette County (1950 to 2023) (source: NOAA SPC)

Date	EF Scale (F before 2007)	Length (miles)	Width (yards)
12/24/1964	3	75.4	400
03/13/1975	1	1	100
04/13/1980	1	50.7	100
11/20/1983	1	5	100
04/22/1984	0	0.3	10
07/06/2005	0	1	440
01/02/2006	2	7	440
10/08/2008	0	0.05	50
12/22/2011	1	1.64	100
12/22/2011	0	2.91	200
02/12/2019	0	0.56	150
03/25/2021	4	38.56	1850

3.3.4.4 Probability

Based on complete historical data, the probability of a tornado in Fayette County is likely (occurring every 5 to 20 years). However, data since 2000 suggest that tornadoes are highly likely (occurring every 1 to 5 years). This probability may be more reliable given the improvements in detection, reporting practices, and population growth.

3.3.4.5 Impacts

Example impacts to Fayette County from tornadoes were analyzed using FEMA's Hazus-MH software, a powerful disaster risk assessment tool based on GIS. The full report from the analysis can be found in Appendix B.

In this analysis, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados. The tornado path was placed to travel through Fayetteville. The selected widths were modeled after a re-creation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths.

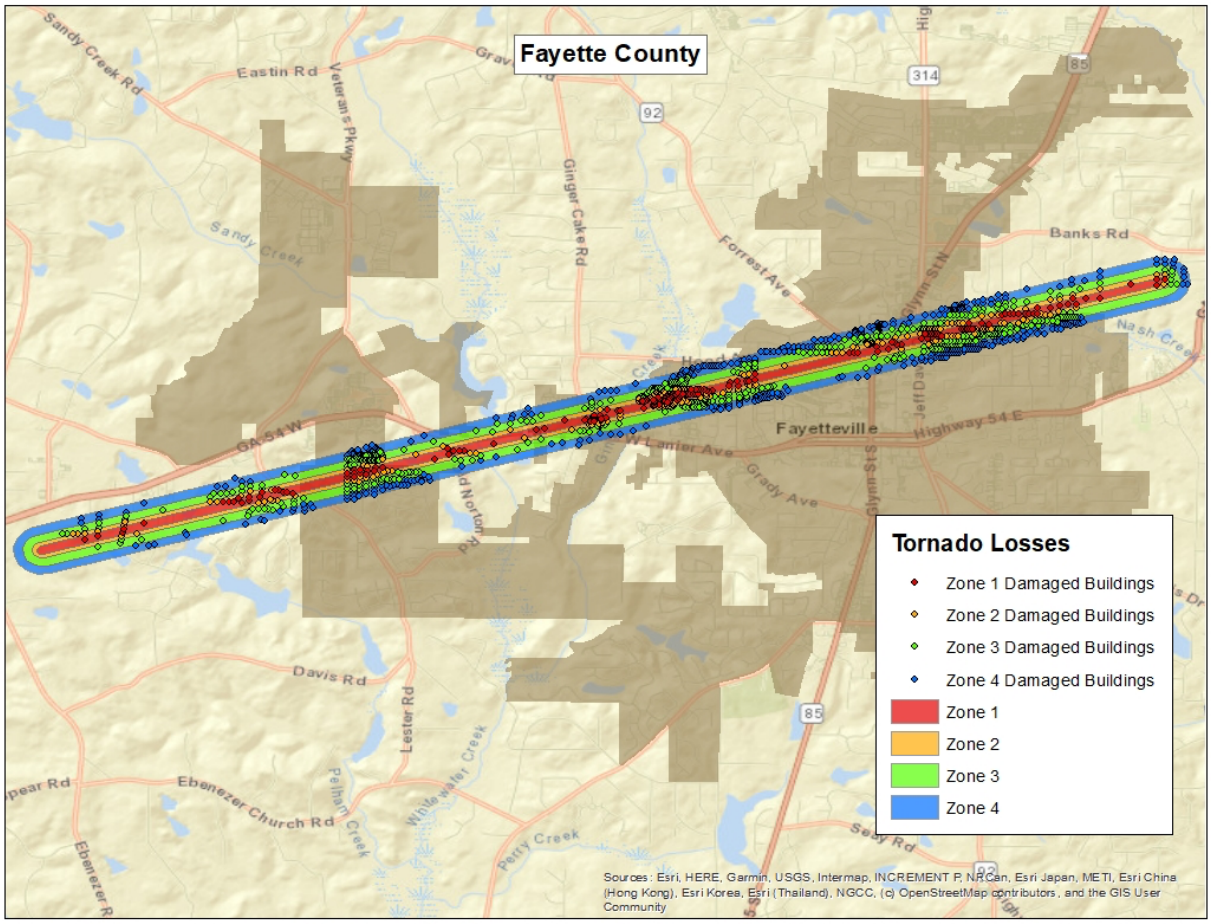
Within any given tornado path, there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center (Table 3-10). After the hypothetical path was digitized on a map, the process was modeled in GIS by adding buffers (damage zones) around the tornado path.
Figure 3-16 shows the modeled EF3 tornado path and damage buffers used in this analysis.

Table 3-10. EF3 tornado zones and damage curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%

Zone	Buffer (feet)	Damage Curve
4	600-900	0%

Figure 3-16. Modeled EF3 tornado path and damage buffers



The analysis estimated that approximately 1,462 buildings could be damaged, with estimated building losses of $84 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Fayette County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 3-11.

Table 3-11. Estimated building losses by occupancy type for modeled tornado

Occupancy	Buildings Damaged	Building Losses
Residential	1,242	$58,537,225
Commercial	207	$16,887,780
Industrial	4	$57,339
Religious	3	$92,567
Education	6	$8,062,517
Total	**1,462**	**$83,637,428**

The above impact analysis demonstrates potential damages and losses for a single scenario, but all areas of Fayette County are susceptible to tornado activity. In evaluating assets that are susceptible to tornadoes, the LHMPC 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.

The county's development pattern, which includes both urbanized centers and rural expanses, means that damage can range from widespread destruction in densely built environments to isolated, but severe, impacts in agricultural or low-density areas.

Fayette County is undergoing substantial growth, particularly in its incorporated municipalities. As population density increases, so does the number of people, structures, and infrastructure exposed to tornado risk. Planned developments introduce additional concentration of assets, tourism, and infrastructure that could be severely affected by a tornado strike.

As land use changes continue and urbanization expands into previously undeveloped areas, tornado impacts could become more severe in terms of both economic and human losses. The continued shift toward multifamily housing and mixed-use developments may create settings where more people are exposed in a single location, complicating evacuation, sheltering, and recovery efforts.

3.3.4.6 Multi-Jurisdictional Considerations

Tornado risk is distributed across all jurisdictions in Fayette County; however, the nature of impacts varies based on urban versus rural characteristics, similar to patterns observed for other hazards, like winter storms and thunderstorms.

Urban jurisdictions such as Fayetteville and Peachtree City face greater potential for concentrated structural damage, disruption to critical infrastructure, and higher population exposure due to dense development and larger residential and commercial footprints.

In contrast, Brooks, Woolsey, and much of unincorporated Fayette County represent more rural settings, where impacts may be less concentrated but still severe, particularly for vulnerable housing types, limited emergency shelter access, and longer emergency response times. Infrastructure in these areas may also be more susceptible to prolonged outages and road obstructions.

3.3.5 Drought

3.3.5.1 Hazard Description

A drought refers to a period of unusually persistent dry weather that endures for a significant time, leading to substantial issues like crop harm and/or shortages in water supply. Drought occurs in virtually all climatic zones, but varies significantly from one region to another, due to its relationship to normal precipitation in that specific region.

The United States Drought Monitor (USDM) identifies areas in drought on weekly-basis and labels them by intensity. The levels of intensity range from D0 – Abnormally Dry to D4 – Exceptional Drought. The USDM uses a convergence of evidence approach, blending objective physical indicators with insight from local experts, condition observations and reports of drought impacts – physical indicators incorporated in its analysis include precipitation,

snowpack, humidity, evapotranspiration, lake and reservoir levels, streamflow, vegetation health, and soil moisture and groundwater.
Table 3-12 below provides more information on drought levels and varying degrees of action.

Table 3-12. USDM drought classifications

Category	Description	Example Percentile Range for Most Indicators	Values for Standard Precipitation and Precipitation-Evapotranspiration Indices
None	Normal or wet conditions	30.01 or Above	-0.49 or above
D0	Abnormally Dry	20.01 to 30.00	-0.5 to -0.79
D1	Moderate Drought	10.01 to 20.00	-0.8 to -1.29
D2	Severe Drought	5.01 to 10.00	-1.3 to -1.59
D3	Extreme Drought	2.01 to 5.00	-1.6 to -1.99
D4	Exceptional Drought	0.00 to 2.00	-2.0 or less

Temporal characteristics of droughts are drastically different from other hazards due to the possibility of extremely lengthy durations as well as a sluggish rates of onset. With the slow rate of onset, most populations anticipate that drought conditions are increasingly present. However, barring drastic response measures, most are required to adapt to the changing environment.

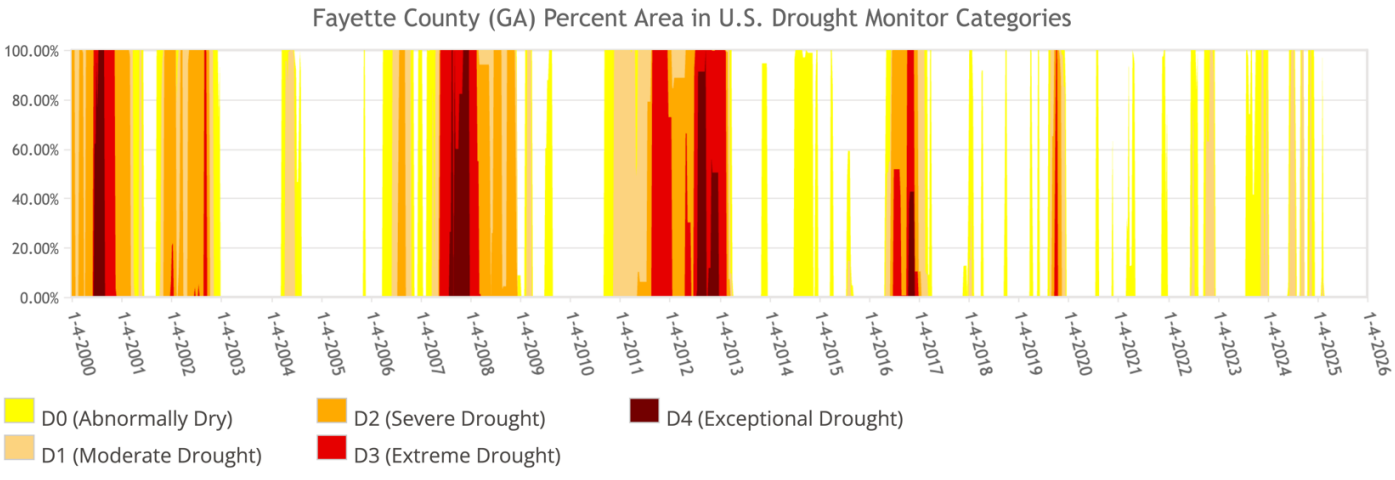
3.3.5.2 Location and Extent

Drought typically impacts entire regions rather than isolated parts of a jurisdiction, so the entire county can, and has, experienced drought. Based on historical data from the USDM, the county can expect to experience droughts up to D4 – Exceptional Drought intensities.

3.3.5.3 Previous Occurrences

Fayette County has experienced drought in 24 of the 25 years between 2000 and 2024. The severity of drought has reached D3 – Extreme Drought levels in 9 of the 25 years and D4 – Exception Drought in 4 of the 25 years.

Figure 3-17. Time series graph for drought monitor conditions in Fayette County (source: USDM)



From the U.S. Drought Monitor website, https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx, 4-30-2025

Table 3-13. Number of weeks in drought conditions by year for Fayette County (source: USDM)

	Weeks with Area in Drought Conditions				
Year	D0	D1	D2	D3	D4
2000	52	52	46	24	11
2001	39	28	17	0	0
2002	52	45	34	8	0
2003	0	0	0	0	0
2004	21	10	0	0	0
2005	2	0	0	0	0
2006	35	20	10	0	0
2007	52	38	32	31	20
2008	53	50	50	12	0
2009	17	5	0	0	0
2010	16	6	0	0	0
2011	52	52	33	18	0
2012	52	52	52	35	21
2013	21	14	12	8	0
2014	23	0	0	0	0
2015	10	4	0	0	0
2016	35	34	29	26	6
2017	18	10	3	0	0
2018	11	3	0	0	0
2019	24	16	10	3	0
2020	4	0	0	0	0
2021	15	0	0	0	0
2022	20	12	0	0	0
2023	23	5	0	0	0
2024	22	12	0	0	0

3.3.5.4 Probability

Drought at any severity in Fayette County is extremely likely (occurring every 1 year or more), but drought at a severity of D3 – Extreme Drought or higher is highly likely (occurring every 1 to 5 years).

3.3.5.5 Impacts

While drought conditions do not typically pose a direct threat to structures, secondary hazards from drought such as increased wildfire threat, do pose a significant threat to all public and private property in Fayette County, including all critical facilities. Drought could directly impact water systems and the agriculture industry.

Fayette County relies on a combination of public and private water systems. These systems depend on surface water from reservoirs and groundwater wells, both of which can be affected by prolonged drought. During drought conditions, water levels in reservoirs may drop significantly, leading to voluntary or mandatory conservation measures and restrictions on outdoor water use.

The agricultural sector, while not the county's largest industry, is still an important part of the economy, particularly in rural areas. According to the 2022 US Department of Agriculture Agriculture Census data, Fayette County's market value of products sold was $1,832,000. $1,404,000 of that total represented crop sales, accounting for 77% of the total. Drought can reduce crop yields, stress livestock operations, and increase costs for irrigation or feed. The impact may be especially pronounced for small-scale farms and operations dependent on well water.

Fayette County is experiencing steady population growth, especially within its incorporated municipalities. Increased residential and commercial development translates into greater water demand, both for consumption and landscaping. New development may significantly increase peak seasonal demand for water, particularly during summer months. Additionally, land use changes, such as the conversion of forested or agricultural land into impervious surfaces, can reduce groundwater recharge and increase reliance on surface water supplies.

3.3.5.6 Multi-Jurisdictional Considerations

While drought affects the entire county, its impacts and vulnerabilities vary across jurisdictions, depending on water infrastructure, land use, and local economies.

- Urbanized jurisdictions. such as Peachtree City and Fayetteville, typically have robust municipal water systems, greater access to alternative sources, and more formal drought response protocols. However, they also experience higher water demand due to concentrated population, business activity, and extensive landscaping.
- Rural areas, including Brooks, Woolsey, and much of unincorporated Fayette County, are more likely to rely on private wells and smaller public systems. These areas may face unique challenges during drought, such as declining well levels and less redundancy in water supply infrastructure. Agricultural operations in these zones are also more vulnerable to drought-related losses.

3.3.6 Wildfire

3.3.6.1 Hazard Description

A wildfire is an uncontained fire that rapidly spreads across vegetation and built environments, posing serious threats to life, property, and natural resources. While flames directly damage ecosystems and structures, the smoke generated by wildfires can travel long distances, posing public health risks, especially for vulnerable populations with respiratory conditions.

Wildfires are driven by the convergence of 3 essential elements: fuel, heat (ignition), and oxygen. Fuel is typically composed of natural vegetation such as grasses, shrubs, and trees. However, as urban and suburban development expands into wildland areas (commonly referred to as the wildland-urban interface (WUI)), buildings and infrastructure can also become sources of combustible material. Lightning is a significant natural ignition source, but human activity is the leading cause of wildfires. Accidental ignitions can result from campfires, fireworks, or machinery, while some fires are deliberately set through arson. Once fuel and ignition are present, oxygen in the atmosphere sustains fire spread.

Wildfires are generally categorized into 3 types, each with different behaviors and consequences:

- Understory Fires: These low-intensity fires burn grasses, shrubs, and deadwood on the forest floor. They are the most common and can play a beneficial role in natural ecosystems by promoting plant regeneration and maintaining habitat health. Often, these fires self-extinguish due to limited fuel or changing weather.
- Crown Fires: These high-intensity fires burn through the upper canopy, consuming entire trees. While less common, they are particularly dangerous because they produce embers that can be carried by wind, igniting spot fires ahead of the main blaze. Crown fires are considered low-probability but high-consequence events.
- Ground Fires: These occur in areas with a high concentration of organic material below the surface. They smolder underground and can persist undetected for extended periods until conditions allow them to surface and spread.

Weather conditions are the most influential and variable factor affecting wildfire behavior. Strong winds can rapidly drive fire across landscapes, while shifting winds contribute to erratic and unpredictable fire behavior, complicating containment efforts. Dry conditions enhance fuel flammability and allow fires to spread more rapidly.

Wildfires can occur in any season, though drier months are more conducive to ignition and rapid spread due to the abundance of quick-burning fuels and favorable weather patterns. The rate of onset varies greatly as some fires can engulf an area within minutes of ignition, while others smolder and advance more slowly. Similarly, the duration depends on fuel availability, terrain, and weather conditions.

Wildfire frequency is difficult to predict or measure statistically because of the unpredictability of human-caused ignitions. Instead, wildfires are typically evaluated by magnitude (total area burned) and intensity (burn severity and heat release).

Wildfires are also known to generate secondary hazards long after flames have been extinguished. The destruction of vegetation reduces the land's ability to absorb rainfall, increasing the risk of flash flooding. Likewise, destabilized slopes may lead to landslides or mudflows, particularly in hilly or mountainous areas.

3.3.6.2 Location and Extent

All of Georgia, including Fayette County, 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 Southern Group of State Foresters (SGSF) calculates and maps Fire Intensity Scale (FIS), which specifically identifies where significant fuel hazards and associated dangerous fire behavior potential exist based on fuel and weighted across a full range of wind and weather conditions. Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consist of 5 classes where the order of magnitude between classes is ten-fold. The minimum class, Class 1, represents very low wildfire intensities and the maximum class, Class 5, represents very high wildfire intensities.

- Class 1, Very Low: Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.

- Class 2, Low: Small flames, usually less than two feet long; small amount of very short range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
- Class 3, Moderate: Flames up to 9 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.
- Class 4, High: Large Flames, up to 40 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.
- Class 5, Very High: Flames exceeding 200 feet in length; expect extreme fire behavior.

Figure 3-18 maps the Characteristic FIS throughout Fayette County. Fayette County has acreage with FIS classes ranging from 0 to 4.5, with the large majority (94%) classified as 3 or lower. Table 3-14 includes the distribution of acreage by FIS class.

Figure 3-18. Characteristic FIS throughout Fayette County (source; SGSF)

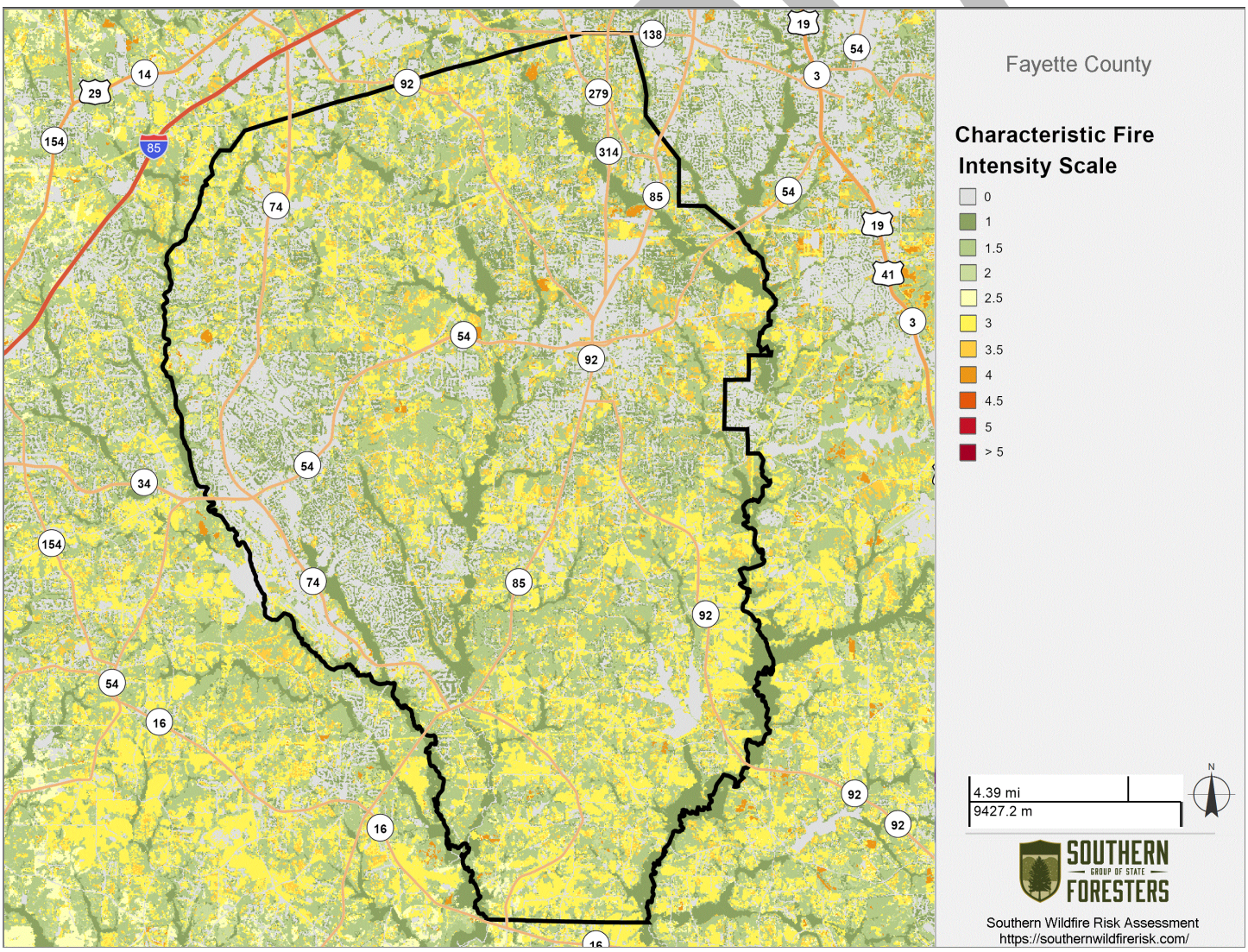


Table 3-14. Distribution of acreage within FIS classes for Fayette County (source: SGSF)

	Characteristic Fire Intensity Scale Category	Acres	Percent
	0	32,095	25 %
	1	22,511	18 %
	1.5	28,996	23 %
	2	10,490	8 %
	2.5	1,126	1 %
	3	23,914	19 %
	3.5	7,804	6 %
	4	584	0 %
	4.5	2	0 %
	5	0	0 %
	> 5	0	0 %
	Total	127,521	100 %

3.3.6.3 Previous Occurrences

The Georgia Forestry Commission's Georgia Historical State Wildfires Dashboard includes 26 wildfires in Fayette County between fiscal year 2012 to 2025. The wildfire incidents are listed below in Table 3-15.

Table 3-15. Previous occurrences of wildfires in Fayette County (fiscal year 2012 to 2025) (source: GFC)

Fire Name	Start Date	Cause	Fuel Type	Size (acres)
Bankstown Fire	11/26/2016	Campfire	Leaves/Needles Mix	0.5
Village Lake Fire	02/17/2013	Campfire	Broom Grass (sedge)	8
Hardy Road Fire	01/19/2014	Machine Use	Pasture Grasses	30
Fayette Crescent Oak	02/28/2025	Children	Leaves/Needles Mix	3
Unnamed	11/10/2011	Campfire	Pasture Grasses	4.54
Fayette Old Farm Road	02/20/2024	Debris: Residential, Leafpiles, Yard, etc.	Pasture Grasses	4.2
Fayette Peeples Road	02/21/2023	Debris: Residential, Leafpiles, Yard, etc.	Pasture Grasses	6
Corinth Road	04/01/2014	Debris: Residential, Leafpiles, Yard, etc.	Leaves/Needles Mix	0.5
Landaulet Path Fire	10/08/2016	Campfire	Leaves/Needles Mix	1
Broken Bow Fire	11/27/2016	Campfire	Leaves/Needles Mix	0.1
Fayette Peachtree Court	04/20/2023	Campfire	Pine Needles	5
Lester Family Fire	08/15/2016	Lightning	Pasture Grasses	0.01
Adams Drive	04/01/2014	Debris: Residential, Leafpiles, Yard, etc.	Leaves/Needles Mix	0.5
Dogwood	06/24/2016	Miscellaneous: Spontaneous Heating/Combustion	Leaves/Needles Mix	0.4

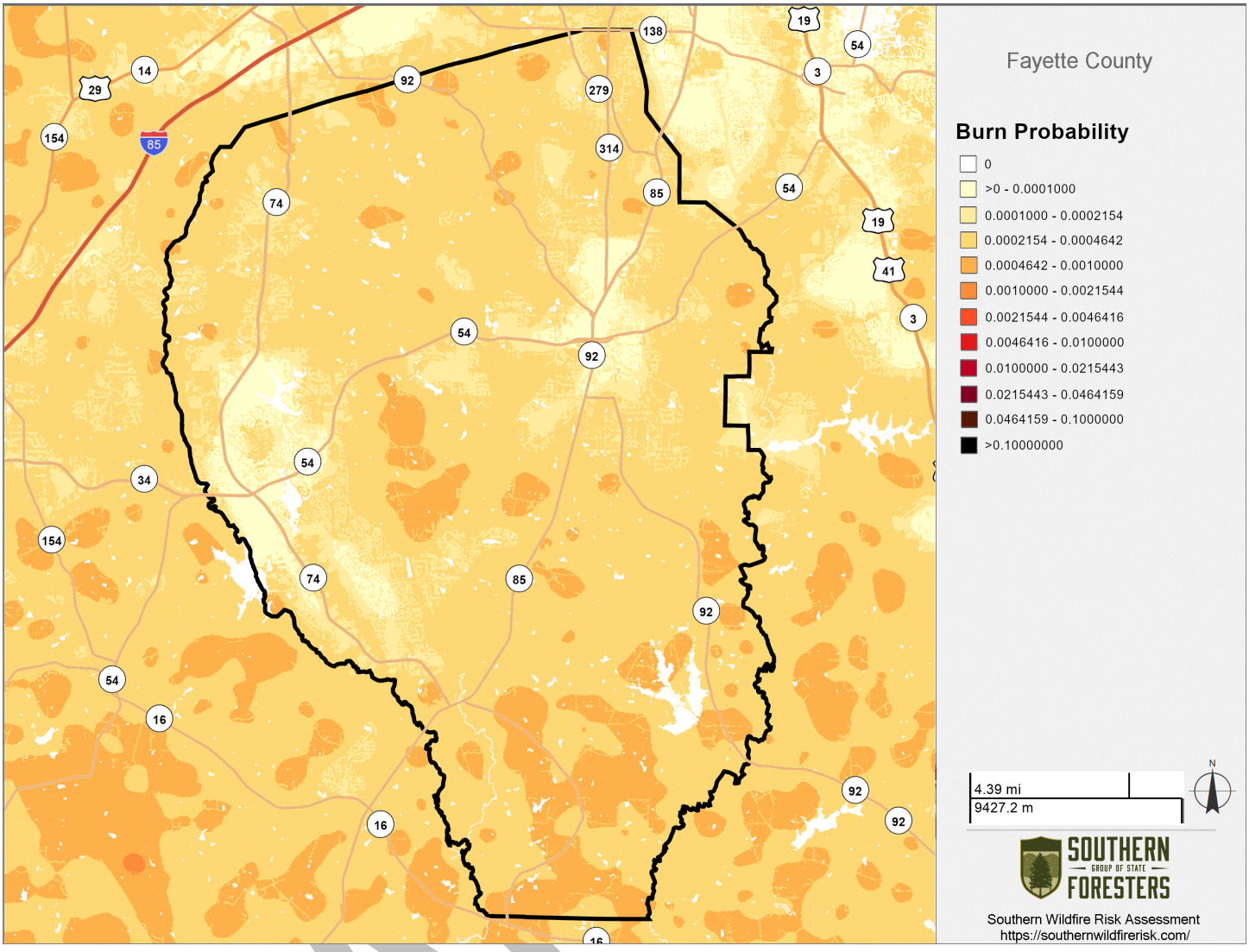
Fire Name	Start Date	Cause	Fuel Type	Size (acres)
Farr Road Fire	01/19/2014	Debris: Residential, Leafpiles, Yard, etc.	Leaves/Needles Mix	43
Unnamed	10/26/2011	Campfire	Leaves/Needles Mix	1.5
Fayette Laurel Circle 455	12/07/2019	Campfire	Hardwood Leaves	0.01
Serenity Place Fire	11/28/2013	Miscellaneous: Spontaneous Heating/Combustion	Residential Grass	2
Concrete Fire	09/11/2014	Lightning	Leaves/Needles Mix	0.01
Unnamed	01/03/2012	Campfire	Leaves/Needles Mix	5
Old Lake Fire	07/22/2012	Lightning	Leaves/Needles Mix	12
Coastline Road	08/15/2012	Railroad	Leaves/Needles Mix	0.25
Fayette Lees Lake Road	03/18/2024	Debris: Residential, Leafpiles, Yard, etc.	Leaves/Needles Mix	10
West Lake Fire	03/14/2018	Debris: Residential, Leafpiles, Yard, etc.	Hardwood Leaves	0.5
Gentle Doe fire	12/12/2014	Debris: Residential, Leafpiles, Yard, etc.	Leaves/Needles Mix	3
Fayette Green Valley Road	09/08/2019	Campfire	Leaves/Needles Mix	1

3.3.6.4 Probability

Burn probability is the likelihood of wildfire burning a specific location within a set time frame and is commonly represented as the chance of burning during 1 calendar year or wildfire season. Burn probability can be expressed as a fraction (0.005) or odds (1-in-200) and is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are varied based on patterns derived from observations in recent decades. It is not predictive and does not reflect any currently forecasted weather or fire danger conditions. Burn probability does not say anything about the intensity of fire if it occurs.

The burn probability within Fayette County ranges from 0 to 0.001 (1-in-1000) with the highest percentage of acres (69% of acres) within the range of 0.0002154 to 0.0004642 (odds of less than a 1-in-2000). The burn probability is mapped in Figure 3-19.

Figure 3-19. Burn probability throughout Fayette County (source: SGSF)



3.3.6.5 Impacts

Fayette County includes large areas of natural vegetation. These areas, combined with periods of drought, elevated temperatures, and high winds, provide ideal conditions for wildfire ignition and spread. While historically most fires in the region have been small in scale, the WUI, where development abuts natural vegetation, has expanded, increasing the risk to people and property. A wildfire in the county could result in the loss of vegetation, damage to structures, transportation disruptions, health risks from smoke exposure, and even secondary hazards, such as post-fire flooding or erosion.

Fayette County is experiencing steady population growth and rapid development, transforming land use patterns and continuing to expand the WUI. As more people move into these transitional zones, the potential for human-caused ignition increases significantly (e.g. from landscaping equipment, outdoor burning, fireworks, or other everyday activities, etc.) contributing to the rising risk of wildfire.

At the same time, increased development produces mixed effects on wildfire impacts. Denser neighborhoods situated near vegetated areas may place more people and structures in hazard zones. However, as development replaces forests and open space with impervious surfaces, the

overall availability of wildfire fuels in certain areas may decrease, potentially limiting fire spread in highly built environments. Despite this, larger populations also mean a greater number of people exposed to smoke, which can travel well beyond the burn area and lead to widespread public health impacts, particularly for individuals with respiratory or cardiovascular conditions.

3.3.6.6 Multi-Jurisdictional Considerations

At this time, no significant multi-jurisdictional differences have been identified with respect to wildfire risk in Fayette County. All jurisdictions share a similar level of baseline exposure to wildfire hazards due to consistent regional climate conditions and the presence of vegetated areas across the county. While specific vulnerabilities may vary based on localized development patterns or land cover characteristics, there are no jurisdiction-specific factors that warrant distinct wildfire risk assessments or mitigation strategies.

3.3.7 Earthquake

3.3.7.1 Hazard Description

Earthquakes are sudden movements of the Earth's surface caused by the abrupt release of accumulated tectonic stress. Their effects may include ground shaking, surface faulting, tectonic uplift or subsidence, ground failures (e.g., liquefaction and landslides), and in rare cases, tsunamis.

- Ground Shaking: Ground shaking is the primary cause of earthquake-related damage in the United States. Seismic waves radiate from the epicenter, traveling at different speeds and frequencies, and can produce horizontal, vertical, or combined motion. Structures not designed for seismic loads are especially vulnerable to this shaking. The behavior of seismic waves also varies with subsurface materials, affecting the severity of shaking at different locations.
- Surface Faulting: Surface faulting is the visible tearing or offset of the Earth's surface due to differential movement along a fault. While it can cause significant structural damage, there are no known active faults in Georgia. Inactive faults exist in the northern part of the state, generally following a northeast-southwest orientation above the Columbus-Macon-Augusta fall line.
- Tectonic Uplift and Subsidence: Tectonic uplift can raise land and shallow waterways, while subsidence can result in localized inundation. Both are typically associated with active fault zones and do not pose a significant threat in Georgia.
- Ground Failures: Earthquakes can trigger ground failures such as liquefaction and landslides. Liquefaction occurs when saturated, sandy soils temporarily lose strength during shaking, causing buildings to tilt or collapse. Landslides or slope failures can result from the destabilization of steep or clay-rich slopes. However, Georgia, including Fayette County, is at very low risk for seismically induced liquefaction or landslides.
- Tsunamis: Tsunamis are large waves generated by the displacement of water during undersea earthquakes. While waves travel rapidly in deep water with minimal height, they can rise dramatically near shorelines, causing sudden inundation and destruction. Successive waves may arrive minutes to hours later, with later waves often being more powerful. Although tsunamis are rare along the eastern U.S. coast, the potential exists for Atlantic and Gulf coast impacts, though the threat to inland areas like Fayette County is negligible.

Two primary scales are utilized to characterize seismic events. The Richter Scale measures the total energy released by an earthquake, while the Modified Mercalli Intensity (MMI) Scale assesses the extent of damage observed.

Table 3-16. Modified Mercalli Scale (United States Geologic Survey (USGS))

Mercalli Intensity	Description
I	Not felt except by very few under especially favorable conditions.
II	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Felt quite noticeably by persons indoors, especially on upper floors of buildings.
IV	Felt indoors by many, outdoors by few during the day. At night some awakened. Dishes, windows, doors disturbed, walls make cracking sounds.
V	Felt by nearly everyone, many awakened. Unstable objects overturned.
VI	Felt by all, many frightened. Some heavy furniture moved. Damage slight.
VII	Damage negligible in buildings of good design and construction, slight to moderate in well-built structures, considerable damage in poorly built.
VIII	Damage slight in specially designed structures, considerable damage and partial collapse in standard buildings. Damage great in poorly built structures.
IX	Damage considerable in specially designed structures. Damage great in substantial buildings with partial collapse. Buildings shifted off foundations.
X	Some well-built wooden structures destroyed, most masonry and frame structures destroyed with foundations. Rails bent.

Table 3-17. Orders of magnitude on the Richter Scale and effects (National Park Service (NPS))

Richter Magnitude	Effects
1 to 3.5	Generally not felt, but recorded
3.5 to 5.4	Often felt, but rarely causes damage
Under 6.0	At most, slight damage to strong buildings
6.1 to 6.9	Destructive over 100km where people live
7.0 to 7.9	Major earthquake causing serious damage
8.0 or greater	Great earthquake causing damage over an area hundreds of kilometers across

3.3.7.2 Location and Extent

Earthquakes have the potential to affect all areas within Fayette County due to the widespread nature of seismic wave propagation. However, Georgia is considered a region of very low seismic activity; further, Fayette County is not included in GMEA's list of 37 Georgia counties with the highest earthquake risk. The underlying geology of the Piedmont Region, which includes Fayette County includes ancient metamorphic and igneous rock formations and is considered structurally stable and not highly susceptible to seismic amplification. Earthquakes that do occur in or near Fayette County typically register below magnitude 3.5 on the Richter Scale and are rarely felt by residents or capable of causing damage.

3.3.7.3 Previous Occurrences

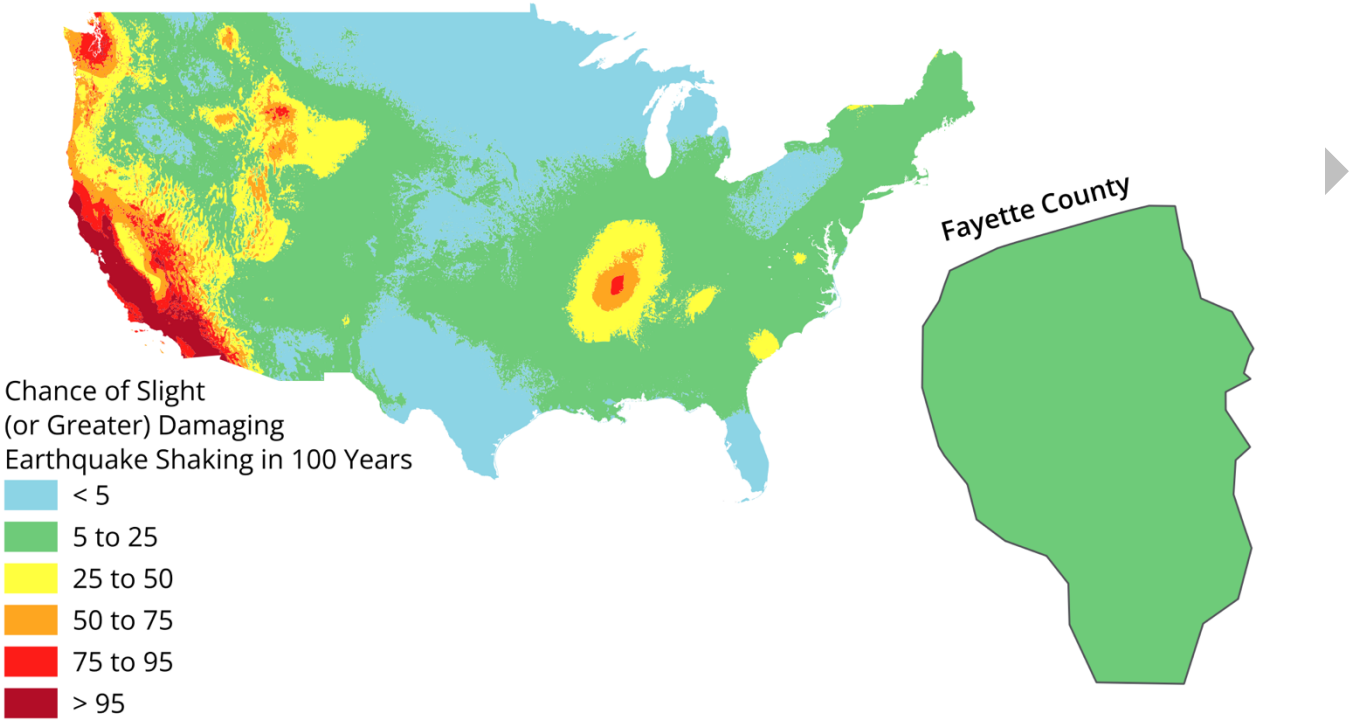
Based on the USGS Earthquake Catalog, over the last 50 years, only 1 earthquake originated from within Fayette County. This earthquake occurred on November 19, 2013, 1 kilometer north of Tyrone and registered as a 2.1 on the Richter Scale. No earthquake with a magnitude greater than a 3.5 has originated within a 50-mile radius of Fayette County.

3.3.7.4 Probability

The USGS developed and mapped the chance of slight or greater damaging earthquake shaking in 100 years for the United States. Based on the 2023 National Seismic Hazard Model, the

shaking is equivalent to MMI VI and higher and is based on the average peak ground acceleration and 1-s horizontal spectral response acceleration. Ground motions are amplified using hybrid VS30 estimates. The map is shown below in Figure 3-20. Fayette County falls within a range of a 5 to 25 percent chance in 100 years.

Figure 3-20. Map illustrating the chance of slight or greater damaging earthquake shaking in 100 years for the United States and Fayette County (source: USGS)



3.3.7.5 Impacts

The LHMPC determined that all critical facilities and all public and private property within Fayette County are susceptible to the impacts of an earthquake, especially given the lower, earthquake-related building code requirements compared to other parts of the United States.

Although Fayette County is in a region of low seismic activity, the potential impacts of an earthquake, though rare, could still be significant, particularly if critical infrastructure or vulnerable structures are affected. Earthquakes have the capacity to cause ground shaking, minor structural damage, infrastructure disruptions. Most existing buildings and infrastructure in Fayette County have not been constructed with seismic design standards, given the historically low probability of damaging events. Older residential structures, critical public facilities, and unreinforced masonry buildings may be particularly susceptible to even modest ground shaking.

Fayette County is experiencing population growth and development expansion, which increase the overall number of people and assets exposed to hazard events. Although seismic risk remains low, these new developments could amplify economic consequences in the event of an earthquake due to higher concentrations of people, critical systems, and high-value infrastructure. Additionally, increased residential and commercial density introduces more lifeline infrastructure, such as power lines, water systems, and telecommunications, that could be disrupted by seismic events.

3.3.7.6 Multi-Jurisdictional Considerations

There are no significant jurisdictional differences in the level of seismic hazard within Fayette County. All municipalities and unincorporated areas lie within the same low-risk seismic zone and share the same underlying geologic characteristics. As a result, the potential impacts of earthquakes are expected to be uniform across the county.

3.3.8 Tropical Cyclone

3.3.8.1 Hazard Description

A tropical cyclone is a rapidly rotating storm system that forms over warm ocean waters near the equator and is characterized by a low-pressure center, strong winds, heavy rain, and thunderstorms.

The NWS describes tropical cyclones systems in the Atlantic Basin, including the Gulf of Mexico and Caribbean Sea, into 4 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.

Hurricanes are categorized by the Saffir-Simpson Hurricane Wind Scale, which ranges from Category 1 (least severe, with winds 74-95 mph) to Category 5 (most severe, with winds exceeding 157 mph).

Table 3-18. Tropical cyclone classification and Saffir-Simpson Hurricane Wind Scale (source: NOAA)

Category	Wind (mph)	Potential Damage
Tropical Depression	< 38	-
Tropical Storm	39 to 73	-
1	74 to 95	Minimal: Damage is primarily to shrubbery and trees, mobile homes, and some signs. No real damage is done to structures.
2	96 to 110	Moderate: Some trees topple, some roof coverings are damaged, and major damage is done to mobile homes.
3	111 to 130	Extensive: large trees topple, some structural damage is done to roofs, mobile homes are destroyed, and structural damage is done to small homes and utility buildings
4	131 to 155	Extreme: Extensive damage is done to roofs, windows and doors; roof systems on small buildings completely fail; and some curtain walls fail.
5	> 156	Catastrophic: Roof damage is considerable and widespread, window and door damage are severe, there are extensive glass failures, and entire buildings could fail.

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 and cause extensive damage from heavy rainfall. Slow moving tropical cyclones traveling into mountainous regions tend to produce especially heavy rain, which can trigger landslides or mudslides. Further, intense rainfall can cause flash flooding.

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.

3.3.8.2 Location and Extent

Due to the large spatial extent of the hazard, tropical cyclones are a county-wide hazard for Fayette County. Tropical cyclones have directly impacted Fayette County on an infrequent basis, and while not common, the possibility of a hurricane or tropical storm retaining its wind strength as far inland as Fayette County does exist.

3.3.8.3 Previous Occurrences

Based in NOAA's Historical Hurricane Tracks viewer, only 2 tropical cyclones have directly intersected Fayette County (Figure 3-21) within the last 50 years.

- Hurricane Nicole (2022) with tropical depression strength wind speeds at time of intersection with Fayette County
- Tropical Storm Alberto (1994) with tropical depression strength wind speeds at time of intersection with Fayette County

Since 1859, Fayette County has had 17 tropical storms within 20 miles of its borders though (Table 3-19).

Further, since 1964, Fayette County has received the following Presidential Disaster Declarations from FEMA related to tropical cyclones:

- September 26, 2024: Hurricane Helene Emergency Declaration (3616)
- September 15, 2017: Hurricane Irma Major Disaster Declaration (4338)
- September 8, 2017: Hurricane Irma Emergency Declaration (3387)
- September 5, 2005: Hurricane Katrina Evacuation Emergency Declaration (3218)
- October 10, 1995: Hurricane Opal Major Disaster Declaration (1071)

Figure 3-21. Historical hurricane tracks intersecting Fayette County (source: NOAA)

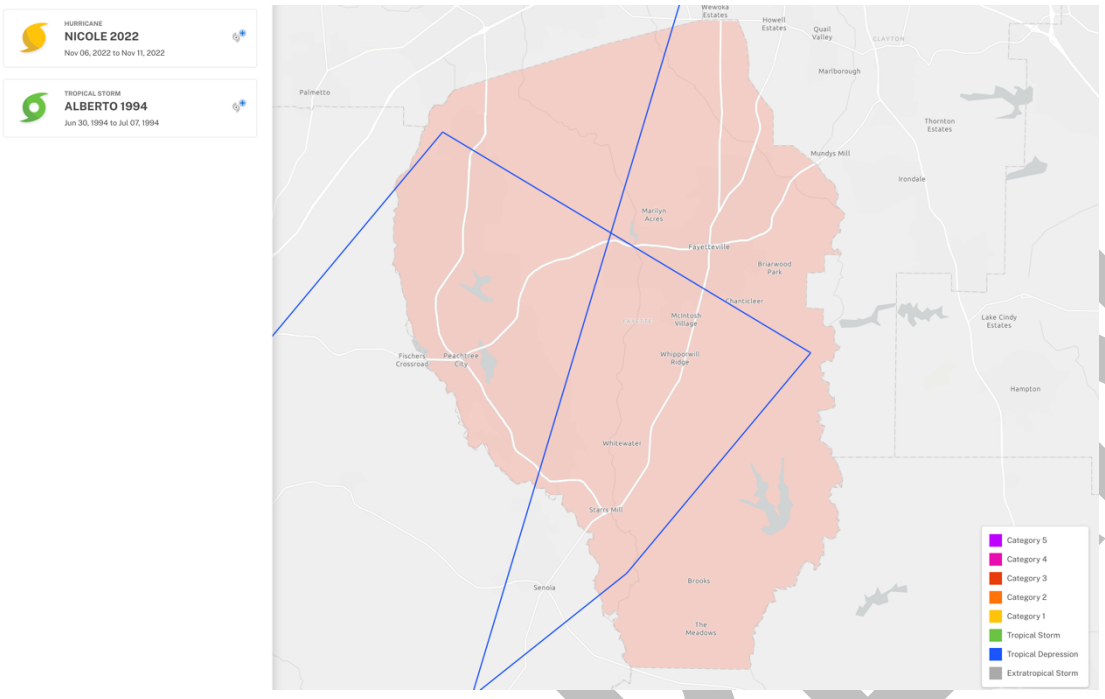


Table 3-19. Previous occurrences of tropical storms within 20 miles of Fayette County (1859 to 2024) (source: NOAA)

Year	Date Range	Name	Max Wind (knots)	Max Pressure	Max Category
1859	September 15 - 18	UNNAMED	70	0	H1
1887	July 20 - 28	UNNAMED	85	0	H2
1893	September 27 - October 05	UNNAMED	115	948	H4
1898	September 25 - October 06	UNNAMED	115	977	H4
1900	September 11 - 15	UNNAMED	45	0	TS
1902	October 03 - 13	UNNAMED	90	970	H2
1903	September 09 - 16	UNNAMED	80	988	H1
1907	September 18 - 23	UNNAMED	40	0	TS
1912	June 07 - 17	UNNAMED	60	0	TS
1940	August 05 - 14	UNNAMED	85	1008	H2
1957	September 07 - 09	DEBBIE	35	1003	TS
1959	May 28 - June 02	ARLENE	55	1002	TS
1994	June 30 - July 07	ALBERTO	55	1014	TS
2004	August 25 - September 10	FRANCES	125	1009	H4
2021	June 17 - 23	CLAUDETTE	40	1008	E
2021	August 09 - 20	FRED	55	1013	TS
2022	November 06 - 11	NICOLE	65	1005	H1

3.3.8.4 Probability

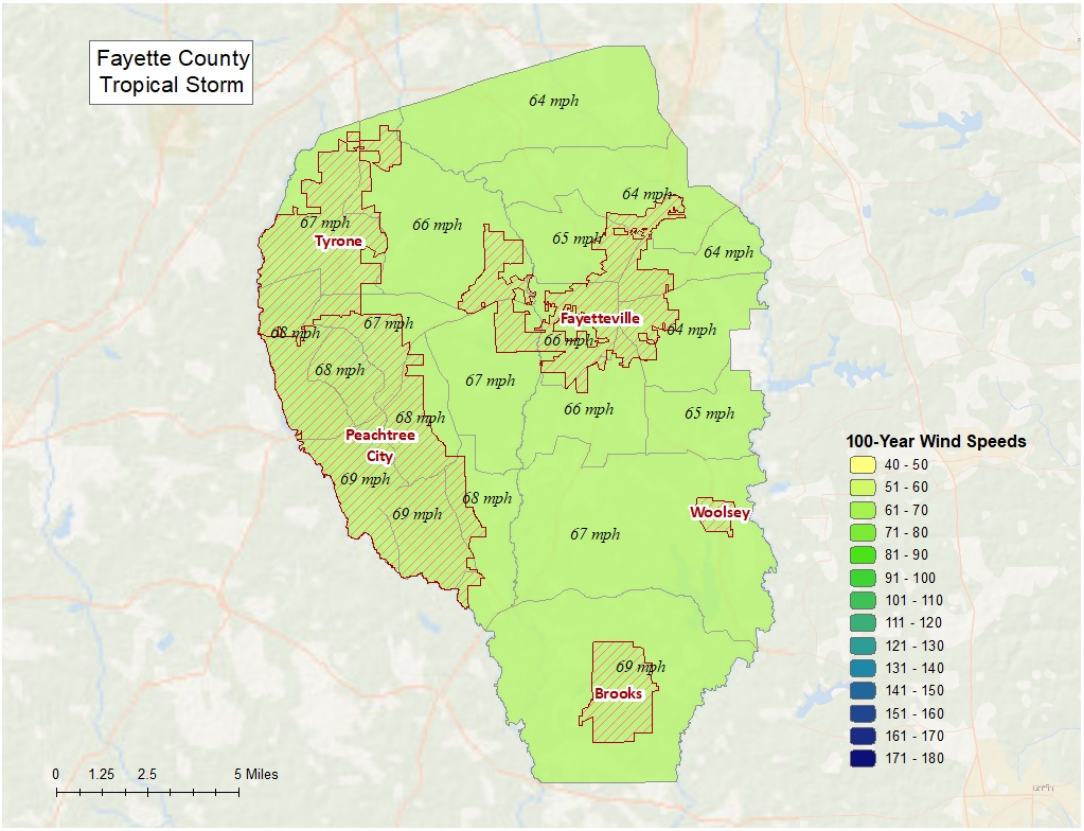
Based on historical data, tropical cyclones are likely (occurring every 5 to 20 years) in Fayette County.

3.3.8.5 Impacts

Impacts to Fayette County from tropical cyclones were analyzed using FEMA's Hazus-MH software, a powerful disaster risk assessment tool based on geographic information systems (GIS). The full report from the analysis can be found in Appendix B.

The wind damage analysis was performed using a probabilistic scenario based on a tropic storm with maximum winds of 69 mph and that equates to the 1% chance storm event. Figure 3-22 shows wind speeds for the modeled storm.

Figure 3-22. Wind speeds used for the modeled storm throughout Fayette County

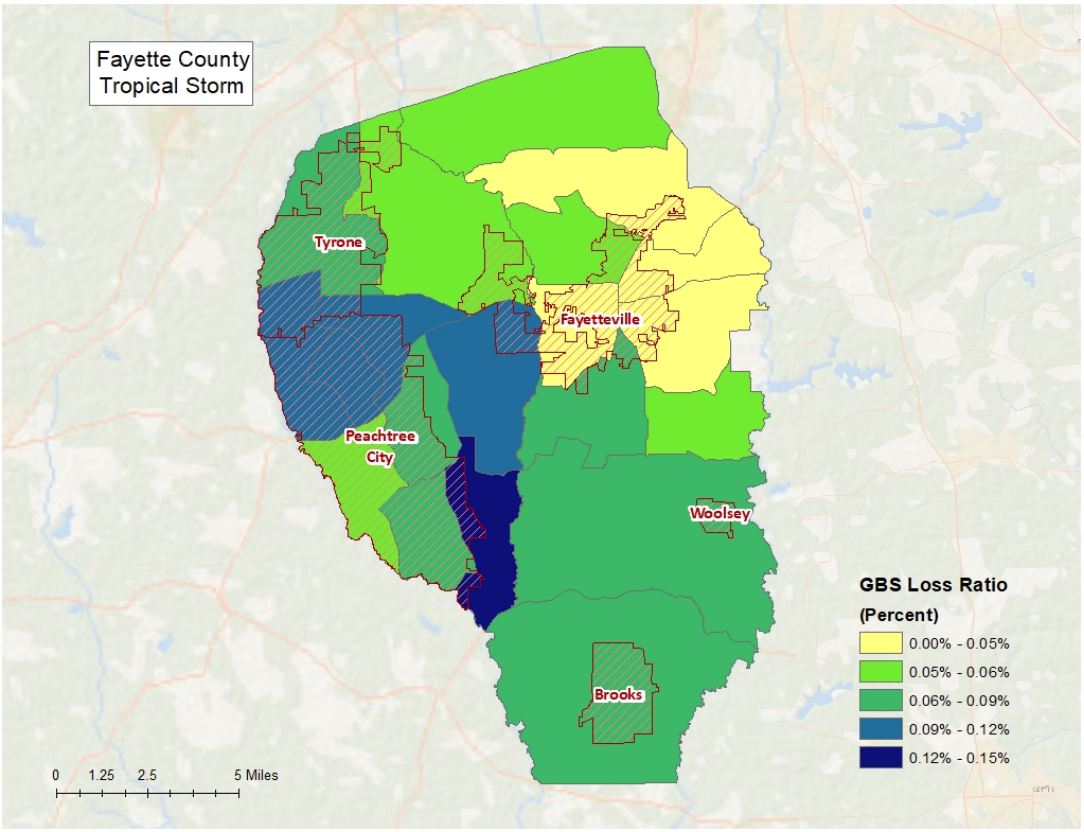


Buildings in Fayette County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. Table 3-20 shows a summary of the results of wind-related building damage in Fayette County for the tropical storm (100-year event). The loss ratio expresses building losses as a percentage of total building replacement cost in the county (Figure 3-23).

Table 3-20. Wind building damage based on the modeled storm

Classification	Number of Buildings Damaged	Total Building Damage	Total Economic Loss	Loss Ratio
Tropical Storm	46	$11,277,560	$18,636,500	0.08%

Figure 3-23. Building loss ratios throughout Fayette County based on the modeled storm



Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Fayette County has 53 essential facilities, including 1 emergency operation center, 17 fire stations, 3 care facilities, 6 police stations, and 26 schools. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds (Table 3-21).

Table 3-21. Essential facilities damaged or with loss of use based on the modeled storm

Classification	Facilities At Least Moderately Damaged > 50%	Facilities Completely Damaged > 50%	Facilities with Expected Loss of Use (< 1 day)
Tropical Storm	1	0	53

The analysis also estimated the amount of debris generated by high velocity winds from the modeled storm and quantified it into 3 broad categories to determine the material handling equipment needed:

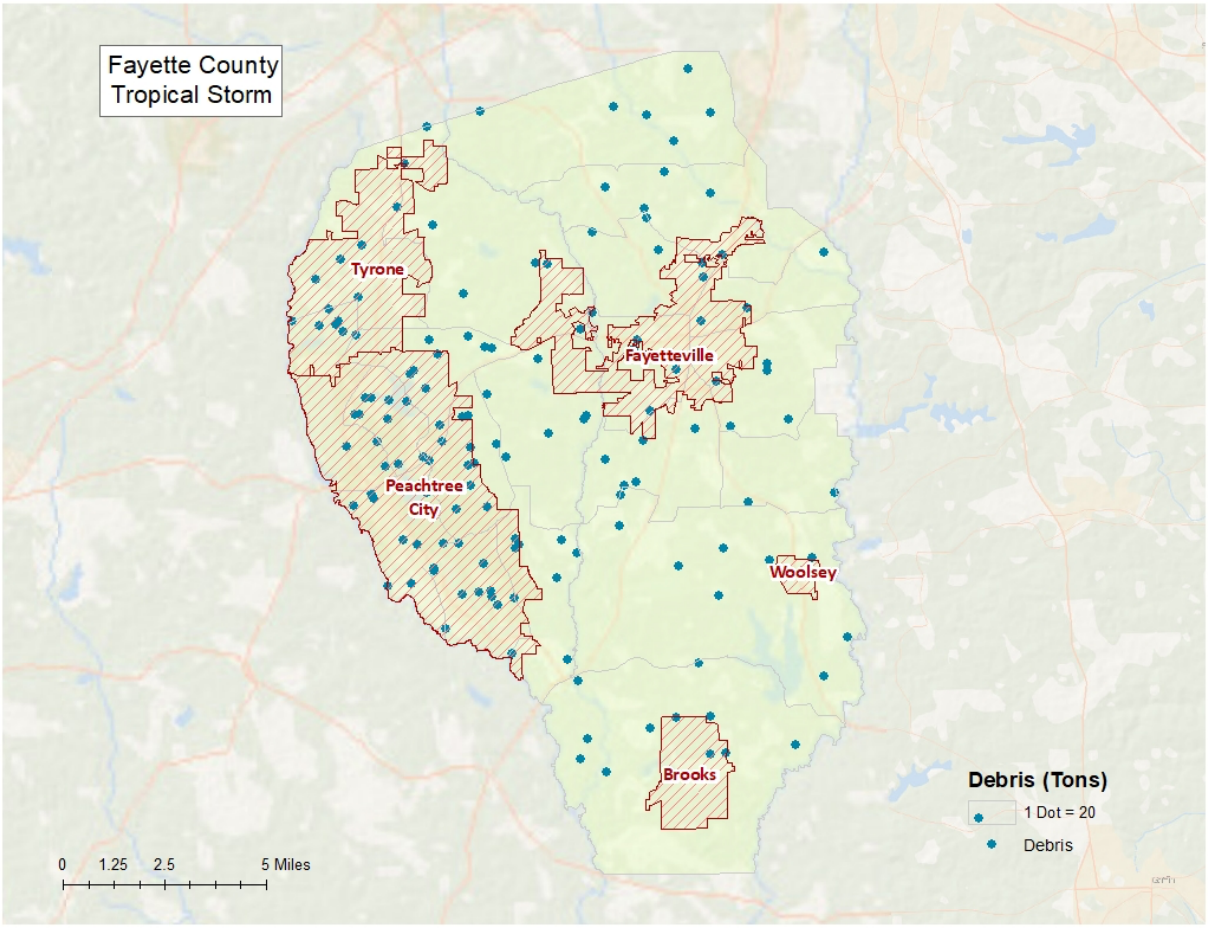
- Reinforced Concrete and Steel Debris
- Brick and Wood and Other Building Debris
- Tree Debris

The estimates of debris for this scenario, including tree debris that the public would be responsible for, are listed in Table 3-22. Figure 3-24 shows the distribution of all wind related debris resulting from the modeled storm. Each dot represents 20 tons of debris within the census tract in which it is located; the dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

Table 3-22. Wind-related debris weights (tons) based on the modeled storm

Classification	Brick, Wood, and Other	Reinforced Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total
Tropical Storm	388	0	2,441	9,509	12,338

Figure 3-24. Distribution of wind-related debris from the modeled storm throughout Fayette County



Tropical cyclones that impact Fayette County typically arrive as inland remnants of hurricanes or tropical storms, bringing heavy rainfall and strong wind gusts. The L HMPC determined that all critical facilities and all public and private property within Fayette County are susceptible to the direct and indirect impacts of a tropical cyclone.

Tropical cyclones can lead to a wide range of impacts, including flash flooding, downed trees, and extended power outages. High winds may damage roofs, signage, fences, and vehicles, while saturated soils increase the likelihood of tree falls, which can block roads and damage power lines. Flooding may affect homes, basements, and public buildings, particularly in areas with inadequate drainage infrastructure. Roadway closures due to standing water or debris can delay emergency response and disrupt daily commutes. Power outages caused by wind or falling trees can last several days in some areas, impacting residences, businesses, and critical facilities. Tropical cyclones can also result in water contamination from runoff, increased demand on emergency services, and temporary closures of schools and businesses. These disruptions collectively strain public infrastructure and services.

Fayette County's growing population increases the number of people and structures at risk from storm impacts. Residential and commercial development as well as land use changes are replacing natural surfaces with impervious ones, increasing the volume and velocity of stormwater runoff during heavy rainfall events, making low-lying and poorly drained areas more vulnerable to flash flooding.

Large-scale developments may draw more visitors, residents, and energy use to the county, increasing the county's exposure to storm-related disruptions, such as infrastructure failure, road closures, and power loss.

3.3.8.6 Multi-Jurisdictional Considerations

Impacts from tropical cyclones vary across Fayette County's 5 municipalities due to differences in tree cover, development density, infrastructure vulnerability, and emergency access routes.

- Fayetteville and Peachtree City: Both cities are densely developed with mature tree canopies lining roadways, neighborhoods, and public spaces, making them highly susceptible to wind-related damage. Tropical storm winds can bring down trees and large limbs, causing blocked roads, damaged structures, and widespread power outages. Peachtree City's extensive golf cart path network is especially vulnerable to obstruction from debris, limiting mobility during and after storm events. Fayetteville's mix of older and newer infrastructure may also be at higher risk for damage to roofing, siding, and aboveground utility lines, especially in historic or lower-density residential areas.
- Tyrone: Tyrone's blend of newer residential developments and wooded areas presents a dual risk. Homes situated near tree lines are at risk of roof and vehicle damage from falling branches or trees during high-wind events. Newer construction in open areas may be less protected from wind exposure, especially in subdivisions where natural windbreaks have been cleared. Utilities and transportation routes in Tyrone are also exposed to temporary disruptions due to wind-driven debris.
- Brooks and Woolsey: These rural towns are heavily forested and characterized by long stretches of narrow, tree-lined roads. During tropical cyclones, downed trees and power lines can isolate properties for extended periods. Homes on larger lots, many of which are not buffered by nearby structures, may experience direct wind loading on roofs and outbuildings.

3.3.9 Extreme Temperatures

3.3.9.1 Hazard Description

Extreme heat refers to periods of unusually high temperatures that can pose significant health risks and impact various aspects of society and the environment. While definitions may vary based on geographic location and climate norms, extreme heat events are generally characterized by temperatures that are substantially higher than normal for a particular region and time of year. The Peachtree City NWS forecast office issues the following watches, warnings, and advisories related to extreme heat events:

- Heat Advisory: Issued when there is at least an 80 percent chance that daytime heat indices will exceed 104°F for at least 2 consecutive days.
- Excessive Heat Watch: Issued when there is at least a 50 percent chance that daytime heat indices will exceed 109°F for at least 2 consecutive days.
- Excessive Heat Warning: Issued when there is at least an 80 percent chance that daytime heat indices will exceed 109°F for at least 2 consecutive days.

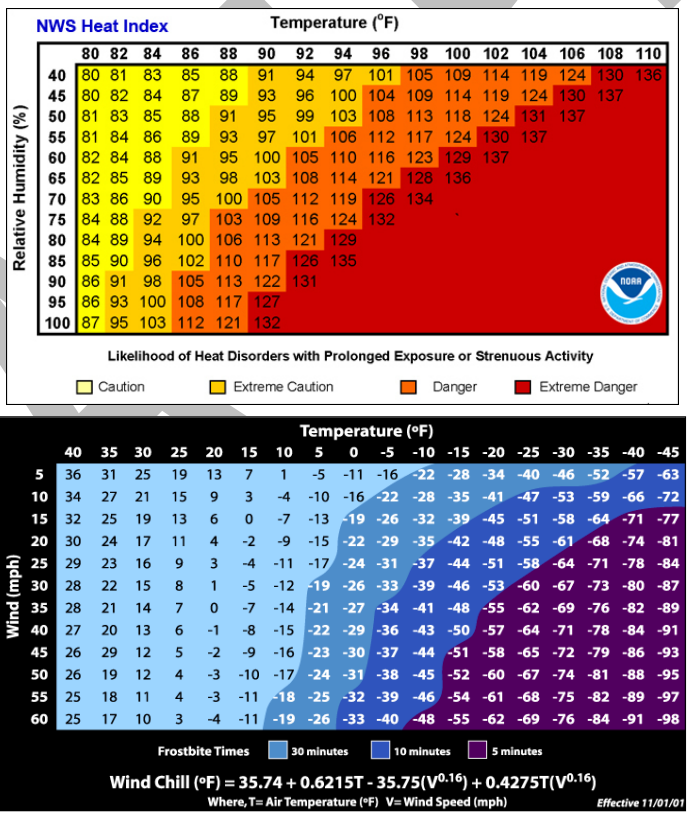
The heat index used as a criteria above is a measure of how hot it really feels when relative humidity is factored in with the actual air temperature. Figure 3-25 below shows the relationship between the temperature, relative humidity, and heat index.

Extreme cold refers to periods of unusually low temperatures that can pose significant health risks and impact various aspects of society and the environment. While definitions may vary based on geographic location and climate norms, extreme cold events are generally characterized by temperatures that are substantially lower than normal for a particular region and time of year. Extreme cold events often accompany or are left in the wake of winter storms, but can also occur without any associated storm activity. The Peachtree City NWS forecast office issues the following watches, warnings, and advisories related to extreme cold events:

- Cold Weather Advisory: Issued when seasonably cold air temperatures or wind chill values, but not extremely cold values, are expected within the next 36 hours.
- Wind Chill Watch: Issued when there is at least a 50 percent chance for wind chill values to drop to 5˚F or lower within the next 36 to 48 hours.
- Wind Chill Warning: Issued when there is at least an 80 percent chance that wind chill values will drop to -10˚F or lower within the next 36 hours.

The wind chill index used as a criteria above is a measure of what the air temperature feels like to the human skin due to the combination of cold temperatures and winds blowing on exposed skin. Figure 3-25 below shows the relationship between the temperature, wind, and index.

Figure 3-25. Heat index and wind chill index charts (source: NOAA)



3.3.9.2 Location and Extent

Extreme temperature events are a county-wide hazard.

Based on historical data, in the event of extreme heat, the severity in Fayette County has the potential to reach a level of "Danger" (heat index ranging from 103°F to 124°F). Figure 3-26 below plots the maximum heat index per day between May and September that Fayette County experienced between 1979 and 2021.

Based on historical data, Fayette County could experience extreme cold events with a wind chill less than or equal to 5°F.

3.3.9.3 Previous Occurrences

Figure 3-27 above details the annual number of extreme heat days for Fayette County from 2000 through 2023. The chart indicates that between 2000 and 2023, with the exclusion of 2003, the county experienced at least 1 day with the heat index at or above 100°F, annually. Further, days with the heat index at or above 90°F and 95°F were frequent with the. The most extreme heat days (heat index at or above 105°F) were not uncommon as at least one day was recorded in over 41% of the years.

Figure 3-28 below shows the annual number of extreme cold-related advisories and watches that were issued to Fayette County's weather forecast zone between 2009 and 2025.

Figure 3-26. Daily maximum heat index (May through September) between 1979 and 2022 (Center for Disease Control and Prevention (CDC) National Environmental Public Health Tracking Network)

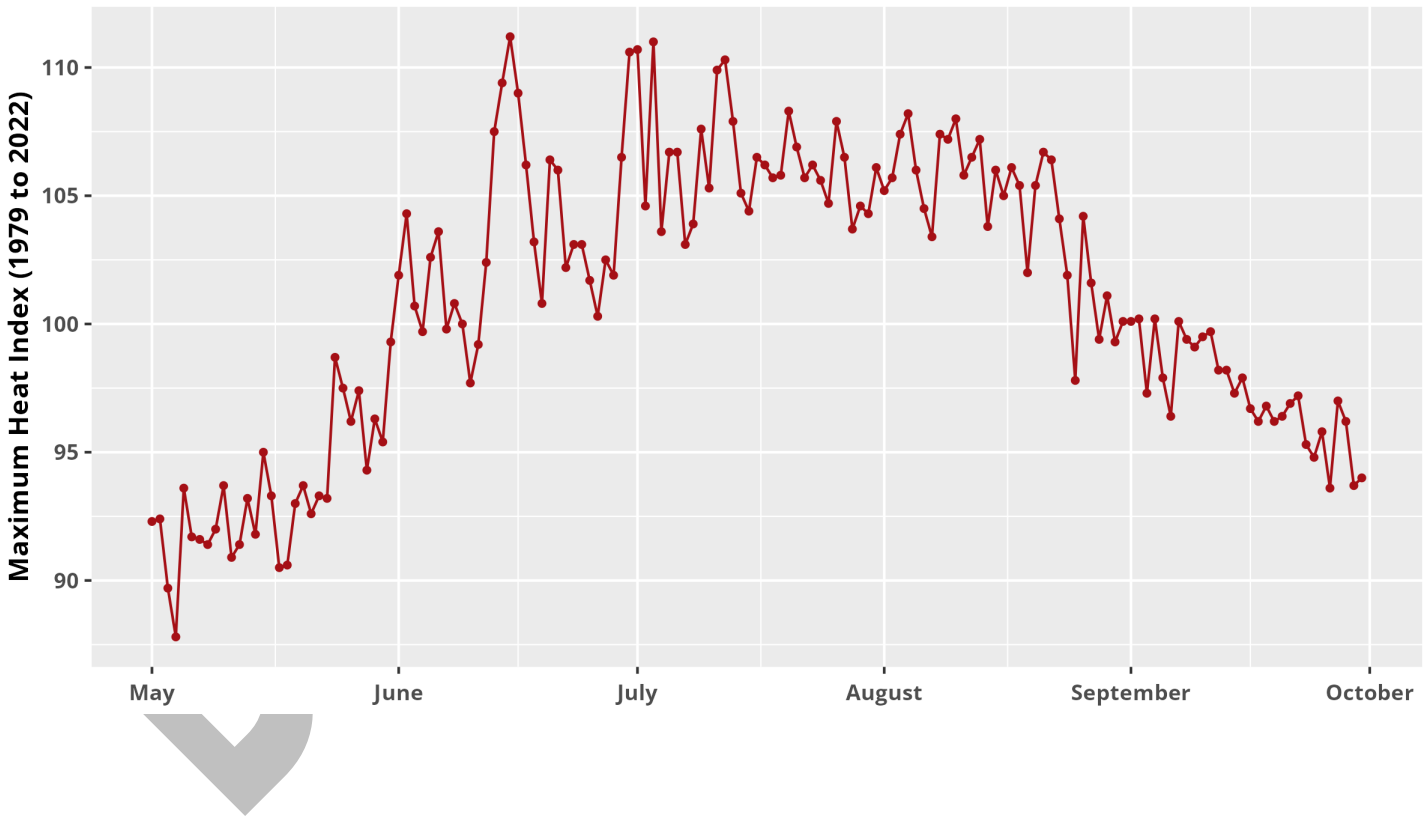


Figure 3-27. Annual number of extreme heat days (May through September) from 2000 through 2023 (CDC National Environmental Public)

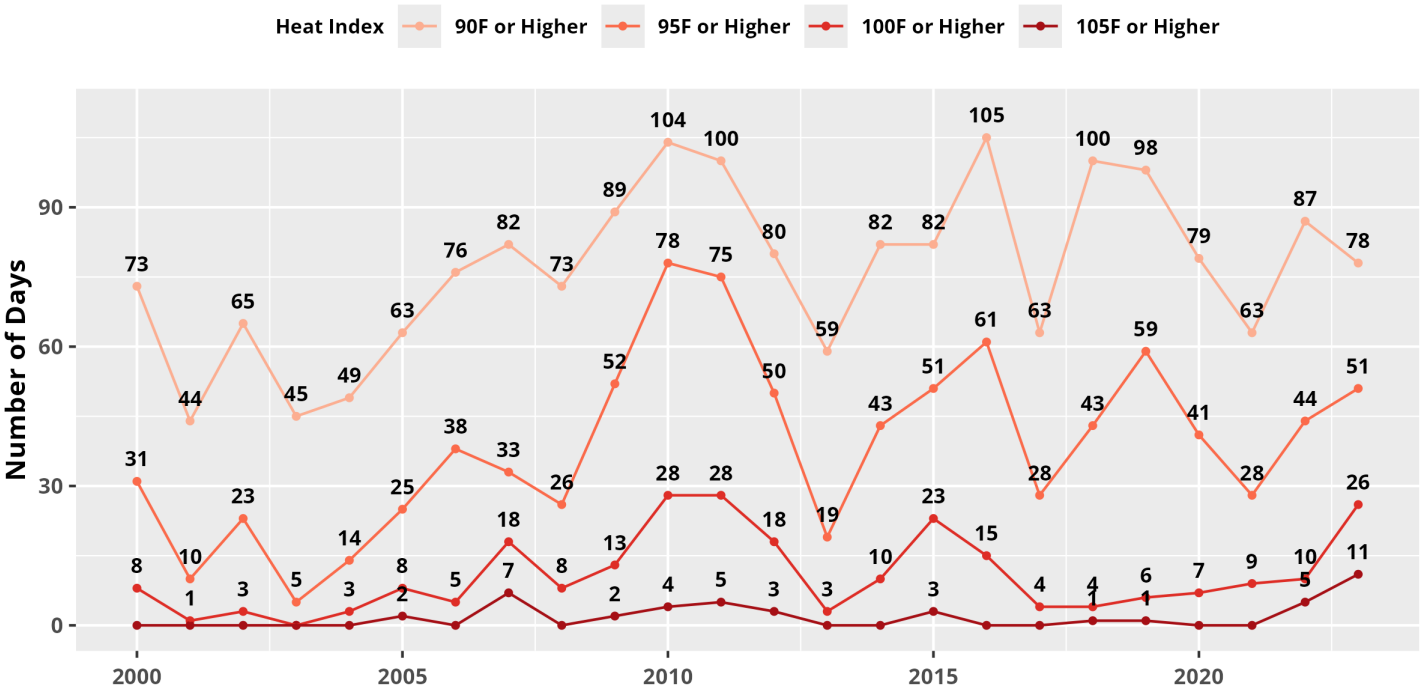
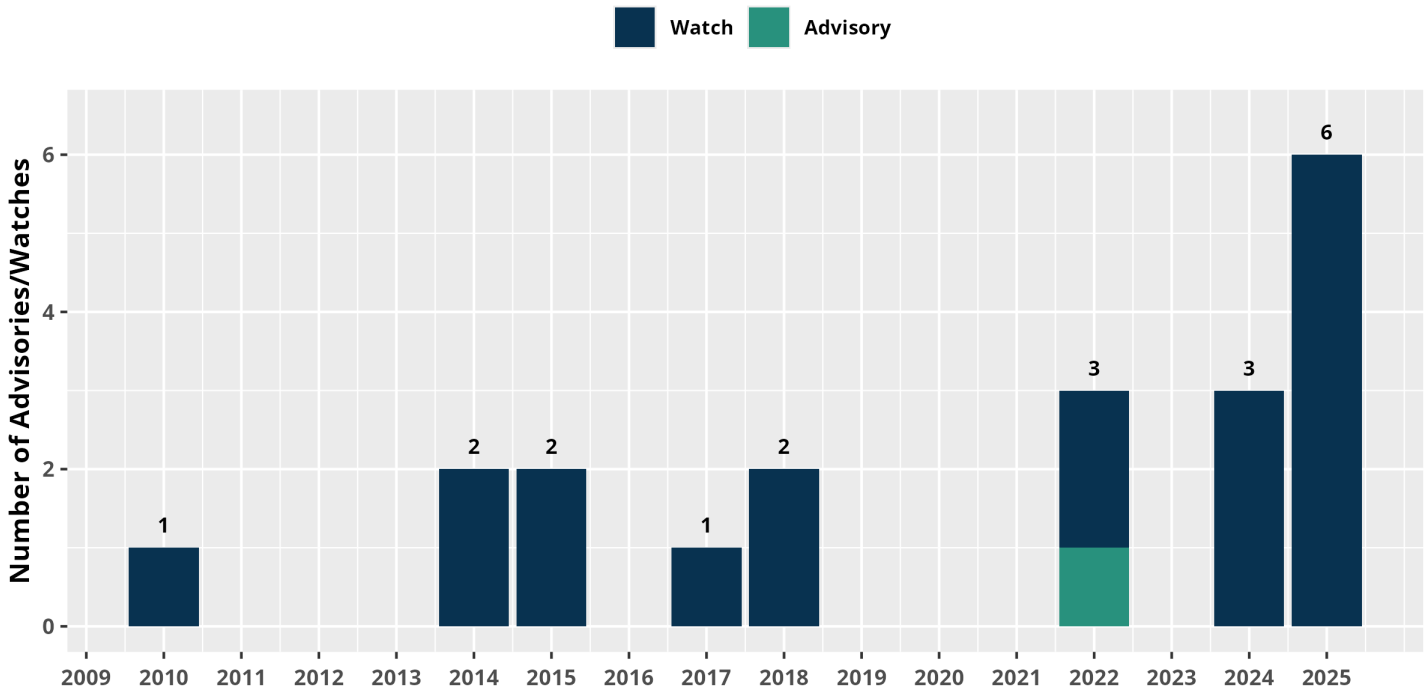


Figure 3-28. Extreme cold-related advisories and watches issued to the Fayette County forecast zone, between 2009 and April 2025 (Iowa State University Iowa Environmental Mesonet)



3.3.9.4 Probability

The probability of having an extreme heat event in Fayette County is extremely likely (occurring every 1 year or more). The probability of having an extreme cold event in Fayette County is highly likely (occurring every 1 to 5 years).

3.3.9.5 Impacts

Fayette County is susceptible to periods of extreme temperatures, including both extreme heat and extreme cold. These events can pose significant risks to public health, critical infrastructure, and economic activity.

High temperatures from extreme heat, especially when sustained over several days, pose a serious threat to public health, especially for vulnerable populations, including older adults, young children, people with chronic illnesses, and those without access to air conditioning. Prolonged heat can lead to heat exhaustion, heatstroke, dehydration, and the worsening of existing health conditions. Outdoor workers, such as construction crews and public works staff, are also at increased risk of heat-related illness. Additionally, extreme heat can stress energy infrastructure as demand for air conditioning spikes, increasing the risk of power outages or rolling blackouts.

High temperatures can also deteriorate road surfaces, warp railroad tracks, and overheat mechanical systems. Urbanized areas may experience the urban heat island effect, where paved surfaces and building materials absorb and retain more heat, intensifying local temperatures.

Extremely low temperatures during extreme cold may result in frozen or burst water pipes, damage to poorly insulated homes, and power outages due to increased heating demand or weather-related impacts on power lines.

Cold weather also poses serious health risks, such as frostbite and hypothermia, especially to residents experiencing homelessness, older adults, and those living in inadequately heated housing. Additionally, prolonged cold can impact agriculture, damaging winter crops or livestock, and can disrupt transportation networks by causing ice accumulation on roads, bridges, and sidewalks, increasing the likelihood of accidents and injuries.

As Fayette County continues to grow, the number of people exposed to extreme temperature risks is likely to increase. Changes in land use, such as reductions in tree cover or increases in impervious surfaces, may also amplify heat retention in developed areas. Moreover, the emergence of new energy-intensive developments, such as data centers, will place additional pressure on energy infrastructure during peak demand periods associated with extreme temperatures.

3.3.9.6 Multi-Jurisdictional Considerations

Extreme temperatures pose a relatively uniform risk across all jurisdictions in Fayette County, with no significant differences in exposure to cold weather events. All areas are susceptible to freezing temperatures, power outages, and health risks associated with inadequate heating or insulation, and emergency preparedness and response efforts can generally be coordinated at the county-wide level.

However, during periods of extreme cold, densely populated areas, especially those with congregate facilities such as personal care homes, senior living centers, and medical facilities,

face unique challenges. Incidents involving burst sprinkler or water lines in such facilities have previously necessitated large-scale evacuations and relocations of vulnerable residents. These events demand significant coordination and resources from local emergency services and can create logistical complications that are less prevalent in the county's more rural areas.

Further, the primary jurisdictional variation during periods of extreme heat stems from the urban heat island effect. More developed areas, particularly Fayetteville and Peachtree City, contain higher concentrations of impervious surfaces such as roads, parking lots, and buildings. These materials absorb and retain heat, leading to locally elevated temperatures compared to surrounding rural zones. When air conditioning systems fail in high-occupancy or medically vulnerable facilities during such events, the risks of heat-related illness and the need for emergency assistance increase significantly.

3.4 Technological Hazards

3.4.1 Hazardous Material

3.4.1.1 Hazard Description

Hazardous materials (HAZMAT) refer to any material that may pose a real hazard to human health or the environment because of its quantity, concentration, 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 hazardous materials 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.

3.4.1.2 Location and Extent

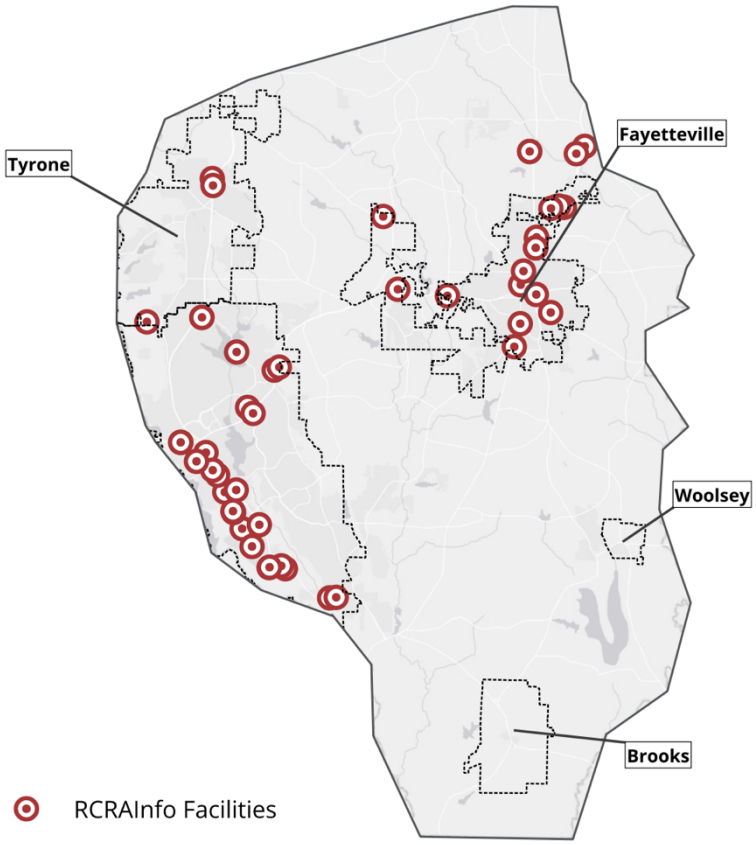
The entire county is at risk of hazardous material release incidents. Areas of heightened concern include:

- Resource Conservation and Recovery Act Information (RCRAInfo) Facilities: RCRAInfo is a national program management and inventory system about hazardous waste handlers. In general, all generators, transporters, treaters, storers, and disposers of hazardous waste are required to provide information about their activities to state environmental agencies. These agencies, in turn pass on the information to regional and national Environmental Protection Agency (EPA) offices. Figure 3-29 maps the RCRAInfo facilities throughout the county.
- Transportation Corridors: For Fayette County, significant threat for a hazardous materials spill comes from the transportation of materials through the county, especially along the Highway 54, 74, and 85 corridors that run through the center of the county. These heavily traveled routes are frequently used by commercial and industrial transporters, including trucks carrying fuel, chemicals, and other regulated materials.
- Water Sources: A hazardous materials release in proximity to drinking water sources or stormwater infrastructure could pose a significant threat to public health and environmental quality. Groundwater wells, particularly in rural and unincorporated areas,

are also susceptible to contamination from surface spills or improper disposal of hazardous substances.

- Rail Infrastructure: There are two rail lines running through Fayette County: Seaboard System and Norfolk Southern. The Seaboard System line runs north/south from Fulton County through Peachtree City to Senoia. Rail service to industrial areas in Peachtree City is provided by CSX Railroad on this line. The Norfolk Southern line runs east/west from Griffin through Brooks to Senoia but is no longer in use.

Figure 3-29. RCRAInfo facility locations throughout Fayette County (source: EPA)



3.4.1.3 Previous Occurrences

The National Response Center (NRC) is a part of the federally established National Response System and staffed 24 hours a day by the US Coast Guard. It is the designated federal point of contact for reporting all oil, chemical, radiological, biological and etiological discharges into the environment, as well as railroad incidents, anywhere in the United States and its territories. Data from the United States Coast Guard National Response Center was reviewed regarding hazardous materials spill history in Fayette County. Between 2000 and 2024, the NRC reported 40 incidents within Fayette County (Table 3-23). Many hazardous materials incidents over the past 25 years likely went unreported or undocumented.

Table 3-23. NRC reported incidents within Fayette County (2000 to 2024) (source: NRC)

Incident Description	Type	Cause	Date and Time	Nearest City
Caller states company breaks hoses on old cars and release freon into atmosphere	Fixed	Dumping	5/8/2000 8:00	Fayetteville

Incident Description	Type	Cause	Date and Time	Nearest City
Car was in lake	Mobile	Other	7/4/2000 13:40	Peachtree City
Asphalt coater hot oil process equipment released material and caught on fire	Fixed	Equipment Failure	1/25/2001 20:00	Peachtree City
The responsible party brings construction materials from the Summerville subdivision construction site to the residence and dumps the material into the back yard.	Fixed	Dumping	5/21/2001 8:00	Brooks
A freight train collided with a passenger truck at a grade crossing.	Railroad	Other	11/6/2001 19:00	Tyrone
The caller reported manhole is overflowing with sewage	Fixed	Unknown	10/23/2002 15:00	Fayetteville
A tanker truck had a minor accident which caused a release.	Mobile	Transport Accident	12/7/2002 9:50	Peachtree City
Caller stated that materials are being dumped on the ground.	Fixed	Dumping	10/13/2003 12:00	Fayetteville
The caller stated that the suspected responsible party is using acid with power washers to wash vehicles and not capturing the runoff. The caller also stated that the SRP is allowing the vehicles' fuel tanks to overflow and is not cleaning up	Fixed	Dumping	10/15/2002 0:01	Fayetteville
Caller stated that the entire area is permeated with a very strong odor in the air. Caller highly suspects that there was a kerosene spill. The smell is coming from a newly developed neighborhood under construction.	Fixed	Unknown	12/2/2003 18:00	Fayetteville
The caller reported release of wingtack 10 and piccotac 1020 (resin from adhesive) from vent pipe of molten resin holding tanks when material was inadvertently pumped through vent system and onto roof top.	Storage Tank	Equipment Failure	12/29/2003 13:00	Peachtree City
The caller stated that mulch is on fire due to automatic ignition.	Fixed	Other	1/20/2004 9:00	Fayetteville
Old equipment and rusty containers of waste oil have been leaking oil into the ground for the past ten years	Storage Tank	Dumping	4/24/2004 11:15	Fayetteville
Caller is reporting a release of hydraulic oil from a broken hydraulic line on a crusher, cause of the broken line is unknown.	Fixed	Equipment Failure	6/7/2006 7:00	Tyrone
The caller stated that due to an air release, there is a respiratory distress to residents in the area. The facility is a wastewater treatment facility.	Fixed	Unknown	7/2/2006 19:00	Fairburn
Caller is reporting that 200-300 gallons of diesel fuel spilled from a locomotive onto the ballast and dirt due to a fuel tank that was over filled by operator error.	Railroad	Operator Error	5/15/2007 16:30	Fairburn
Caller is reporting they found a crusher that had leaked about 150 gallons of oil onto the ground. The cause appears to be from a valve that was open that allowed the product to discharge out.	Fixed	Unknown	7/23/2007 7:30	Tyrone

Incident Description	Type	Cause	Date and Time	Nearest City
They do not know if someone left it open or if it was opened over the weekend while operations were shut down.				
Caller is reporting that an unknown blue substance was released from the truck. Caller stated that as the material released sand was placed on top. County board of health arrived on scene and verified the material on the service road.	Mobile	Dumping	3/9/2009 11:00	
The facility has 5 refrigeration units. Employees were moving a table and broke a copper line that caused all of the refrigerant to release into the 75,000 sq ft facility. The amount released is 800 - 1000 lbs. The vapor cloud is hanging at knee level in the store. The fire dept is venting the store. Everyone was evacuated from the facility.	Fixed	Operator Error	5/30/2010 20:25	Fayetteville
The caller is releasing refrigerant (r-22) into the atmosphere from old equipment (compressors). The caller also stated that the RP also releases the oil onto the ground. This has been ongoing for at least 1 month, and it was stated that it will probably be done today.	Fixed	Dumping	10/1/2010 12:00	Tyrone
Caller stated due to a hose that broke on a small tanker truck there was a spill of recycled motor oil that span eight miles on Highway 74 southbound.	Mobile	Equipment Failure	3/30/2011 10:30	Peachtree City
Caller stated there was a spill of copper and an unknown material from 55-gallon steel drums that are leaking and storage tanks that were being pumped out. Caller stated the spill is due to operator error. Caller stated the site location was being demolished when the spill occurred.	Storage Tank	Operator Error	5/22/2012 12:00	Peachtree City
The caller reported that a single engine beach craft went off the runway. No spills or injuries reported. Aircraft is upright.	Aircraft	Unknown	10/21/2012 15:18	Peachtree City
Caller reported a garbage truck broke down in front of the driveway spilling hydraulic oil onto the ground.	Mobile	Equipment Failure	5/1/2014 15:00	Fayetteville
The caller is reporting a locomotive that discharged an unknown amount of lubricating oil onto the ground and into a retention pond.	Railroad	Equipment Failure	7/25/2014 12:00	Tyron
Caller is reporting a discharge of 120 gallons of lube oil when the primary pressure oil line pipe fitting failed.	Fixed	Equipment Failure	11/10/2015 9:00	Tyrone
The caller is reporting a release of an unknown chemical from an unknown source. Caller describes the odor as "really strong" and it causes a burning sensation in the throat. Caller stated they have detected the odor several times while driving through the area.	Fixed	Unknown	3/10/2016 19:00	Peachtree City

Incident Description	Type	Cause	Date and Time	Nearest City
Caller stated that the landscaping company was performing work at the address listed. The truck was leaking an unknown material onto the road. The spill is about 3 to 4 feet wide and leading down the road. An employee of the company also dumped a bucket of an unknown material down the storm drain. The truck drove off appearing to have no intention of remediation.	Mobile	Unknown	4/13/2016 11:25	Peachtree City
Caller stated that there is an unknown sheen from an unknown source on the waters of Lee's Lake.	Unknown Sheen	Unknown	7/26/2016 17:30	Fayetteville
Caller stated the company uses diesel fuel to break asphalt free from the inside of the asphalt trucks. Then the diesel is allowed to release into a local creek. Caller stated that this is a regular occurrence that has been happening for a long time.	Mobile	Dumping	2/8/2017 17:30	Tyrone
Caller is reporting that for about 2 years a company has been dumping junk at the location provided, resulting in oil and unknown materials released on the ground. There is a potential for release into the Nash Creek.	Fixed	Dumping	8/8/2018 15:00	Fayetteville
Caller is reporting that a local business is improperly disposing of refrigerant gases onto the ground and to the atmosphere.	Fixed	Other	9/12/2018 9:00	Fayetteville
Used oil discharged from a rail car that was pulled away while it was being offloaded.	Railroad	Operator Error	10/30/2018 9:20	Peachtree City
Caller is reporting that the company is releasing refrigerant gases directly into the air from air conditioning units.	Fixed	Operator Error	4/7/2019 12:00	Peachtree City
Caller reported a Canadian air force aircraft (snowbirds) was having equipment issues. The pilot self-ejected out of the plane causing the plane to crash into a grassy field. There is a potential release of s34 (jet fuel) among other chemicals. Caller stated some of the indicators may have radioactivity but has not been confirmed.	Aircraft	Other	10/13/2019 13:30	Brooks
Caller reported an unknown green container with unknown contents was dumped at a housing complex entrance.	Storage Tank	Dumping	12/4/2019 16:00	Fayetteville
Caller stated an auto shop is releasing motor oil, coolant, and other oils into the sewer system.	Fixed	Dumping	9/26/2020 12:00	Fayetteville
Caller stated an underground pipeline coming from a tank farm to a pump house ruptured and released gas vapors into the air.	Pipeline	Equipment Failure	1/29/2022 22:00	Peachtree City
Caller reported that personnel working for the HVAC company at the address location are releasing unknown quantity and type of refrigerant gases to the atmosphere and not	Fixed	Other	8/5/2022 12:00	Tyrone

Incident Description	Type	Cause	Date and Time	Nearest City
recovering it from equipment being serviced in the facility.				
The caller stated that a vibratory hammer at a construction site experienced a broken air relief valve, which caused an unknown amount of hydraulic oil to release into Lake Peachtree. Although the amount of material that released is unknown the caller suspects upwards of 3 gallons may have released	Mobile	Equipment Failure	5/16/2024 15:30	Peachtree City

3.4.1.4 Probability

Hazardous materials incidents typically occur multiple times a year in Fayette County, but based on qualitative analyses, majority of incidents are usually small in scale with no significant consequences. The probability of any hazardous materials incident is extremely likely (occurring every 1 year or more), while the probability of a major incident is likely (occurring every 5 to 20 years).

3.4.1.5 Impacts

Hazardous materials incidents can result in a wide range of impacts, depending on the type of material released, the location of the incident, and the surrounding environment. Potential consequences include threats to public health through exposure to toxic substances, contamination of soil and water resources, fire or explosion hazards, and disruption of local infrastructure and services.

Spills near populated areas or critical infrastructure can prompt evacuations, emergency sheltering, or temporary shutdowns of schools, transportation routes, and commercial operations. Incidents affecting surface water bodies or groundwater sources, especially those used for drinking water, may lead to long-term environmental degradation and costly remediation efforts. Public safety personnel responding to hazardous materials incidents also face significant risk of exposure if appropriate containment and protective measures are not in place.

Even relatively small-scale spills can create localized nuisances, including noxious odors, short-term health effects, and neighborhood complaints. More severe events, such as pipeline breaches or tanker rollovers, could result in substantial economic disruption, environmental damage, and long-duration clean-up operations. Additionally, hazardous materials incidents may generate public concern and erode trust in local industry or infrastructure if not managed transparently and effectively.

3.4.1.6 Multi-Jurisdictional Considerations

Hazardous materials risks are distributed across all jurisdictions in Fayette County, though the specific nature and concentration of risk factors vary. Each jurisdiction is potentially affected by the movement of hazardous materials along the county's transportation corridors and the presence of fixed facilities that generate, store, or process such materials.

- Peachtree City and Fayetteville: Both cities contain the largest concentrations of industrial and commercial activity, including RCRAInfo facilities and sites that store fuel, chemicals, and other hazardous substances. These cities are also intersected by major highways and active rail lines, making them more susceptible to transportation-related

incidents. Their denser populations and proximity to critical infrastructure, such as water supply facilities and schools, may elevate the consequences of a release.
- Tyrone: Tyrone also contains RCRAInfo facilities and is traversed by key roads used for freight transport. Though smaller in population, it has experienced several notable incidents and continues to be at risk due to its industrial base and proximity to major transportation routes.
- Brooks and Woolsey: Both towns are more rural with fewer fixed hazardous materials sites; however, transportation-related risks persist, especially in areas near rail lines or highways used for commercial deliveries.

3.4.2 Dam Failure

3.4.2.1 Hazard Description

Under the Georgia Safe Dams Act, the State of Georgia 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. The Safe Dams Program is responsible for developing and maintaining an inventory of dams, classifying dams, and ensuring compliance of all regulated dams.

Dam failure can be a catastrophic type of failure characterized by the sudden, immediate, and uncontrolled release of impounded water, or the likelihood of such an uncontrolled release with secondary impacts to downstream structures within the inundation zone. Dams fail in two ways, a controlled spillway release done to prevent full failure, or the partial or complete collapse of the dam itself. Possible reasons for dam failure include but are not limited to:

- Sub-standard construction materials/techniques
- Geological instability caused by changes to water levels during filling or poor surveying
- Sliding of a mountain into the reservoir
- Poor maintenance, especially of outlet pipes
- Human, computer, or design error
- Internal erosion, especially in earthen dams
- Earthquakes
- Terrorism

The Georgia Safe Dams Program employs a classification system for dams:

- Category I: Category I structures are those where it has been determined, should the dam ever fail, there is a probable loss of life from that failure. Category I dams are regulated under the Safe Dams Act and a permit is required from Environmental Protection Division.
- Category II: Category II are those dams where no occupied structure has been identified to be in the dam failure zone. There are no regulatory requirements for a Category II dam. The Safe Dams Program re-inventories Category II dams at least once every 5 years. The re-inventory involves checking that the dam still exists and evaluating downstream to make sure the dam is properly classified. If modifications to the dam or changes in development downstream indicate the potential for probable loss of life, the dam may be reclassified Category I.

The National Inventory of Dams also provides condition assessments:

- Satisfactory: No existing or potential dam safety deficiencies are recognized. Acceptable performance is expected under all loading conditions (static, hydrologic, seismic) in accordance with the minimum applicable state or federal regulatory criteria or tolerable risk guidelines.
- Fair: No existing dam safety deficiencies are recognized for normal operating conditions. Rare or extreme hydrologic and/or seismic events may result in a dam safety deficiency. Risk may be in the range to take further action.
- Poor: A dam safety deficiency is recognized for normal operating conditions which may realistically occur. Remedial action is necessary. Poor may also be used when uncertainties exist as to critical analysis parameters which identify a potential dam safety deficiency. Investigations and studies are necessary.
- Unsatisfactory: A dam safety deficiency is recognized that requires immediate or emergency remedial action for problem resolution.
- Not Rated: The dam has not been inspected, is not under state or federal jurisdiction, or has been inspected but, for whatever reason, has not been rated.
- Not Available: Dams for which the condition assessment is restricted to approved government users rated according to their condition by the Dam Safety Program during a visual inspection.

3.4.2.2 Location and Extent

Fayette County has 13 Category I dams and 50 Category II dams. The Category I dams are mapped and listed in Figure 3-30 and Table 3-24, respectively. Out of the Category I dams, 6 are rated as "Poor," 6 are rated as "Satisfactory," and 1 is "Not Rated".

Figure 3-30. Category I dams within Fayette County symbolized by condition (source: Safe Dams Program, National Inventory of Dams)

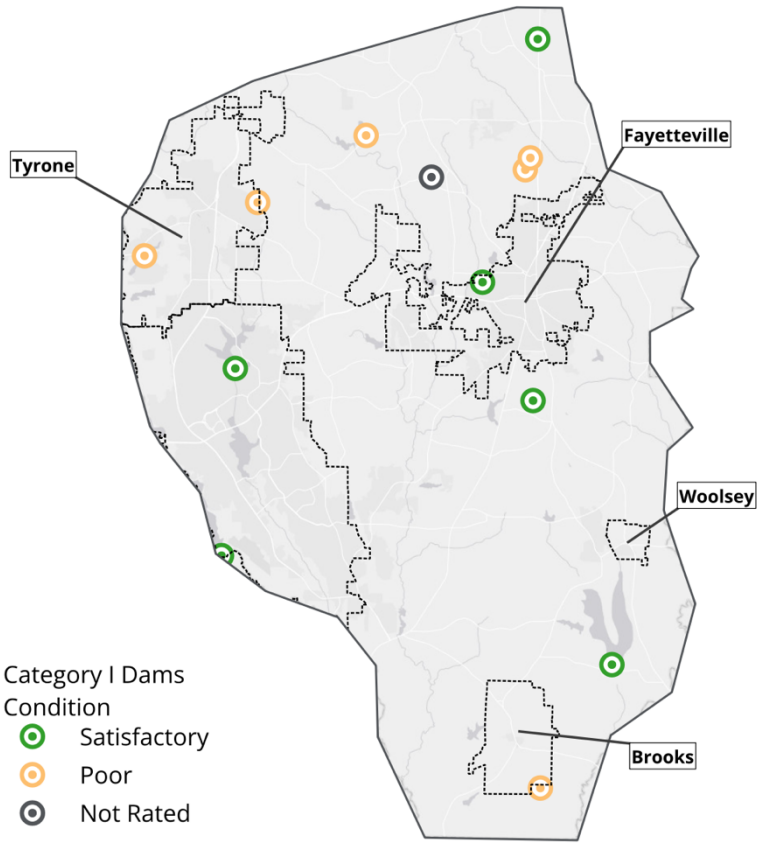


Table 3-24. Category I dams within Fayette County (source: Safe Dams Program, National Inventory of Dams)

Dam Name	Condition	Dam Height	Maximum Storage	Owner Name
Reeves Lake Dam	Not Rated	30.20	126.00	Dorothy Reeves
Bradbury Lake Dam	Poor	20.50	221.00	David and Sandi Borders; Linda McCoy; Mr. & Mrs. Jack Sprayberry
Castle Lake Dam	Poor	29.90	513.00	Wilcox, Guy R.; Bacon, William and Angela; Smith, Jonathan
Graves Lake Dam	Poor	22.00	147.00	Graves, Johnny Mrs.
Kozisek Lake Dam	Poor	27.60	380.00	Kozisek, Darrell J.; Fayette County Board of Commissioners
Margaret Phillips Lake Dam	Poor	16.00	239.00	Fayette County Board of Commissioners; Thomas Concrete of Georgia Inc
Pendleton Lake Dam	Poor	14.60	140.00	The Pendleton HOA; Benjamin Gaxiola; Town of Tyrone
Dickson Lake Dam	Satisfactory	21.40	200.00	Xavier Hill
Ford Lake Dam	Satisfactory	34.00	150.00	Mrs. Nina C. A. Tucker; Ms. Lela Hinds Peterson
Horton Creek Reservoir Dam	Satisfactory	52.00	18160.00	Fayette County Board of Commissioners
Lake Kedron Dam	Satisfactory	54.00	26648.00	Fayette County Board of Commissioners
McIntosh Reservoir Dam	Satisfactory	40.00	20800.00	Fayette County Board of Commissioners
Pye Lake Dam	Satisfactory	16.80	195.50	City of Fayetteville

3.4.2.3 Previous Occurrences

The 2024 Georgia Hazard Mitigation Strategy lists no previous occurrences of dam failure in Fayette County.

3.4.2.4 Probability

The probability of dam failure in Fayette County is unlikely (occurring every 50 years or less). While no previous occurrences of dam failure have occurred in Fayette County, the hazard is still possible, especially given the "Poor" condition of multiple Category I dams.

3.4.2.5 Impacts

Dam failure can have catastrophic consequences, particularly in areas located within downstream inundation zones. The sudden release of water may result in rapid and severe flooding, causing damage or destruction to homes, businesses, roadways, utilities, and critical infrastructure. The velocity and volume of water released during a failure event can lead to the loss of life, particularly where warning times are short and evacuation options are limited.

Beyond the immediate flooding impacts, dam failures can result in long-term environmental degradation, including soil erosion, habitat disruption, and contamination of surface water systems. Dam failures may also interrupt water supply for drinking, irrigation, and industrial use, particularly for those reservoirs owned or managed by public entities. Additionally, damaged or destroyed dams require costly and complex repairs, which can burden local budgets and resources.

3.4.2.6 Multi-Jurisdictional Considerations

While dam failure poses a county-wide hazard, the risks and potential impacts vary by jurisdiction based on the location of the dam, the extent of the downstream inundation area, and population density in affected zones. The county's areas most prone to flooding are those areas located within the 100-year floodplain and downstream from dams. The multi-jurisdictional considerations outlined in the flooding hazard section apply here as well.

3.4.3 Transportation Incident

3.4.3.1 Hazard Description

Transportation incidents refer to accidents or emergencies involving vehicles or systems that move people or goods, including automobiles, trucks, buses, railcars, and aircraft. These incidents can result in injury or loss of life, property damage, hazardous material releases, traffic disruptions, and cascading impacts on emergency response and infrastructure. Incidents of concern include highway crashes, freight train derailments, aviation accidents, and commercial truck spills.

3.4.3.2 Location and Extent

Overall, transportation incidents are a county-wide hazard and concentrated along the major transportation routes.

- Highways and Roads: 6 State Routes serve Fayette County.
    - State Route 85 runs south from I-75, through Clayton County, into Fayette County north of Fayetteville. This 4-lane highway continues south through Fayetteville where it narrows to 2 lanes and continues south into Coweta County. State Route 85 carries a range of 10,900 to 32,100 vehicles a day per various Georgia Department of Transportation (GDOT) traffic locations.
    - State Route 54 is the main east-west highway in the county. It extends from Coweta County on the west, through Peachtree City, eastward through Fayetteville, to Clayton County. All of State Route 54 within Fayette County is a 4-lane, divided highway. State Route 54 carries a range of 14,200 to 43,100 vehicles a day based on various GDOT traffic locations.
    - State Route 74 is a 4-lane highway running south from Interstate 85 south to its end at State Route 85 in unincorporated Fayette County. This major access to Interstate 85 and the Atlanta Metropolitan Area carries a range of 14,000 to 34,600 vehicles a day per various GDOT traffic locations.
    - State Route 314 extends southward from Hartsfield International Airport to its end at State Route 85 in Fayetteville. The southern portion of this highway (State Route 279 to State Route 85) is a 4-lane divided highway. This major commuting route for airport workers carries a range of 12,500 to 20,600 vehicles a day per various GDOT traffic locations.
    - State Route 279 runs south from I-285 in South Fulton County, entering Fayette County at State Route 138. It proceeds southwest across State Route 314 and ends at State Route 85 north of the City of Fayetteville. State Route 279 is a 2-lane highway and carries a range of 6,190 to 18,200 vehicles a day per various GDOT traffic locations.
    - State Route 92 extends southward from Fulton County, running northwest to southeast through Fayetteville and Woolsey, and continuing into Spalding County. It is 2 lanes throughout Fayette County, except for the section with passing lanes on State Route 92 north and the section in the City of Fayetteville where State Routes 85 and 92 merge. This highway carries commuter traffic from Griffin and Spalding

County north to the airport and the Atlanta Metropolitan Area. State Route carries a range of 6,200 to 17,400 vehicles a day per various GDOT traffic locations.

The Fayette County Road Department maintains approximately 535 miles of roads of which 50 miles are unpaved. The county maintains all roads in the unincorporated area, Brooks and Woolsey (these are included in the total of 535 miles). The Town of Tyrone, the City of Fayetteville, and the City of Peachtree City perform maintenance on their roads.

Fayette County's residents are dependent on the automobile as the major mode of transportation. Public transportation does not exist in Fayette County. While carpool and vanpool use is encouraged, its use is minimal at this time.

- Path Systems: Although unconventional, a real and growing option to automobile travel is the use of the path system for short trips. This is especially prevalent in Peachtree City, which has over 90 miles of paths that connect parks, schools, businesses, homes, places of worship, etc.
- Railroads: There are 2 rail lines running through Fayette County, Seaboard System and Norfolk Southern. The Seaboard System line runs north/south from Fulton County through Peachtree City to Senoia. Rail service to industrial areas in Peachtree City is provided by CSX Railroad on this line. The Norfolk Southern line runs east/west from Griffin through Brooks to Senoia. The Norfolk Southern line is no longer in use although the tracks are still in place.
- Airports: Falcon Field in Peachtree City, within the confines of the Peachtree City industrial area, is the county's only general aviation airport. This airport is experiencing an increase in the amount of corporate usage. A 5,768 foot all-weather-lighted runway allows this airport to accommodate corporate jets and smaller commercial airplanes. There are also a number of small private landing fields located in the county.

3.4.3.3 Previous Occurrences

Transportation incidents, especially vehicle crashes, are typically a daily occurrence in Fayette County. According to GDOT's crash data dashboard, between 2020 and 2024, Fayette County experienced:

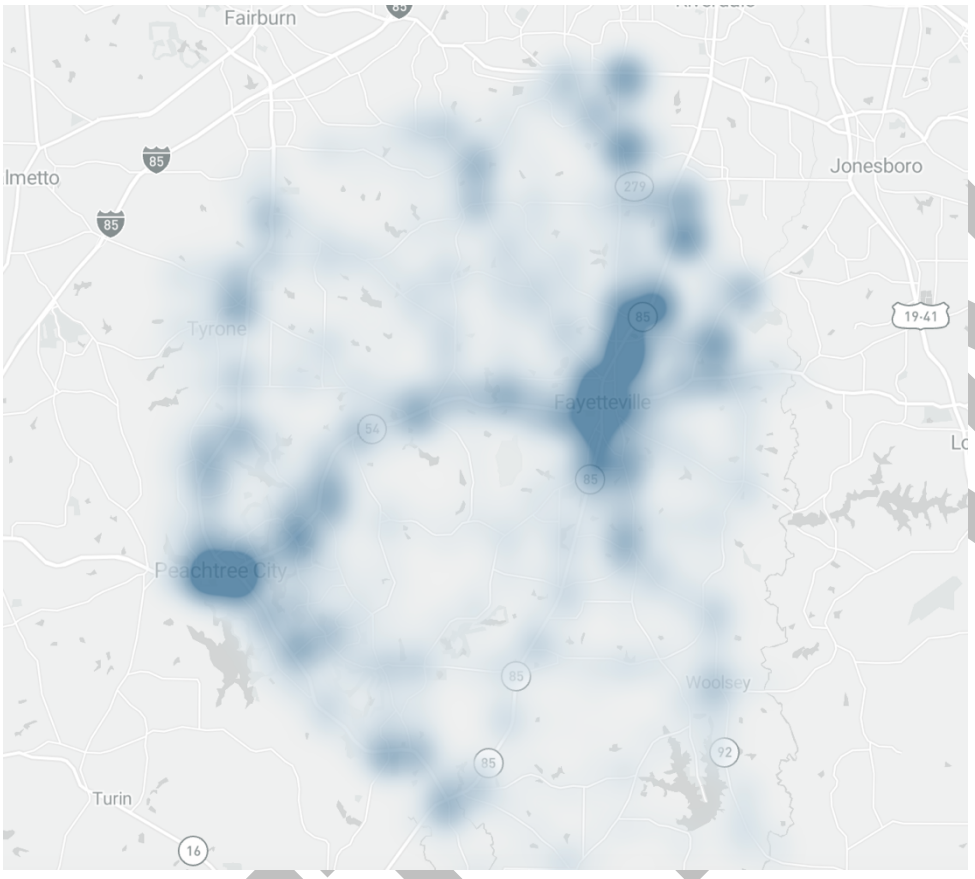
- 17,664 total crashes
  - 65 fatalities and 6,727 injuries
- The top vehicle types involved included Passenger Car, Sports Utility Vehicle, and Pickup Truck.
- The top focus areas for crashes included Intersection-Related, Distracted Driver, and Older Driver.
- The top hours of day included 3 PM, 4 PM, and 5 PM.

Table 3-25 lists the crashes by jurisdiction. Figure 3-31 maps the crashes throughout the county.

Table 3-25. Crashes in Fayette County by jurisdiction (2020 to 2024) (source: GDOT)

Jurisdiction	Number of Crashes	Percent of Total Crashes
Unincorporated Fayette County	7,931	44.9%
Fayetteville	4,435	25.11%
Peachtree City	4,322	24.47%
Tyrone	774	4.38%
Woolsey	110	0.62%
Brooks	71	0.4%

Figure 3-31. Density map of crashes in Fayette County (2020 to 2024) (source: GDOT)



In addition to vehicle crashes, notable transportation incidents that have occurred in Fayette County include:

- 2001 Train-Truck Collision in Tyrone: On November 6, 2001, a freight train collided with a passenger truck at a grade crossing in the Town of Tyrone. No injuries or fatalities were reported. The collision caused minor delays as emergency responders cleared the scene and rail service was temporarily paused.
- 2019 Canadian Snowbirds Aircraft Crash in Brooks: On October 13, 2019, a Canadian Forces Snowbirds demonstration aircraft crashed into a grassy field near Brooks after the pilot ejected from the aircraft. The pilot survived and no injuries or fatalities were reported. The crash prompted a multi-agency emergency response and temporarily restricted access to nearby roads and property during the investigation and cleanup.
- 2025 CSX Train Derailment in Fayette County: In 2025, 6 CSX freight cars derailed in Fayette County. No injuries or fatalities occurred, and no hazardous materials were released. However, the incident resulted in temporary rail service delays and required road closures near the derailment site while crews conducted inspection and recovery operations.

3.4.3.4 Probability

Transportation incidents in Fayette County are extremely likely (occurring every 1 year or more).

As population growth and development continue across the county, particularly in and around transportation corridors, the probability of transportation incidents is expected to increase.

Expanded residential and commercial areas will contribute to higher traffic volumes, greater demand on infrastructure, and increased interactions with freight and service vehicles. While large-scale incidents involving hazardous materials or mass casualties remain less common, they will become an increasingly credible risk as roadway congestion, freight activity, and exposure of people and structures all grow.

3.4.3.5 Impacts

Transportation incidents can cause significant short-term disruption and long-term consequences, depending on severity and location. Immediate impacts include injuries, fatalities, traffic delays, and road closures. More severe events may cause fires, explosions, environmental contamination, or require large-scale evacuations, particularly if hazardous materials are involved. Crashes can damage road infrastructure, utility poles, or pipelines, leading to secondary effects such as power outages or water supply interruptions. In some cases, emergency response operations may be hindered due to blocked access routes or the need for specialized HAZMAT capabilities. Aviation accidents, although rare, pose risks to both occupants and those on the ground, and rail-related incidents can disrupt freight movement, damage property, or impact public health if chemicals are released.

3.4.3.6 Multi-Jurisdictional Considerations

Transportation incident risk is distributed across all jurisdictions in Fayette County; however, the nature and consequences of these incidents vary based on local development patterns and infrastructure characteristics.

Urban jurisdictions such as Fayetteville and Peachtree City face greater potential for frequent incidents due to higher traffic volumes, denser development, and proximity to major transportation corridors such as Highways 54, 74, and 85. These areas also include key intersections, commercial hubs, and rail infrastructure, which increase the likelihood of traffic congestion, hazardous material transport, and response complexities in the event of an incident.

In contrast, Brooks, Woolsey, and large portions of unincorporated Fayette County are more rural in nature. While transportation incidents may occur less frequently, the consequences can be significant due to longer emergency response times, limited road networks, and reduced access to immediate medical or HAZMAT response. Isolated road segments may also be more vulnerable to disruption or extended closures following crashes, spills, or infrastructure damage.

3.4.4 Terrorism

3.4.4.1 Hazard Description

The Federal Bureau of Investigation (FBI) defines terrorism as violent or life-threatening acts that violate federal or state law and are intended to intimidate or coerce a civilian population, influence government policy through mass destruction, assassination, or kidnapping, or retaliate against government actions. Terrorism is usually referenced as being premeditated and politically motivated.

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 or sponsored by organizations outside of the United States. Terrorism can take many forms, including the following:

- Bombings and Explosive Attacks: The most common terrorist tactics, these involve the detonation of explosive devices intended to cause widespread destruction, casualties, and panic.
- Armed Assaults: Attacks where firearms are used to inflict mass casualties. Active shooter events fall under this category.
- Hijackings: Taking control of a vehicle, such as a plane or bus, often to fulfill a political demand or to use the passengers as hostages.
- Hostage Situations: Seizing and detaining hostages as leverage to negotiate demands or to garner media attention for a cause.
- Cyberterrorism: Attacks on information systems to disrupt critical infrastructure, steal sensitive data, or spread propaganda.
- Chemical and Biological Attacks: Involving the release of toxic chemicals or disease-causing biological agents to cause illness, death, and fear.
- Radiological and Nuclear Attacks: Using radioactive materials to cause contamination, radiation sickness, or in the case of a nuclear blast, massive destruction and long-term environmental damage.
- Vehicle Ramming Attacks: Using a vehicle to run over people in public spaces, causing injury and fatalities.
- Stabbings: Using bladed weapons to attack individuals, often with the intent to cause fear and chaos.
- Suicide Attacks: Perpetrators carry explosives on themselves or use a vehicle loaded with explosives to commit an attack, intending to kill others and themselves in the process.
- Kidnapping and Abductions: Taking someone against their will, often to demand a ransom, make a political statement, or influence government policies.
- Insider Threats: Attacks perpetrated by someone within an organization or community, exploiting their access and knowledge to conduct an attack.
- Ecoterrorism: The destruction of the natural environment or agricultural facilities, often intended to halt development or to draw attention to environmental issues.

An active threat, often referred to as an active shooter situation, is a specific type of terrorist act where an individual or group is actively engaged in killing or attempting to kill people, usually in a confined and populated area. This situation is dynamic and evolves rapidly, demanding immediate deployment of law enforcement and emergency response to stop the threat and mitigate harm to civilians. School shootings and mass shootings fall within active shooter situations.

- School Shooting: A school shooting is an incident in which an individual or group opens fire at an educational institution, such as a primary school, secondary school, or university. School shootings are often carried out by current or former students and can stem from a variety of complex motives, including mental health issues, bullying, retaliation, or ideological beliefs.
- Mass Shooting: A mass shooting is an event where a gunman shoots multiple people (typically defined as 4 or more victims, not including the shooter), usually in a single location, over a short period. The motives behind mass shootings vary and can include mental health issues, ideological extremism, or personal grievances.

3.4.4.2 Location and Extent

Terrorism and active threats are a county-wide hazard. While counterterrorism efforts can help, predicting the exact location of terrorist attacks is not possible. Generally, terrorists target densely populated or high-profile areas, making high profile infrastructure, like government

buildings, schools, tourist hubs, and airports more probable, but any location has the potential to become a target of terrorism.

The severity of terrorist threats can differ widely based on various factors, such as the methods used, the capabilities of the terrorists, and the success of preventive security measures. These methods may range from bombings and shootings to kidnappings, assassinations, and cyberattacks, often in diverse combinations. The scale of terrorism is further influenced by target selection, which can include the general public, government entities, places of worship, or vital infrastructure. The extent of terrorism may also be influenced by public support or sympathy for extremist ideologies, as well as the recruitment and radicalization of individuals into terrorist organizations. Underlying social and economic issues can also create environments that facilitate the spread of terrorist ideologies and activities.

3.4.4.3 Previous Occurrences

Fayette County has experienced several terrorism-related threats in recent decades. While none have resulted in significant violence or loss of life, these incidents underscore the continued potential for targeted attacks or politically motivated actions within the community. Notable events have included:

- March 2025: Around 350 peaceful protesters gathered at the Fayetteville Tesla service center and dealership for a “National Take Down Tesla Day” protest, part of a nationwide protest against Elon Musk's influence and budget priorities. While largely focused on policy statements and disinformation concerns, the protests included some warnings about escalation in tone.
- 2024: Residents in Fayetteville actively protested the development of data centers, including the massive QTS Data Center (now backed by Blackstone), raising concerns over power line expansions, environmental impacts, and use of eminent domain. These efforts included organized rallies such as one at Hopeful Church opposing transmission poles through residential and historic land.
- April 16, 2024: Early in the morning near Piedmont Fayette Hospital, several pieces of heavy construction equipment used by Brasfield & Gorrie (a lead contractor on the Atlanta Public Safety Training Center) were set ablaze. Police characterized it as suspected arson and began investigations in coordination with state and federal agencies. The act was committed in opposition of the training center, which protesters call "Cop City."
- November 15, 2022: A Fayette County high school student was arrested and charged with domestic terrorism and terroristic threats and acts after the student made 2 social media posts that were directed at 2 Fayette County schools.

3.4.4.4 Probability

Based on historic data, the probability of a terrorist incident in Fayette County is classified as unlikely (occurring every 50 years or less). However, the risk of active shooter or targeted violence events is increasing, particularly in schools and public facilities. Given the national increase in mass shootings and the growing accessibility of online extremist content, the likelihood of an active threat scenario occurring locally is higher than that of a large-scale coordinated terrorist attack. Continued population growth and higher-profile infrastructure in the county may increase exposure over time.

3.4.4.5 Impacts

Terrorism and active shooter incidents can result in severe physical, emotional, and psychological impacts. The most immediate consequences include loss of life, serious injuries, psychological trauma, and damage to property. These events can also lead to long-term community disruption, strained emergency response resources, and reduced public confidence in safety and security systems. Active shooter incidents in schools or other public spaces may have particularly devastating impacts on youth, families, and educational continuity. Beyond the physical impacts, terrorism can disrupt critical systems, delay government operations, damage reputations, and generate widespread fear within the community.

3.4.4.6 Multi-Jurisdictional Considerations

Terrorism is a county-wide concern in Fayette County, with potential targets such as schools, government offices, and public spaces present in every jurisdiction. However, urban areas like Peachtree City and Fayetteville are more susceptible due to their higher population densities, and major public venues and critical infrastructure. Further, the development of Trilith, increases potential exposure to targeted threats due to its visibility and workforce traffic. Additionally, the growth of data centers in the region introduces new challenges, as these facilities represent critical infrastructure with high-value digital assets and operational vulnerabilities that may appeal to cyber or physical threat actors. Moreover, private and charter schools within the county often have less integrated emergency coordination with the county's 911 and public safety systems compared to public schools, which could complicate response times and unified crisis communication during an active threat or emergency event.

3.4.5 Infrastructure Failure

3.4.5.1 Hazard Description

Infrastructure failure refers to the breakdown or malfunctioning of essential systems and services that support daily life, including electricity, water supply, sewage treatment, natural gas, telecommunications, and transportation networks. These failures can result from various causes such as:

- Natural Disasters: Events like hurricanes, floods, earthquakes, and wildfires can severely damage infrastructure and utilities, disrupting services due to physical destruction or power outages.
- Aging Infrastructure: Over time, infrastructure elements such as bridges, roads, and water pipes deteriorate, leading to increased risk of failure without adequate maintenance and upgrades.
- Cyber Attacks: Targeted attacks on digital systems that control utilities and infrastructure can lead to shutdowns or malfunctions in essential services like electricity and water supply.
- Technical Failures: Equipment malfunctions or failures within power plants, water treatment facilities, or telecommunications networks can disrupt services due to inherent mechanical or electrical issues.
- Human Error: Mistakes made during the operation, maintenance, or construction of infrastructure can lead to utility failures, such as cutting a major power line or improperly managing a dam.
- Terrorist Attacks: Deliberate attacks aimed at infrastructure targets can cause significant damage, intended to disrupt services and create chaos.
- Overload and Demand Surges: Infrastructure and utilities can fail when demand exceeds the capacity, such as power grids during heatwaves or water systems in drought conditions.

- Poor Planning and Management: Lack of foresight in infrastructure development and inadequate risk management can lead to vulnerabilities, exposing systems to a higher risk of failure.
- Economic Constraints: Financial limitations can lead to deferred maintenance and underinvestment in infrastructure, increasing the likelihood of failures due to outdated or worn-out equipment.

3.4.5.2 Location and Extent

Infrastructure failure is a county-wide hazard that can occur anywhere essential utilities and services are present. Key areas of concern include transportation corridors, electrical substations, water treatment facilities, major roadways and bridges, telecommunication hubs, and public service infrastructure. The extent of a failure can range from localized power outages or water disruptions to widespread system breakdowns affecting multiple jurisdictions.

3.4.5.3 Previous Occurrences

The 2024 Georgia Hazard Mitigation Strategy lists no notable previous occurrences of infrastructure failure in Fayette County While no catastrophic infrastructure failures have been recorded in Fayette County in recent years, intermittent utility service disruptions, such as power outages from severe weather, localized water main breaks, or telecommunications failures, have occurred. For example, ice storms and thunderstorms have caused temporary power loss and flooding has occasionally disrupted transportation infrastructure. These incidents are typically short-term and quickly resolved.

3.4.5.4 Probability

The probability of infrastructure failure in Fayette County is extremely likely (occurring every 1 year or more), but these incidents are usually minor disruptions.

3.4.5.5 Impacts

Infrastructure failure can disrupt essential services such as electricity, water, wastewater, transportation, and communications, leading to significant public safety and economic impacts. Residents may experience loss of heating or cooling, water shortages, or inability to access emergency services. Businesses and healthcare facilities may also face interruptions, affecting commerce and health outcomes. In prolonged cases, failures can lead to public health concerns, especially if sanitation systems are impacted or water becomes unsafe to consume.

3.4.5.6 Multi-Jurisdictional Considerations

Infrastructure failure can affect all jurisdictions in Fayette County, but impacts may differ based on system design, capacity, and location. Urban areas, such as Fayetteville and Peachtree City, typically rely on more complex and interconnected infrastructure systems, increasing their vulnerability to cascading failures. In contrast, rural areas, such as Woolsey and Brooks, may have fewer systems in place, but they also face longer service restoration times and limited backup resources

3.4.6 Emergent Infectious Disease

3.4.6.1 Hazard Description

An infectious disease is an illness caused by pathogens such as bacteria, viruses, fungi, or parasites. Diseases such as influenza, pertussis, tuberculosis, and meningitis are examples of infectious diseases that can pose a threat to a community's population. The spread of these

diseases can occur through multiple pathways, including direct contact between individuals, airborne respiratory droplets, ingestion of contaminated food or water, bites from vector organisms like mosquitoes, or interaction with infected animals.

Emergent infectious diseases are those that are appearing in a population for the first time. Re-emergent infectious diseases are those that may have previously existed in a population, but levels had dropped to the point where it was no longer considered a public health problem until levels once again began increasing.

The extent of an infectious disease can be measured based on the following classification:

- An isolated case of a high-consequence disease: One or more cases of a particularly serious disease (e.g., botulism), whose further spread is unlikely, but place significant strain on the resources required to isolate and provide treatment for the infected.
- Institutional outbreak: Two or more cases of similar illness with a common exposure at an institution (e.g., a school, nursing home, correctional facility).
- Epidemic: An increase, often sudden, in the number of cases of a disease above what is normally expected in that population in that area.
- Pandemic: An epidemic that has spread over several countries or continents, usually affecting many people.

Novel transmissible diseases, diseases caused by newly identified pathogens, pose significant concern due to their ability to emerge and spread within human populations unexpectedly, reaching pandemic levels. The rise of novel transmissible diseases can be attributed to various factors, including shifts in human behaviors, urban development, deforestation, changes in climate, extensive global travel, and human encroachment into previously undisturbed natural areas. Key features of these diseases include:

- Emergence of a New Pathogen or Strain: Often, novel diseases arise from a pathogen or a new strain of a known pathogen that humans have not encountered before. These can emerge through genetic changes, transmission from animals to humans (zoonotic transmission), or when a pathogen enters a new area where it was not previously found.
- Capability for Human-to-Human Transmission: Novel diseases can spread among humans via various means such as direct physical contact, airborne droplets, contact with contaminated objects, and other transmission routes.
- Challenges in Control: The novelty of these diseases means there may be little to no pre-existing immunity in the human population, presenting significant hurdles for public health systems in terms of monitoring, diagnosing, managing, and curbing the spread of the disease.

3.4.6.2 Location and Extent

Emergent infectious diseases represent a county-wide hazard with the potential to affect both human and animal populations. Human disease outbreaks can occur anywhere people live, work, and gather. Locations of heightened concern include schools, long-term care facilities, hospitals, public buildings, and densely populated areas.

In addition to human health risks, animal-borne diseases, such as Avian Influenza or other zoonotic illnesses, pose a significant threat, particularly in rural and agricultural areas. Fayette County's agricultural economy includes numerous poultry, livestock, and equine operations that could be vulnerable to outbreaks. Animal diseases can spread through direct contact, contaminated feed, water sources, or migratory wildlife, and often require aggressive containment measures such as quarantines, mass culling, and transport restrictions.

The extent of disease spread may range from isolated institutional outbreaks to widespread community transmission or even global pandemics, depending on the pathogen and public health response capacity.

3.4.6.3 Previous Occurrences

Fayette County has experienced several significant emergent infectious disease events in recent decades with notable events including:

- H1N1 Swine Flu: The 2009 to 2010 H1N1 Swine Flu pandemic affected the Central Georgia region, with 1,286 confirmed cases and 33 deaths statewide. The disease primarily impacted individuals between the ages of 5 and 29, resulting in a mortality rate of approximately 2.5%, slightly below that of the 1918 to 1919 Spanish Flu pandemic.
- COVID-19: The 2019 to 2020 COVID-19 pandemic, caused by the novel coronavirus SARS-CoV-2, spread rapidly across the globe. As of March 27, 2024, the Georgia Department of Public Health reported 24,275 confirmed cases in Fayette County with 344 confirmed deaths and an additional 58 probable deaths.

3.4.6.4 Probability

The probability of future emergent infectious disease outbreaks in Fayette County is likely (occurring every 5 to 20 years). Given the continued global movement of people and urban development, the conditions that lead to novel disease emergence are expected to persist.

3.4.6.5 Impacts

Unlike other most other hazards, infectious disease events have limited impacts on infrastructure, but the hazard has significant short-term and long-term effects on people, animals, the economy, and operations. Major impacts include:

- Immediate health consequences, including widespread illness and increased mortality rates.
- Post-recovery health issues such as long-term organ damage or chronic conditions.
- Mental health challenges including post-traumatic stress disorder (PTSD), depression, and anxiety disorders.
- Social disruption due to isolation and quarantine measures, as well as the need for social distancing.
- Economic slowdown due to decreased consumer spending, mandated business closures, and disrupted workforce participation.
- Strains on healthcare resources such as hospital beds, medical staff, and emergency services.
- Immediate closures of educational institutions and shifts to online learning with potential long-term educational gaps.
- Loss of livestock or poultry due to disease outbreaks, including required culling or quarantining of affected populations.
- Disruption to agricultural supply chains, including feed, labor, and product distribution.
- Significant financial losses to local farmers and agriculture businesses.
- Increased burden on animal health systems, including veterinary services and regulatory oversight.

3.4.6.6 Multi-Jurisdictional Considerations

Emergent infectious disease risk is distributed across all jurisdictions in Fayette County; however, the nature and scale of potential impacts vary based on population density, available healthcare infrastructure, and economic activity.

Urban jurisdictions such as Fayetteville and Peachtree City face greater potential for widespread transmission due to higher population densities, large school systems, long-term care facilities, and concentrations of commercial and public gathering spaces. These areas also host key healthcare infrastructure, which plays a critical role in detection, treatment, and containment but can become quickly overwhelmed during a widespread outbreak.

In contrast, Brooks, Woolsey, and rural portions of unincorporated Fayette County may experience fewer cases due to lower population density but face other challenges such as limited access to medical services, longer response times, and reduced public health staffing. These areas also contain much of the county's agricultural activity, making them more susceptible to economic disruption in the event of an animal disease outbreak.

3.4.7 Cyberattack

3.4.7.1 Hazard Description

A cyberattack is an offensive action that targets computer information systems, infrastructures, computer networks, or personal computer devices, using various methods to steal, alter, or destroy data or information systems. These attacks can be launched by individuals or groups with malicious intent to exploit vulnerabilities for various reasons, such as financial gain, espionage, personal grudges, or to disrupt services. Cyberattacks can take many forms, including viruses, worms, trojan horses, ransomware, phishing, Denial of Service attacks, and Advanced Persistent Threats. Although cybersecurity incidents occur almost daily, the efficacy of the "threat actors" or type of attacks, can vary significantly and be classified into three categories:

- Hacktivists and Petty Criminals: Constitute most cyber-attacks on the internet, typically conducted by single individuals or small unaffiliated groups. These unstructured attacks exploit unprotected targets with known vulnerabilities and can be completely automated, using little technical skill and sophistication.
- Organized Crime and Cyberterrorists: Target a specific person or entity for financial gain, intellectual property, or blackmail. These structured attacks, for instance a Distributed Denial-of-Service or intellectual property theft, tend to be more organized and planned, and often rely on insider knowledge.
- Sophisticated Nation States: Although fewest in number, these adversaries conduct reconnaissance over long periods of time, with extreme preparation and organization. These highly structured attackers use multiple methods of reconnaissance and multiple attack techniques to achieve their goal that may combine a physical attack with a cyber incident.

3.4.7.2 Location and Extent

The entirety of Fayette County is vulnerable to cyberattacks, especially given the pervasive use of the internet and connected devices in individual, business, and government capacities. The severity of cyberattacks can range widely with some attacks affecting an individual to other attacks spanning the entire county or broader region.

3.4.7.3 Previous Occurrences

The 2024 Georgia Hazard Mitigation Strategy provides a subset of notable cyberattacks that occurred in the State. The list does not specify the affected jurisdictions, but includes the following for the entire State:

- Colonial Pipeline Attack (April 2021): Shut down the largest fuel pipeline in the US for 5 days, causing panic buying of fuel, leading to fuel shortages and outages in many areas. The supply chain took several weeks to recover.
- 15 Ransomware Attacks
- 5 Office 365 Compromises
- 3 Website Defacements
- 2 Network Compromises
- 2 Supply Chain Attacks
- 1 Third Party Vendor
- 1 End Point Compromise
- 1 Typo Squatting

Within Fayette County, in July 2023, Fayette County Fire and Emergency Services experienced a data breach involving its billing services provider, EMS Management and Consultants (EMS | MC). The breach was linked to a zero-day vulnerability in the MOVEit Transfer software by Progress Software Corp., which EMS | MC utilized. An unauthorized actor exploited this vulnerability on May 30, 2023, accessing a server and extracting data. Subsequent investigations revealed that 94 files containing sensitive information of 2,625 individuals associated with Fayette County Fire and Emergency Services were compromised. While there was no evidence of misuse of the compromised information, EMS | MC notified affected individuals.

3.4.7.4 Probability

Cyberattacks are extremely likely (occurring every 1 year or more), but are most prevalent on the individual-level. While cyber security is advancing, cyberattacks are still expected to persist at the same or an increased rate because of the combination of (1) the continued evolution of cyber criminals and advancement in sophisticated techniques and (2) the increased reliance on computers, devices, email, the internet, and other technologies.

3.4.7.5 Impacts

Cyberattacks can have significant operational and financial impacts. At any level, a breach in cybersecurity could lead to the exposure of sensitive data, affecting not only operations but also privacy and security – this is especially concerning for governmental, medical, and financial institutions. For instance, a successful attack on municipal databases could reveal personal information, financial records, or confidential communications, jeopardizing the integrity of the county's data systems and eroding public trust in the county's ability to safeguard information. Additionally, a cyberattack could disrupt the delivery of critical services such as emergency response and utility management.

The economic impact of a cyberattack on Fayette County's economy could be substantial, particularly if it affects the service sector, which includes education, healthcare, and financial services. Businesses may suffer due to compromised data, theft of intellectual property, or operational downtime. The costs associated with responding to a cyberattack, including mitigation, increased cybersecurity measures, and reputational damage control, can be significant. For small businesses, which may lack the resources for sophisticated cybersecurity defenses, the impact can be devastating, potentially leading to closure and job losses.

3.4.7.6 Multi-Jurisdictional Considerations

Cybersecurity threats span all jurisdictions within Fayette County equally due to the interconnected nature of digital systems and internet-based services. Government agencies, school districts, utilities, emergency services, and individuals in each jurisdiction rely on networked platforms for communication, operations, and service delivery, making them vulnerable to a wide range of cyber threats. Because cyber threats are not constrained by geographic or jurisdictional boundaries and can target systems regardless of physical location, there are no meaningful multi-jurisdictional considerations in terms of varying exposure or vulnerability.

3.5 Vulnerability Assessment

Requirement 201.6(c)(2)(ii)

The goal of profiling the location, extent, previous occurrences, probability, and impacts of each of the above hazards is to be able to summarize the vulnerabilities of Fayette County, so the planning team can develop a strategy to increase the county's resiliency. Based on the analysis above, the LHMPC identified the vulnerabilities, written as problem statements, in Table 3-26.

Table 3-26. Vulnerability assessment results performed by the LHMPC

Hazard(s)	Vulnerability Problem Statement
Thunderstorm	Residents may be caught outdoors with little warning of approaching storms. Residents may be unfamiliar with available early warning systems and weather apps.
Thunderstorm; Winter Storm; Tornado; Tropical Cyclone; Infrastructure Failure	Prolonged power outages can present significant problems, such as impacting essential services, local business, and the well-being of individuals.
Thunderstorm; Winter Storm; Tornado; Tropical Cyclone	Downed trees pose significant problems due to safety hazards, property damage, power lines, economic impacts, and possible environmental impacts. Furthermore, some tree removal on right-of-way areas may require strategic aerial cutting.
Winter Storm	Winter storms could pose problems due to accumulation of snow, sleet, or rain causing significant hazards to road safety and mobility, leading to increased traffic accidents and road maintenance issues.
Flooding	Some culverts throughout Fayette County are undersized, resulting in frequent localized flooding, posing risks to transportation access, public safety, and adjacent properties.
Flooding	Critical facilities, including the water intake at Flint River and the City of Fayetteville's wastewater treatment plant, are located within the 100-year floodplain.
Tornado	All residents do not have access to a suitable shelter location, particularly those in vulnerable housing, from tornadic activity.
Drought; Wildfire	Wildfires can place significant demands on staff resources while essential services must continue uninterrupted; access to wildfires could endanger emergency responders and residents.
Drought	Decreased water availability under drought conditions could force local jurisdictions to rely on alternate water sources, such as wells.
Wildfire	Livestock owners may lack the resources or infrastructure needed to safely relocate animals during a wildfire event.

Earthquake	Earthquakes can damage underground infrastructure, which can disrupt essential services, creating safety and health issues for the public.
Earthquake	Earthquakes can cause structural damage to critical facilities, disrupting delivery of essential services.
Earthquake	Earthquakes can damage safety systems in industrial facilities, increasing potential for hazardous conditions or releases.
Extreme Temperature	Vulnerable populations, such as older adults, residents without adequate warming and cooling systems, and residents with underlying health conditions, may be more susceptible to temperature extremes due to increased risk of heat- or cold-related illness, hospitalization, or mortality.
Extreme Temperature	During extreme temperatures, pets are vulnerable to serious health risks, such as heatstroke, dehydration, hypothermia, and frostbite. Pets can also suffer from burned paw pads, ingestion of harmful substances, like ice melt products, and overexertion.
Hazardous Material	Hazardous material incidents, including releases during railroad derailments, require coordinated, multi-jurisdictional responses to prevent significant consequences.
Hazardous Material; Transportation Incident	Transportation incidents involved hazardous material can cause significant short and long-term environmental and health consequences to the community.
Dam Failure	Multiple dams located in Fayette County are vulnerable to failure based on "poor" condition ratings, including Kozisek Lake Dam and Margaret Phillips Lake Dam.
Dam Failure	Multiple dams located throughout the county are under private ownership, making mitigation activity and enforcement difficult.
Transportation Incident	Transportation incidents can cause a significant increase in traffic congestion.
Terrorism	A terrorist attack has the potential to completely overwhelm emergency and medical services so that effective assistance is unable to be provided until the incident is stabilized.
Terrorism	A terrorist impact may cause significant disruption of infrastructure and services well past the initial incident. This disruption may hinder recovery.
Terrorism	Private schools and charter schools within the county often have less integrated emergency coordination with the county's 911 and public safety systems compared to public schools, which could complicate response times and unified crisis communication during an active threat or emergency event.
Infrastructure Failure	An infrastructure failure event could result in the simultaneous loss of essential services such as water and sewer, flooding of critical systems, and limited access for emergency response and residents, severely disrupting daily operations and public health across affected areas.
Emergent Infectious Disease	Fayette County is located near Hartsfield-Jackson Atlanta International Airport, making the county vulnerable to transmissions from foreign sources.
Emergent Infectious Disease	In the event of a large-scale infectious disease outbreak, local healthcare resources are likely to be overwhelmed, and regional mutual aid may be limited or unavailable, hindering the ability to provide both immediate and long-term care for affected individuals.
Emergent Infectious Disease	A major outbreak could significantly disrupt the local economy by limiting workforce availability, supply chains, and transportation,

	ultimately restricting community access to essential services, employment, and food security.
Cyberattack	Fayette County utilizes outdated systems, often unsupported by vendors, creating easily exploitable security vulnerabilities.
Cyberattack	Fayette County employees are frequently susceptible to social engineering, acting as easy entry points for attackers.
Cyberattack	County governments, including Fayette County, hold high-value sensitive data and maintain critical services, making them prime targets for cyberattacks.

Chapter 4 Hazard Mitigation Strategies

4.1 Summary of Updates for Chapter 4

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Fayette County Hazard Mitigation Plan 2020.

Chapter 4 Section	Updates
Capability Assessment	New section – not in 2020 Plan
Goals and Objectives	Verbiage updated
Identification and Analysis of Mitigation Techniques	Verbiage updated Updated mitigation action tables to reflect changes since the 2020 Plan and new actions for this Plan

4.2 Capability Assessment

Requirement 201.6(c)(3)

Each participant in Fayette County brings a diverse and robust set of tools to support mitigation planning and implementation. These tools include established regulations, staffing structures, planning documents, and funding mechanisms. Together, they create a framework of institutional knowledge and operational readiness that enables each jurisdiction to take proactive steps toward risk reduction.

This capability assessment serves not only as a record of what is currently in place but also as a strategic guide for aligning mitigation goals with available resources. For example, all jurisdictions implement land use planning tools such as zoning ordinances, subdivision regulations, and stormwater management requirements, which provide a legal basis for regulating development in flood-prone or otherwise hazardous areas. Building codes adopted across the County are based on Georgia's state minimum codes, ensuring new construction and substantial improvements meet minimum safety standards related to structural integrity, fire resistance, and flood resilience. These building codes and development ordinances are enforced locally by staff and supported by technical personnel.

Table 4-1 documents the existing capabilities within Fayette County with notes, as applicable. The assessment illustrates that most jurisdictions also have access to specialized plans, such as Capital Improvement Plans and Comprehensive Plans, that directly support hazard mitigation by guiding infrastructure investments, managing growth, and sustaining critical services during disasters. Moreover, enforcement and planning duties are supplemented by qualified staff across jurisdictions, including emergency managers, civil engineers, and geographic information systems (GIS) specialists – roles essential for both long-range planning and real-time disaster response. Finally, the availability of financial resources, including general funds, Special Purpose Local Option Sales Tax (SPLOST) revenues, federal mitigation grants, and capital improvement funds, ensures jurisdictions can finance mitigation priorities. Education and outreach capabilities, through social media, school programs, and public safety apps, further strengthen community engagement in hazard awareness and preparedness.

Taken together, these capabilities demonstrate that each participating jurisdiction is well-positioned to support and implement mitigation strategies, particularly through the use of existing regulatory, administrative, and technical infrastructure, but the following section

expands on this table by describing keyways the County and its municipalities can expand and improve the identified capabilities to achieve mitigation.

Table 4-1. Capability assessment for Fayette County

Capability Type	In Place	Notes
Plans		
Capital Improvements Plan	Yes	
Comprehensive/Master Plan	Yes	
Continuity of Operations Plan	Yes	Plan is more departmental based, not centralized
Economic Development Plan	Yes	
Land Use Plan	Yes	
Local Emergency Operations Plan	Yes	
Stormwater Management Plan	Yes	
Transportation Plan	Yes	On county-level with input from all municipalities – Safety Action Plan
Land Use Planning and Ordinances		
Building Code	Yes	Based on state minimum codes
Flood Insurance Rate Maps	Yes	
Floodplain Ordinance	Yes	
Substantial Damage Plan	Yes	
Stormwater Ordinance	Yes	
Subdivision Ordinance	Yes	
Zoning Ordinance	Yes	
Administrative		
Chief Building Official	Yes	Position exists for all jurisdictions or covered by Fayette County Some jurisdictions use contractors
Civil Engineer	Yes	Position exists for all jurisdictions or covered by Fayette County
Community Planner	Yes	Position exists for all jurisdictions or covered by Fayette County
Emergency Manager	Yes	Position exists for all jurisdictions or covered by Fayette County
Floodplain Administrator	Yes	Position exists for all jurisdictions or covered by Fayette County
GIS Coordinator	Yes	Position exists for all jurisdictions or covered by Fayette County
Planning Commission	Yes	Recommending body
Technical		
Grant Writing	Yes	Done internally – no dedicated grant writers
GIS Analysis	Yes	
Financial		
Capital Improvements Project Funding	Yes	
General Fund	Yes	
Special Purpose Local Option Sales Tax (SPLOST)	Yes	
Federal Funding Programs	Yes	Most frequent use of FEMA grants

Capability Type	In Place	Notes
Impact Fees for New Development	Yes	Restricted to fire services at county-level (not available for hazard mitigation use) Restricted to use for fire services, transportation, police, and parks and recreation for Fayetteville and Peachtree City
Stormwater Utility Fee	Yes	Only available for Fayetteville and Peachtree City
Education and Outreach		
Community Newsletters	Yes	
Hazard Awareness Campaigns	Yes	Storm Ready through 2027 Fayette County Fire, EMS, EMA app
Social Media	Yes	
School Programs	Yes	Local law enforcement works with schools to run drills

4.2.1 Expansion and Improvement of Capabilities

While the County's current capabilities are extensive and varied, the mitigation process includes continual expansion and improvement of mitigation capabilities to better protect residents, infrastructure, and natural resources from the increasing threats posed by hazards.

The County and its municipalities can expand and improve the identified capabilities for achieving mitigation as follows:

- Enhance Planning and Regulatory Capabilities
  - Work to strengthen the collaboration and consistency of planning documents across jurisdictions by promoting regional planning workshops and joint mitigation exercises.
  - Explore the adoption of building codes that exceed the state minimums, while acknowledging the current resistance from developers and builders. This may involve education campaigns to communicate the long-term cost savings and safety benefits of more stringent codes.
- Strengthen Administrative and Technical Capabilities
  - Work toward a more centralized and coordinated GIS capability across all jurisdictions to streamline hazard mapping, vulnerability analysis, and data-sharing for emergency planning and response.
  - Increase staffing in key technical and administrative roles, especially within the Building Official's Office, to enhance the enforcement of codes and timely review of development applications in high-risk areas.
- Increase Financial Capabilities
  - Encourage the Board of Commissioners to shift from a reactive to a proactive funding model by identifying long-term investment strategies for resilience.
  - Place a greater emphasis on prioritizing and funding stormwater improvements, acknowledging that current resources are insufficient to address the backlog of drainage and infrastructure concerns.

4.3 Goals and Objectives

Requirement 201.6(c)(3)(i)

Ensuring that state and local governments, public-private partnerships, and residents can recognize the results of mitigation efforts requires setting goals and strategies that are both realistic and achievable. The mitigation goals and objectives along with the risk assessment 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 Fayette County have largely remained the same since the last Plan update in 2025; however, the Plan now includes a greater emphasis on addressing technological hazards, particularly cyberattacks, in response to increasing reliance on digital infrastructure and recent incidents that have exposed new vulnerabilities. This expanded focus ensures that the County's mitigation strategy reflects evolving threats alongside traditional hazards.

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
GOAL 5: Respond promptly, appropriately, and efficiently in the event of natural or technological hazards

The below objectives state a more specific outcome that Fayette County strives to accomplish over the next 5 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 Fayette 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: Minimize the impacts on local citizens, industry, and infrastructure of a technological hazard
OBJECTIVE 8: Implement additional protective measures and capabilities in response to human-caused incidents
OBJECTIVE 9: Increase public awareness of local human-caused hazards and proper response to those hazards

4.4 Identification and Analysis of Mitigation Techniques

Requirement 201.6(c)(3)(ii)

In updating Fayette 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):

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

4.4.1 Review of Previous Mitigation Actions

Requirement 201.6(d)(3)

For this Plan update, the Local Hazard Mitigation Planning Committee (LHMPC) was provided with a complete list of previously identified mitigation actions and asked to review the status of the actions. Each action was assigned one of the following status values:

- Completed: The action has been fully completed.
- Delete: The action has not been completed and has been removed from consideration (reasoning provided in table).
- In progress, carry over: The action is in progress, but has not been fully completed and will be carried over to this Plan.
- Not completed, carry over: The action was not started and will be carried over to this Plan.
- Not completed, carry over and modify: The action was not started and will be carried over to this Plan, but with modifications (reasoning provided in table).
- Ongoing, carry over: The action is completed and has become an ongoing activity or capability.

Table 4-2 lists the mitigation actions from the 2020 Plan with their current statuses.

4.4.2 Mitigation Actions

Requirement 201.6(c)(3)(iv)
Requirement 201.6(c)(3)(iii)

An updated list of mitigation actions (Table 4-3) was developed by combining "In progress, carry over", "Not completed, carry over", "Not completed, carry over and modify" (after applicable revisions), and "Ongoing, carry over" actions from the 2020 Plan with newly identified mitigation actions.

Table 4-3 provides specific details concerning each identified mitigation action, including the expected time frame, cost, assigned lead agency, assigned support agency (if applicable), and potential funding sources. The priority of each mitigation action was determined 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.

Table 4-2. Mitigation actions included in the 2020 Plan with current statuses

2020 ID	Mitigation Action	Lead and Supporting Agency, Department, Organization *Jurisdiction*	Progress and Status (for 2025 Plan)	Notes
OBJECTIVE 1: Reduce damage to property and loss of life through the utilization of preventative activities				
1.a	Develop a strategy for the reduction of flooding in the Tinsley Mill Condominium Complex	Peachtree City Engineering *Fayette County and City of Peachtree City*	Not completed, carry over	
1.b	Acquire flood prone property in Fayette County, Peachtree City, Fayetteville, and Tyrone	Fayette County, Peachtree City, Fayetteville, and Tyrone Environmental Management *Fayette County, City of Peachtree City, City of Fayetteville, and Town of Tyrone*	Ongoing, carry over	Progress has been completed since the last Plan, including acquisitions on Honeysuckle Lane, Emerald Lake
1.c	Continue to enforce floodplain management requirements, including regulating new construction in SFHA	Fayette County and Municipal Environmental Management *All Jurisdictions*	Ongoing, carry over	
1.d	Waterproof homes in the City of Fayetteville that collect water and cause moisture problems for residents	Property Owners and City of Fayetteville *City of Fayetteville*	Delete	Delete as not within Jurisdiction's authority
1.e	Implement drainage project at Stonewall Apartments in Fayetteville	Property Owner *City of Fayetteville*	Not completed, carry over	
1.f	Strictly enforce the countywide outdoor burning ban from May to October to prevent wildland fires	County and Municipal Fire Departments *All Jurisdictions*	Ongoing, carry over	
1.g	Establish a system for recording hazard mitigation plan monitoring for inclusion in the next Plan update	Fayette County EMA *All Jurisdictions*	Not completed, carry over and modify	Modify to also include awareness of grant availability
1.h	Perform study of stormwater needs at Booker Avenue to determine best course of action to divert stormwater away from homes	Fayetteville Public Services *City of Fayetteville*	Completed	Study and work have been completed
1.i	Perform engineering study on Fenwyck Commons Draining Project	Fayette Public Services and Private Owners *City of Fayetteville*	Completed	Recommendations were provided to HOA and identified as private property concern
1.j	Maintain and enforce the Erosion and Sediment Control Act	Fayette County Public Works *All Jurisdictions*	Ongoing, carry over	

OBJECTIVE 2: Minimize the damage to property and loss of life through property protection measures				
2.a	Install generator and transfer switch at Tyrone Municipal Complex	Tyrone City Council *Fayette County and Town of Tyrone*	Completed	
2.b	Encourage retrofitting of existing and future public schools with special high wind resistant film for doors and windows	Fayette County BOE *All Jurisdictions*	Not completed, carry over	
2.c	Encourage retrofitting of existing and future county and municipal buildings with special high wind resistant film for doors and windows	Fayette County EMA and BOC *All Jurisdictions*	Not completed, carry over	
2.d	Purchase backup mobile generator and automated transfer switch for the City of Fayetteville Public Services Department	Fayetteville Public Services Department *City of Fayetteville*	Not completed, carry over	Funding has been acquired
2.e	Purchase backup mobile generator and enclosed trailer with lighting system for the Fayette County School System	Fayette County BOE *All Jurisdictions*	In progress, carry over	Completed for most schools, but not all
2.f	Upgrade the 20-year old generator at Fayette County Public Works and add transfer switch	Fayette County Water System *All Jurisdictions*	In progress, carry over	Grant has been acquired
2.g	Acquire a mobile backup generator for the Town of Tyrone	Tyrone Police Department and Public Works *Town of Tyrone*	Not completed, carry over	
2.h	Install generator at Station 91 in Fayetteville	Fayetteville Fire Department and EMA *City of Fayetteville*	Completed	
2.i	Install generator at Real Life Center to allow it to be able to accept donations during a disaster event	Real Life Center *All Jurisdictions*	Completed	
2.j	Install a generator and automatic transfer switch for Piedmont Fayette Central Plant	Piedmont Fayette *All Jurisdictions*	Not completed, carry over	
2.k	Replace current hospital generator and ATS at Piedmont Fayette	Piedmont Fayette *All Jurisdictions*	Not completed, carry over	
2.l	Purchase and install a generator for any needed location in the Piedmont Fayette campus and any accompanied and identified ATS	Piedmont Fayette *All Jurisdictions*	Not completed, carry over	
2.m	Purchase ATS to connect to portable generator as backup for existing generator	Piedmont Fayette *All Jurisdictions*	Not completed, carry over	

2.n	Build a tornado safe room at Fayette County Public Works facility	Fayette County Public Works and EMA *All Jurisdictions*	Not completed, carry over	
OBJECTIVE 3: Minimize the damage to property and loss of life through natural resource protection activities				
3.a	Implement a corrective action plan to upgrade/remove mobile home wastewater treatment systems located within the SFHA on both Morning and Whitewater Creeks	Fayette County Environmental Management *Fayette County*	Not completed, carry over	
3.b	Dredge portions of Starr's Mill pond to help reduce flooding at historic Starr's Mill and improve flow of water to the raw water pump station that provides water to the Crosstown Water Treatment Plant	Fayette County Water System *Fayette County*	Not completed, carry over and modify	Modify to only dredge as intake at Starr's Mill no longer exists
3.c	Dredge Pye Lake to increase flood control	Fayetteville Engineering *City of Fayetteville*	Not completed, carry over	
3.d	Perform creek bank stabilization project to control erosion and reduce damage to buildings	Fayette County Engineering and Property Owner *City of Fayetteville*	Not completed, carry over and modify	Modify to include county-owned property
3.e	Design and implement stabilization projects at eroding bank areas in the Lake Peachtree Watershed	Peachtree City Stormwater *Fayette County and City of Peachtree City*	Not completed, carry over	
3.f	Restore stream in Hunters Glen subdivision to decrease erosion	Fayetteville Public Services and Fayette County Environmental Management *Fayette County and City of Fayetteville*	Delete	Delete as not within jurisdiction's authority
3.g	Restore stream in Oak Street basin to decrease erosion and minimize flooding	Fayetteville Public Services and Fayette County Environmental Management *Fayette County and City of Fayetteville*	In progress, carry over	
3.h	Create a large regional retention pond at the Walker Concrete Plant site on West Georgia Avenue	Fayetteville Public Services *City of Fayetteville*	Not completed, carry over	
3.i	Purchase a generator for Animal Services	Fayette County Animal Services and EMA *All Jurisdictions*	Not completed, carry over	
3.j	Install lightning rods at critical facilities	Fayette County EMA and Critical Facility Operators *All Jurisdictions*	Not completed, carry over	

OBJECTIVE 4: Reduce damage to property and loss of life through the utilization of structural mitigation projects				
4.a	Implement a corrective action plan to upgrade Camp Creek culverts under Redwine Road	Fayette County Environmental Management *Fayette County*	Not completed, carry over	
4.b	Install adequate culverts beneath Roberts Road	Fayette County Road Department *Fayette County*	Not completed, carry over	
4.c	Replace two 8-foot diameter CMPs on Dogwood Trail at Flat Creek	Fayette County Road Department *Fayette County*	Completed	
4.d	Replace existing culvert on Silver Leaf Drive at Unnamed tributary	Fayette County Road Department *Fayette County*	Completed	
4.e	Replace triple 6-foot diameter CMPs on Darren Drive at Shoal Creek with concrete pipes or box culverts	Fayette County Road Department *Fayette County*	In progress, carry over	
4.f	Build a tornado shelter on or near station 93 for Hospital, GMC, and Pinewood Studios	Fayette County EMA *All Jurisdictions*	Delete	Delete as specified locations are the responsibility of private owners and the proposed location of the shelter would be ineffective given the that the locations are too spread out
4.g	Build a safe room at the new fire station in Fayetteville	Fayette County EMA *Fayette County and City of Fayetteville*	Delete	Delete as the fire station is built to a Risk Category 4 Level, so a shelter is unnecessary
4.h	Replace existing pipes and add additional drainage structures at Lawson Lane in Northridge subdivision	Fayette County Environmental Management and Public Works *Fayette County*	Completed	
4.i	Replace undersized popes with double box concrete culverts on Morning Dove Drive in Quail Hollow Subdivision	Fayette County Stormwater Utility and Public Works *Fayette County*	Completed	
4.j	Replace pipes with appropriately sized double box concrete culverts on Callaway Road	Fayette County Environmental Management and Public Works *Fayette County*	In progress, carry over	
4.k	Upgrade street culverts at the intersection of Jefferson Avenue and Hillsdale Drive	Fayetteville Engineering *City of Fayetteville*	Not completed, carry over	
4.l	Replace failing and undersized storm drains under five road segments to prevent flooding and road failure	Peachtree City Stormwater *City of Peachtree City*	Completed	

4.m	Complete Deep Forest drainage project by adding piping and establishing a drainage ditch on Oak Street and expand the capacity of the drainpipe at Deep Forest Lane and Oak Street	Fayetteville Public Services *City of Fayetteville*	In progress, carry over	
4.n	Replace undersized culvert on Jefferson Avenue	Fayetteville Public Services *City of Fayetteville*	In progress, carry over	
4.o	Replace undersized culvert on Hillsdale Drive	Fayetteville Public Services *City of Fayetteville*	Not completed, carry over	
4.p	Replace corrugated metal pipe on Hillsdale Drive at Cottonwood Drive	Fayetteville Public Services *City of Fayetteville*	Not completed, carry over	
4.q	Install 3 corrugated metal pips under Pye Court upstream of Pye Lake (Pye Ct is the only means of egress for 7 residential homes)	Fayetteville Public Services *City of Fayetteville*	Not completed, carry over	
4.r	Install two corrugated metal pipes under Woodgate Drive	Fayetteville Public Services *City of Fayetteville*	Completed	
4.s	Line 1,500 feet of drainage pipe along Carriage Lane	Fayetteville Public Services *City of Fayetteville*	Not completed, carry over	
4.t	Lower Heritage Lake Dam to prevent flooding of homes on the lake during heavy rain events	Fayetteville Public Services *City of Fayetteville*	Completed	
4.u	Replace drainage system under Honeysuckle Lane; residents upstream and downstream will also need to replace their systems	Fayetteville Public Services and Private Homeowners *City of Fayetteville*	In progress, carry over	
4.v	Increase the size of the Matthew and Friendship Road culverts	Fayette County Public Works *Fayette County*	In progress, carry over	
4.w	Repair Country Lakes subdivision water system and drainage issues	Country Lakes HOA *Fayette County*	Not completed, carry over	
4.x	Build a safe room at the Fayetteville City Hall and park area	Fayette County EMA *City of Fayetteville*	Not completed, carry over and modify	Modify to consolidate with other safe room actions and include all parks
4.y	Build a safe room at McCurry Park	Fayette County EMA *City of Fayetteville*	Not completed, carry over and modify	Modify to consolidate with other safe room actions and include all parks
4.z	Replace two 72-inch diameter (50'L) corrugated metal pipes under Woods Road	Public Works *Town of Brooks*	In progress, carry over	

OBJECTIVE 5: Increase the ability of Fayette County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures				
5.a	Acquire additional barricades and other road closure resources for emergency road closures	Fayette County BOE, EMA, City of Fayetteville Police and Public Works, and City of Peachtree City Police and Public Works *All Jurisdictions*	In progress, carry over	Progress has been completed since the last Plan, including in City of Fayetteville
5.b	Equip all County and Municipal recreation parks with adequate lightning detection devices	Fayette County and Municipal Recreation Departments and EMA *All Jurisdictions*	In progress, carry over	Progress has been completed since the last Plan, including weather station at City Hall and Fayette County High School
5.c	Obtain off-road capable vehicles to include a 4x4 truck and/or ATVs for the Town of Tyrone	Tyrone Police Department *Town of Tyrone*	Completed	
5.d	Purchase 4x4 truck and/or ATV for the City of Fayetteville	Fayetteville Public Services *City of Fayetteville*	Completed	
5.e	Purchase mobile electronic signage for Fayette County and municipalities of Peachtree City, Fayetteville, and Tyrone	Fayette County EMA and Public Safety Agencies in Each Jurisdiction *All Jurisdictions*	In progress, carry over	
5.f	Acquire diesel and gasoline storage tanks for the Tyrone Police Department	Tyrone Police Department *Town of Tyrone*	Completed	
5.g	Establish a CERT Team within the Town of Tyrone	Tyrone Police Department *Town of Tyrone*	Not completed, carry over	
5.h	Train damage assessment teams in Brooks, Fayetteville, Peachtree City, Tyrone, and Woolsey	Fayette County Public Works and EMA *All Jurisdictions*	In progress, carry over	Progress has been completed since the last Plan with County team trained
5.i	Replace sanding truck	Fayette County Public Works *All Jurisdictions*	Completed	
5.j	Replace current, older chipper	Fayette County Public Works *All Jurisdictions*	Completed	
5.k	Purchase chainsaws and other handheld equipment	Fayette County Public Works *All Jurisdictions*	Ongoing, carry over	Equipment is purchased annually
5.l	Provide snow removal training to Public Works personnel	Fayette County Public Works *All Jurisdictions*	Ongoing, carry over	Limited virtual training was completed, as well as training during the last snow storm
5.m	Develop a plan for a direct tornado strike of Public Works facility	Fayette County Public Works and EMA *All Jurisdictions*	Not completed, carry over	Modify to "Harden public buildings for all hazards,

				designate plans and safety, all essential facilities"
5.n	Develop a plan and purchase proper equipment for the disposal of deceased animal	Fayette County Public Works *All Jurisdictions*	Not completed, carry over	
5.o	Purchase LED Light stations for nighttime operations	Fayette County EMA and Public Works *All Jurisdictions*	Completed	
5.p	Purchase trucks for Right of Way clearing and assessment of arterial roads	Fayette County Public Works *All Jurisdictions*	Completed	
5.q	Purchase bucket truck for tree assessment operations	Fayette County Public Works *All Jurisdictions*	Not completed, carry over	
5.r	Purchase a livestock trailer for animal services operations	Fayette County Animal Services *All Jurisdictions*	In progress, carry over	Progress has been completed since the last Plan with animal services currently building barn
5.s	Purchase ESI Net for 911 Center	Fayette County 911 *All Jurisdictions*	In progress, carry over	Currently waiting for State contract
5.t	Purchase 40 chainsaws and safety equipment and provide training for usage	Fayette County Sheriff's Office *All Jurisdictions*	In progress, carry over	
5.u	Purchase a portable shelter for use by animal services	Fayette County Animal Services *All Jurisdictions*	Not completed, carry over	
OBJECTIVE 6: Increase public education and awareness of natural hazards				
6.a	Develop a public awareness program about the installation of lightning grounding systems on critical infrastructure, residential, and business properties	Fayette County EMA *All Jurisdictions*	Ongoing, carry over	
6.b	Maintain the campaign to promote water-saving	Fayette County Water System, Fayetteville Water Department, Various Private Water Systems, and North Metro Water Planning District *All Jurisdictions*	Ongoing, carry over	
6.c	Work with the local cable and radio providers to develop and broadcast public education on emergency preparedness annually	Fayette County Information Systems, Comcast, and EMA *All Jurisdictions*	Ongoing, carry over	

OBJECTIVE 7: Minimize the impacts on local citizens, industry, and infrastructure of a technological hazard				
7.a	Develop a Dam Emergency Action Plan for all Category I dams in Fayette County	Dam Owners and Fayette County EMA *All Jurisdictions*	In progress, carry over	Progress has been completed since the last Plan with multiple EAPs completed, but some still remain
7.b	Establish a dam safety awareness program for residents who reside in Category I dam inundation areas	Fayette County EMA *All Jurisdictions*	Ongoing, carry over	
7.c	Work closely and proactively with Georgia Safe Dams Division regarding Category II dams that have potential to become Category I	Georgia Safe Dams and Fayette County EMA *All Jurisdictions*	Ongoing, carry over	
7.d	Develop a plan and strategy for the reduction of water levels of Category I dams prior to Tropical Cyclones	Dam Owners and Fayette County EMA *All Jurisdictions*	Not completed, carry over	
7.e	Ensure Phillips Lake Dam meets Georgia Safe Dams standards to prevent failure	Fayette County Stormwater and Public Works *All Jurisdictions*	In progress, carry over	
7.f	Remove trees along the BCS Pond Dam and rebuild the dam with a proper emergency spillway (current structure is not a category I or II)	Peachtree City Stormwater Utility *City of Peachtree City*	In progress, carry over	Outlet structure and outfall have been repaired, but the dam rehab has not occurred yet
7.g	Update Castle Lake Dam infrastructure to meet current Safe Dams standards	Castle Lake HOA *Town of Tyrone*	Delete	Delete as identified as private property concern
OBJECTIVE 8: Implement additional protective measures and capabilities in response to manmade incidents				
8.a	Develop security strategies and safeguards for the containment of hazardous material at fixed facilities	Fayette County EMA *All Jurisdictions*	Ongoing, carry over	
8.b	Develop a comprehensive multi-jurisdictional railroad disaster response plan	Fayette County EMA *All Jurisdictions*	Not completed, carry over	
8.c	Hold a tabletop exercise on a railroad disaster	Fayette County EMA *All Jurisdictions*	Not completed, carry over	
8.d	Continue to do pre-planning of industry facilities with known hazardous materials	Fayette County EMA and Fire Departments *All Jurisdictions*	Ongoing, carry over	
8.e	Purchase a JetVac truck for hazardous materials cleanup and mitigation efforts	Fayette County Public Works *All Jurisdictions*	Not completed, carry over	
8.f	Purchase “low tech” vehicles that would be operational in the event of an EMP detonation	Fayette County Board of Commissioners and Municipal	Delete	Delete as likelihood does not warrant action

		Councils *All Jurisdictions*		
OBJECTIVE 9: Increase public awareness of local manmade hazards and proper response to those hazards				
9.a	Implement a public awareness campaign regarding technological hazards	Fayette County EMA All Jurisdictions	Ongoing, carry over	

Table 4-3. Updated list of mitigation actions

2025 ID	2020 ID	Mitigation Action	Lead and Supporting Agency, Department, Organization Jurisdiction	Hazard(s) Addressed	Funding Source	Estimated Cost	Completion Timeframe	Priority
OBJECTIVE 1: Reduce damage to property and loss of life through the utilization of preventative activities								
1.a	1.a	Develop a strategy for the reduction of flooding in the Tinsley Mill Condominium Complex	Peachtree City Engineering *Fayette County and City of Peachtree City*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	Staff time to develop strategy; $1.25 million to implement	30 months	Medium
1.b	1.b	Acquire flood prone property in Fayette County, Peachtree City, Fayetteville, and Tyrone	Fayette County, Peachtree City, Fayetteville, and Tyrone Environmental Management *Fayette County, City of Peachtree City, City of Fayetteville, and Town of Tyrone*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$750,000	60 months	High
1.c	1.c	Continue to enforce floodplain management requirements, including regulating new construction in SFHA	Fayette County and Municipal Environmental Management *All Jurisdictions*	Flood; Tropical Cyclone	Local general budget	Staff time	12 months	High
1.d	1.e	Implement drainage project at Stonewall Apartments in Fayetteville	Property Owner *City of Fayetteville*	Flood; Tropical Cyclone	Private funds	$100,000	60 months	Medium
1.e	1.f	Strictly enforce the countywide outdoor burning ban from May to October to prevent wildland fires	County and Municipal Fire Departments *All Jurisdictions*	Wildfire	Local general budget	Staff time	12 months	Medium
1.f	1.g	Establish a system for recording hazard mitigation plan monitoring for inclusion	Fayette County EMA *All Jurisdictions*	All Natural Hazards	Local general budget	$5,000	12 months	High

		in the next Plan update and a system for publicizing grant availability to lead and supporting agencies responsible for mitigation actions						
1.g	1.j	Maintain and enforce the Erosion and Sediment Control Act	Fayette County Public Works *All Jurisdictions*	Flood; Tropical Cyclone	Local general budget	Staff time	18 months	High
1.h	NEW	Perform Engineering study of Morning Creek for erosion stabilization	City of Fayetteville and Property Owners *City of Fayetteville*	Flood; Tropical Cyclone	FEMA/GEMA Hazard Mitigation Grants; Private funds	$60,000	48 months	Medium
OBJECTIVE 2: Minimize the damage to property and loss of life through property protection measures								
2.a	2.b	Encourage retrofitting of existing and future public schools with special high wind resistant film for doors and windows	Fayette County BOE *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$20,000 per school	48 months	Medium
2.b	2.c	Encourage retrofitting of existing and future county and municipal buildings with special high wind resistant film for doors and windows	Fayette County EMA and BOC *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$10,000 to 20,000 per building	60 months	Medium
2.c	2.d	Purchase backup mobile generator and automated transfer switch for the City of Fayetteville Public Services Department	Fayetteville Public Services Department *City of Fayetteville*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	48 months	Medium
2.d	2.e	Purchase backup mobile generator and enclosed trailer with lighting system for the Fayette County School System	Fayette County BOE *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone;	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation	$75,000	48 months	Medium

				Winter Weather	Grants; Private funds			
2.e	2.f	Upgrade the 20-year old generator at Fayette County Public Works and add transfer switch	Fayette County Water System *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	48 months	Medium
2.f	2.g	Acquire a mobile backup generator for the Town of Tyrone	Tyrone Police Department and Public Works *Town of Tyrone*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$55,000	48 months	Medium
2.g	2.j	Install a generator and automatic transfer switch for Piedmont Fayette Central Plant	Piedmont Fayette *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	FEMA/GEMA Hazard Mitigation Grants; Private funds	$100,000	60 months	Medium
2.h	2.k	Replace current hospital generator and ATS at Piedmont Fayette	Piedmont Fayette *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	60 months	Medium
2.i	2.l	Purchase and install a generator for any needed location in the Piedmont Fayette campus and any accompanied and identified ATS	Piedmont Fayette *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	FEMA/GEMA Hazard Mitigation Grants; Private funds	$300,000	60 months	Medium

2.j	2.m	Purchase ATS to connect to portable generator as backup for existing generator	Piedmont Fayette *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	24 months	Medium
2.k	2.n	Build a tornado safe room at Fayette County Public Works facility	Fayette County Public Works and EMA *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000	48 months	Medium
2.l	NEW	Acquire a generator and back-up power to a main switch gear at South Fayette Water Treatment Plant	Fayette County Water Systems *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$1.1 to 3 million	2 years	High
2.m	NEW	Acquire a portable generator to back up all pump stations and tanks	Fayette County Water Systems *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$1 million	1 year	Medium
2.n	NEW	Replace all surge suppression for major pumps and motors	Fayette County Water Systems *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$100,000	24 months	Medium
2.o	NEW	Replace and upsize all cables between electrical building and filter building at South Fayette Water Treatment Plant	Fayette County Water Systems *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone;	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$2 million	36 months	High

				Winter Weather				
OBJECTIVE 3: Minimize the damage to property and loss of life through natural resource protection activities								
3.a	3.a	Implement a corrective action plan to upgrade/remove mobile home wastewater treatment systems located within the SFHA on both Morning and Whitewater Creeks	Fayette County Environmental Management *Fayette County*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	60 months	Low
3.b	3.b	Dredge portions of Starr's Mill pond to help reduce flooding at historic Starr's Mill	Fayette County Water System *Fayette County*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$2 million	60 months	Low
3.c	3.c	Dredge Pye Lake to increase flood control	Fayetteville Engineering *City of Fayetteville*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$600,000 to $1 million	60 months	Low
3.d	3.d	Perform creek bank stabilization project to control erosion and reduce damage to county-owned property	Fayette County Engineering and Property Owner *City of Fayetteville*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$100,000	48 months	Medium
3.e	3.e	Design and implement stabilization projects at eroding bank areas in the Lake Peachtree Watershed	Peachtree City Stormwater *Fayette County and City of Peachtree City*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$1 million	60 months	Medium

3.f	3.g	Restore stream in Oak Street basin to decrease erosion and minimize flooding	Fayetteville Public Services and Fayette County Environmental Management *Fayette County and City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$4 million	60 months	Low
3.g	3.h	Create a large regional retention pond at the Walker Concrete Plant site on West Georgia Avenue	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$2 million	60 months	Low
3.h	3.i	Purchase a generator for Animal Services	Fayette County Animal Services and EMA *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	48 months	Medium
3.i	3.j	Install lightning rods at critical facilities	Fayette County EMA and Critical Facility Operators *All Jurisdictions*	Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$40,000	48 months	Medium
OBJECTIVE 4: Reduce damage to property and loss of life through the utilization of structural mitigation projects								
4.a	4.a	Implement a corrective action plan to upgrade Camp Creek culverts under Redwine Road	Fayette County Environmental Management *Fayette County*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	36 months	Medium
4.b	4.b	Install adequate culverts beneath Roberts Road	Fayette County Road Department *Fayette County*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000	48 months	Medium

4.c	4.e	Replace triple 6-foot diameter CMPs on Darren Drive at Shoal Creek with concrete pipes or box culverts	Fayette County Road Department *Fayette County*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$75,000	24 months	High
4.d	4.j	Replace pipes with appropriately sized double box concrete culverts on Callaway Road	Fayette County Environmental Management and Public Works *Fayette County*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	36 months	High
4.e	4.k	Upgrade street culverts at the intersection of Jefferson Avenue and Hillsdale Drive	Fayetteville Engineering *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$700,000	48 months	Medium
4.f	4.m	Complete Deep Forest drainage project by adding piping and establishing a drainage ditch on Oak Street and expand the capacity of the drainpipe at Deep Forest Lane and Oak Street	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000	36 months	Medium
4.g	4.n	Replace undersized culvert on Jefferson Avenue	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	30 months	High
4.h	4.o	Replace undersized culvert on Hillsdale Drive	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000	60 months	Low

4.i	4.p	Replace corrugated metal pipe on Hillsdale Drive at Cottonwood Drive	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$100,000	60 months	Low
4.j	4.q	Install 3 corrugated metal pips under Pye Court upstream of Pye Lake (Pye Ct is the only means of egress for 7 residential homes)	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000	30 months	High
4.k	4.s	Line 1,500 feet of drainage pipe along Carriage Lane	Fayetteville Public Services *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	30 months	High
4.l	4.u	Replace drainage system under Honeysuckle Lane; residents upstream and downstream will also need to replace their systems	Fayetteville Public Services and Private Homeowners *City of Fayetteville*	Flood; Thunderstorm; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	30 months	High
4.m	4.v	Increase the size of the Matthew and Friendship Road culverts	Fayette County Public Works *Fayette County*	Flood; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$100,000	30 months	Medium
4.n	4.w	Repair Country Lakes subdivision water system and drainage issues	Country Lakes HOA *Fayette County*	Flood; Tropical Cyclone	FEMA/GEMA Hazard Mitigation Grants; Private funds	$2 million	60 months	Medium
4.o	4.x	Build safe rooms at Fayette County parks	Fayette County EMA *City of Fayetteville*	Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$200,000 per safe room	36 months	High

4.p	4.z	Replace two 72-inch diameter (50'L) corrugated metal pipes under Woods Road	Public Works *Town of Brooks*	Flood	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$650,000	24 months	High
4.q	NEW	Complete a grounding assessment and repair for the 911 Center and radio sites	Fayette County 911 *All Jurisdictions*	All Hazards	Local funds (general and CIP)	$200,000	12 months	Medium
OBJECTIVE 5: Increase the ability of Fayette County, its municipalities, and its citizens to respond to natural and manmade hazards through emergency service measures								
5.a	5.a	Acquire additional barricades and other road closure resources for emergency road closures	Fayette County BOE, EMA, City of Fayetteville Police and Public Works, and City of Peachtree City Police and Public Works *All Jurisdictions*	Earthquake; Flood; Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$150,000	60 months	Medium
5.b	5.b	Equip all County and Municipal recreation parks with adequate lightning detection devices	Fayette County and Municipal Recreation Departments and EMA *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$300,000	48 months	High
5.c	5.e	Purchase mobile electronic signage for Fayette County and municipalities of Peachtree City, Fayetteville, and Tyrone	Fayette County EMA and Public Safety Agencies in Each Jurisdiction *All Jurisdictions*	Earthquake; Flood; Thunderstorm; Tornado; Tropical Cyclone; Wildfire	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$90,000	36 months	High
5.d	5.g	Establish a CERT Team within the Town of Tyrone	Tyrone Police Department *Town of Tyrone*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$35,000	36 months	Medium
5.e	5.h	Train damage assessment teams in Brooks, Fayetteville,	Fayette County Public Works and EMA *All Jurisdictions*	Earthquake; Flood; Thunderstorm;	Local funds (general and CIP)	Staff time	18 months	High

		Peachtree City, Tyrone, and Woolsey		Tornado; Tropical Cyclone; Winter Weather				
5.f	5.k	Purchase chainsaws and other handheld equipment	Fayette County Public Works *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$25,000	36 months	High
5.g	5.l	Provide snow removal training to Public Works personnel	Fayette County Public Works *All Jurisdictions*	Winter Weather	Local funds (general and CIP)	Staff time	12 months	High
5.h	5.m	Harden public buildings for all hazards and designate or develop plans for all essential facilities in the event of a direct hazard hit	Fayette County Public Works and EMA *All Jurisdictions*	All Natural Hazards	Local funds (general and CIP)	Staff time	18 months	High
5.i	5.n	Develop a plan and purchase proper equipment for the disposal of deceased animal	Fayette County Public Works *All Jurisdictions*	Drought; Extreme Temperature; Flood; Tropical Cyclone; Wildfire	Local funds (general and CIP)	Staff time	12 months	Low
5.j	5.q	Purchase bucket truck for tree assessment operations	Fayette County Public Works *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$50,000	24 months	Medium
5.k	5.r	Purchase a livestock trailer for animal services operations	Fayette County Animal Services *All Jurisdictions*	Drought; Extreme Temperature; Flood; Tropical Cyclone; Wildfire	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$15,000	36 months	Medium

5.l	5.s	Purchase ESI Net for 911 Center	Fayette County 911 *All Jurisdictions*	Earthquake; Flood; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$80,000	30 months	Medium
5.m	5.t	Purchase 40 chainsaws and safety equipment and provide training for usage	Fayette County Sheriff's Office *All Jurisdictions*	Earthquake; Thunderstorm; Tornado; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$25,000	30 months	Medium
5.n	5.u	Purchase a portable shelter for use by animal services	Fayette County Animal Services *All Jurisdictions*	Earthquake; Tropical Cyclone; Winter Weather	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$10,000	30 months	Medium
5.o	NEW	Acquire an autonomous robot dog to supplement the need for public safety personnel	Fayette County EMA *All Jurisdictions*	All Natural Hazards	FEMA/GEMA Hazard Mitigation Grants	$100,000	24 months	Medium
5.p	NEW	Create a back up 911 Center	Fayette County 911 *All Jurisdictions*	All Hazards	Local funds (general and CIP)	$1.5 million	36 months	Medium
OBJECTIVE 6: Increase public education and awareness of natural hazards								
6.a	6.a	Develop a public awareness program about the installation of lightning grounding systems on critical infrastructure, residential, and business properties	Fayette County EMA *All Jurisdictions*	Thunderstorm; Tornado; Tropical Cyclone	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$10,000	24 months	Medium

6.b	6.b	Maintain the campaign to promote water-saving	Fayette County Water System, Fayetteville Water Department, Various Private Water Systems, and North Metro Water Planning District *All Jurisdictions*	Drought; Extreme Temperature; Flood; Tropical Cyclone; Wildfire	Local funds (general and CIP)	$15,000	12 months	High
6.c	6.c	Work with the local cable and radio providers to develop and broadcast public education on emergency preparedness annually	Fayette County Information Systems, Comcast, and EMA *All Jurisdictions*	All Natural Hazards	Local funds (general and CIP)	Staff time	18 months	High
6.d	NEW	Early warning systems and weather apps should be advertised in many areas, such as websites, media, social media.	Fayette County EMA *All Jurisdictions*	All Natural Hazards	Local funds (general)	$20,000	12 months	Medium
6.e	NEW	Create a public outreach campaign for how to safely care for pets during extreme temperature events	Fayette County Animal Services *All Jurisdictions*	Extreme Temperature	Local funds (general)	$5,000	12 months	Low
OBJECTIVE 7: Minimize the impacts on local citizens, industry, and infrastructure of a technological hazard								
7.a	7.a	Develop a Dam Emergency Action Plan for all Category I dams in Fayette County	Dam Owners and Fayette County EMA *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP)	Staff time	18 months	High
7.b	7.b	Establish a dam safety awareness program for residents who reside in Category I dam inundation areas	Fayette County EMA *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$5,000	24 months	High
7.c	7.c	Work closely and proactively with Georgia Safe Dams Division regarding Category II	Georgia Safe Dams and Fayette County EMA *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP)	Staff Time	18 months	Medium

		dams that have potential to become Category I						
7.d	7.d	Develop a plan and strategy for the reduction of water levels of Category I dams prior to Tropical Cyclones	Dam Owners and Fayette County EMA *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP)	Staff time	24 months	Medium
7.e	7.e	Ensure Phillips Lake Dam meets Georgia Safe Dams standards to prevent failure	Fayette County Stormwater and Public Works *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	36 months	High
7.f	7.f	Remove trees along the BCS Pond Dam and rebuild the dam with a proper emergency spillway (current structure is not a category I or II)	Peachtree City Stormwater Utility *City of Peachtree City*	Dam Failure; Terrorism	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$500,000	60 months	Medium
7.g	NEW	Create engineering plans to remove County-owned dams are in poor condition (Phillips and Kozisek)	Fayette County Stormwater and Public Works *All Jurisdictions*	Dam Failure; Terrorism	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants	$250,000	36 months	Medium
7.h	NEW	Establish channels with DPH to ensure close coordination in the event of emergent infectious disease events	Fayette County EMA and DPH *All Jurisdictions*	Emergent Infectious Disease	Local funds (general); DPH funds	Staff time	12 months	Medium
OBJECTIVE 8: Implement additional protective measures and capabilities in response to manmade incidents								
8.a	8.a	Develop security strategies and safeguards for the containment of hazardous material at fixed facilities	Fayette County EMA *All Jurisdictions*	Hazardous Material; Terrorism; Transportation Incident	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$350,000	60 months	Medium

8.b	8.b	Develop a comprehensive multi-jurisdictional railroad disaster response plan	Fayette County EMA *All Jurisdictions*	Hazardous Material; Infrastructure Failure; Terrorism; Transportation Incident	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$10,000	48 months	Medium
8.c	8.c	Hold a tabletop exercise on a railroad disaster	Fayette County EMA *All Jurisdictions*	Hazardous Material; Infrastructure Failure; Terrorism; Transportation Incident	Local funds (general and CIP)	$2,000	24 months	High
8.d	8.d	Continue to do pre-planning of industry facilities with known hazardous materials	Fayette County EMA and Fire Departments *All Jurisdictions*	Hazardous Material; Terrorism	Local funds (general and CIP)	Staff time	24 months	High
8.e	8.e	Purchase a JetVac truck for hazardous materials cleanup and mitigation efforts	Fayette County Public Works *All Jurisdictions*	Hazardous Material; Terrorism; Transportation Incident	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$45,000	36 months	Medium
8.f	NEW	Inventory all legacy systems within IT's purview, plan for phased modernization, and isolate critical old systems with strong controls	Fayette County IT *All Jurisdictions*	Cyberattack	Local funds (general and CIP)	$75,000	12 months	Medium
8.g	NEW	Implement mandatory, regular security awareness training and enforce strong password policies with multifactor authentication (MFA)	Fayette County IT *All Jurisdictions*	Cyberattack	Local funds (general and CIP)	$20,000	6 months	High
8.h	NEW	Classify and protect sensitive data, establish robust backups, and	Fayette County IT *All Jurisdictions*	Cyberattack	Local funds (general and CIP)	$100,000	24 months	High

		conduct regular incident response drills						
OBJECTIVE 9: Increase public awareness of local manmade hazards and proper response to those hazards								
9.a	9.a	Implement a public awareness campaign regarding technological hazards	Fayette County EMA *All Jurisdictions*	All Technological Hazards	Local funds (general and CIP); FEMA/GEMA Hazard Mitigation Grants; Private funds	$10,000	18 months	High

Chapter 5 Maintenance and Implementation

5.1 Summary of Updates for Chapter 5

The following table provides a description of each section of this chapter and a summary of the changes that have been made to the Fayette County Hazard Mitigation Plan 2020.

Chapter 5 Section	Updates
Maintenance	Identification of mitigation goals
Plan Distribution	Verbiage updated
Implementation	Verbiage updated
Evaluation	Verbiage updated
Plan Update	Verbiage updated

5.2 Maintenance

Requirement 201.6(c)(4)(i)

To adhere to best practices, state and federal guidelines, and lessons learned, the Local Hazard Mitigation Planning Committee (LHMPC) has developed a method to ensure the regular review and update of the Plan occurs.

The LHMPC will reconvene annually in February to monitor and evaluate the progress of the mitigation strategies in the Plan. Fayette County's Emergency Management Agency Director, Brian Davis, will be responsible for implementing this meeting. The LHMPC will discuss the 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?

Fayette County's Emergency Management Agency Director will send the minutes from this annual meeting to the Fayette County Board of Commissioners and the municipalities of Brooks, Fayetteville, Peachtree City, Tyrone, and Woolsey for review.

If there are any updates or modifications to the Fayette County Hazard Mitigation Plan, the Emergency Management Agency Director will forward the changes to the Georgia Emergency Management Agency's (GEMA) Hazard Mitigation Officer. All annual reviews of the Fayette

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.

5.3 Implementation

Requirement 201.6(c)(4)(ii)
Requirement 201.6(d)(3)

Each jurisdiction participating in the Fayette County Hazard Mitigation Plan is responsible for implementing specific mitigation actions as prescribed in this Plan. Every proposed strategy in the Plan 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.

Fayette 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 Fayette County Hazard Mitigation Plan.

This Plan, as a joint effort between Fayette County and the municipalities of Brooks, Fayetteville, Peachtree City, Tyrone, and Woolsey 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 Fayette 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 Fayette County Comprehensive Plan during the next planning cycle.

Identified hazards and mitigation strategies of the 2020 Fayette County Hazard Mitigation plan were integrated into the Local Emergency Operations Plan, the Fayette County Safety Action Plan, the County's American Water Infrastructure Act (AWIA) Emergency Response Plan, the County's AWIA Risk and Resilience Assessment Plan, multiple County and City standard operation procedures and standard operating guidelines, and future planning and zoning plans. Fayette County will integrate mitigation strategies identified in this plan into the Fayette County Comprehensive Plan, Fayette County Special Purpose Local Option Sales Tax (SPLOST) Plan, Debris Removal 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 Fayette County and all municipalities. Many of these strategies will be applied using previously identified policies and ordinances, including the National Flood Insurance Program (NFIP) compliance ordinances and water-use ordinances. All jurisdictions have the authority to adopt locally binding ordinances and policies to enhance the mitigation strategies in their jurisdiction.

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 LHMPC to be the most effective and appropriate method to implement local hazard mitigation actions at this time.

5.4 Evaluation

Requirement 201.6(c)(4)(i)
Periodic revisions and updates of the Fayette 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 Fayette County.

The LHMPC will meet annually to review the Fayette 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 LHMPC 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 Fayette County Hazard Mitigation Plan is continuously updated to allow for changes in hazard vulnerabilities and identified mitigation strategies.

The LHMPC will complete all evaluations of the Fayette County Hazard Mitigation Plan.

5.5 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 5 years. The Fayette County Emergency Management Agency is the department responsible with ensuring this requirement is met. The LHMPC will be involved in this future process and will aid the Fayette 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.

At least 1 year prior to this Plan's expiration, Fayette County plans to begin the Hazard Mitigation Plan update process for the fifth time. This planning process will likely follow the same process performed for this Plan update, and include project management, LHMPC, and public meetings to accomplish the identified goals of the Fayette County Hazard Mitigation Plan update. This process will be headed up by the Fayette County Emergency Management Agency. The LHMPC will follow a similar process as was undertaken during this planning cycle to complete all Federal Emergency Management Agency (FEMA) and GEMA requirements for the Hazard Mitigation Plan update.

Appendix A Planning Process

A.1 Local Hazard Mitigation Planning Committee Invitation

Good Afternoon,

I hope this email finds you well.

Fayette County is beginning the process of updating its Multi-Jurisdictional Hazard Mitigation Plan (view the 2020 Plan), and **we would like to invite you to participate as a member of the Local Hazard Mitigation Planning Committee (LHMPC)**.

The Hazard Mitigation Plan (HMP) is updated every five years to ensure that Fayette County and its communities continue to form the foundation for guiding risk reduction investments, which build community resilience. The planning process also ensures collaboration throughout the community, and is necessary to remain eligible for certain FEMA grant programs.

You have been identified as a key stakeholder with the necessary expertise to inform the HMP update – we are seeking your participation in the LHMPC.

As a member of the LHMPC, you would be asked to:

- Attend 3 to 4 meetings over the next 4 to 6 months (meetings will be in-person with a virtual option)
    - These meetings will cover topics, such as:
        - The list of hazards that affect Fayette County
        - Changes in land development and population since the last Plan
        - Risk assessments and community capabilities
        - Mitigation actions from the previous plan and potential new strategies
        - Public engagement and outreach efforts
        - Plan maintenance and implementation
- Review the draft Hazard Mitigation Plan and provide feedback before it is finalized.

If you are willing to join the LHMPC, please reply to this email by February 26th, 2025 to confirm your participation.

If you have any questions, please don't hesitate to reach out.

Thank you,

Ariel Mallett
Assistant Director, Analytics

Direct: 678.892.5860
ariel.mallett@iParametrics.com

6515 Shiloh Road
Suite 200
Alpharetta, GA 30005
www.iparametrics.com

A.2 Local Hazard Mitigation Committee Meeting Sign-In Sheets

A.2.1 April 2, 2025

FAYETTE County Create Your Story!

Fayette County Hazard Mitigation Plan Update

Meeting Sign-In Sheet

April 2, 2025

Name	Organization and Title	Email Address
Chet Ripka	911 Operations Mngr.	cripka@fayettecountyga.gov
Ted Lombard	FCBOE - operations/ Safety	lombard.ted@fcboe.org
Sheri Russo	Gema - HS	Sheri.Russo@gema.ga.gov
Sam Anglin	Peachtree city Fire Div. Chief	Sanglin@peachtree-city.org
Van Brock	Tyrone PD Major	Van.brock@tyronega.org
RANDY MUNDY	TYRONE PD CHIEF	randy.mundy@tyronega.gov
BRIAN EUBANKS	FAYETE CO. SHERIFFS	beubanks@fayettecountyga.gov
Michael Jones	Fayette Co. Sheriff	mjones@fayettecountyga.gov
JEFF HILL	FAYETTE Co FIRE/EMS CHIEF	JHILL@FAYETTECOUNTYGA.GOV
Matt Bergen	Fayette Co EMD/Utilities	mbergen@fayettecountyga.gov
Tracy Thompson	Director Animal Control	tthompson@fayettecountyga.gov
Kathye Voet	Fayette 911 / Director	kvogt@fayettecountyga.gov
BOBBIAN KELLER	FAYETTE ENVIR. MGNT OFFICER	BKELLER@FAYETTECOUNTYGA.GOV
Courtney Hassenzahl	Fayette - EMD	Chassenzahle fayettecountyga.gov
ANITA GODBEE	FAYETTE Co. PARKS & RECREATION	AGODBEE@FAYETTECOUNTYGA.GOV
Bryan Clanton	Fayette Co. Marshals	bclanton@fayettecountyga.gov
Debbie Bell	Fayette CO. - Dir Planning & Z.	dbell@fayettecountyga.gov
GLENN FOLK	SPALDING COUNTY EMA	gfolk@spaldingcounty.com
Leslie Nieber	Fayette County	lnieber@fayette
Audrey Toney	Fay City. Board of Educ.	toney.audrey@fcboe.org
Chris Hindman	City of Fayetteville Director	chindman@fayetteville-ga.gov
Cajen Rhodes	City of Fayetteville	crhodes@fayetteville-ga.gov
MAVRICK UNGARO	TOWN OF BROOKS	MUNGARO@BROOKSGA.com
CHRIS PEACOCK	CITY OF FAYETTEVILLE FIRE	cpeacock@fayetteville-ga.gov
Linda Black	City of Fayetteville Fire	lblack@fayetteville-ga.gov
Brian Davis	Fayette Co. EMA Dir.	bdavis@fayettecountyga.gov

A.2.2 June 4, 2025

FAYETTE County Create Your Story!

Fayette County Hazard Mitigation Plan Update

Meeting Sign-In Sheet

June 4, 2025

Name	Organization and Title	Email Address
Chet Ripka	911 - Ops Manager	cripka@fayettecounty.ga.gov
Linda Black	Fayetteville Fire Dept.	lblack@fayetteville-ga.gov
CHRIS PEACOCK	FAYETTEVILLE FIRE DEPT.	cpeacock@fayetteville-ga.gov
JEFF HILL	FAYETTE CO. FIRE	JHILL@FAYETTECOUNTYGA.GOV
BRIAN EUBANKS	FAYETTE CO. SO	beubanks@fayettecountyGA.GOV
Michael Jones	Fayette Co. S.O.	mjones@fayettecountyGA.gov
Anita Godbee	Fayette Co. Parks & Recreation	AGODBEE@FAYETTECOUNTYGA.GOV
Debbie Bell	Fayette Co. Planning & Zoning	dbell@fayettecountyga.gov.
Matt Bergen	Fayette Co. EMD Utility Mgr	mbergen@fayettecountyga.gov
BRYAN KELLER	FAYETTE CO EMD-DIRECTOR	BKELLER@FAYETTECOUNTYGA.GOV
ALAN JONES	CITY OF FAYETTEVILLE	AJONES@FAYETTEVILLE-GA.GOV
Cajen Rhodes	City of Fayetteville	crhodes@fayetteville-ga.gov
Lee Ann Bartlett	Fayette Co. Assessors Office	lbartlett@fayettecountyga.gov
Brian P. Davis	Fayette Co. EMA	bdavis@fayettecountyga.gov
RANDY MUNDY	TYRONE PD	~~randy.mundy~~@TyroneGA.GOV
Tracy Thompson	Fayette Co. Animal Control	ttthompson@fayettecountyga.gov
MAURICE UNGARO	TOWN OF BROOKS	MUNGARO@BROOKSGA.com

A.2.3 July 10, 2025

FAYETTE County Create Your Story!

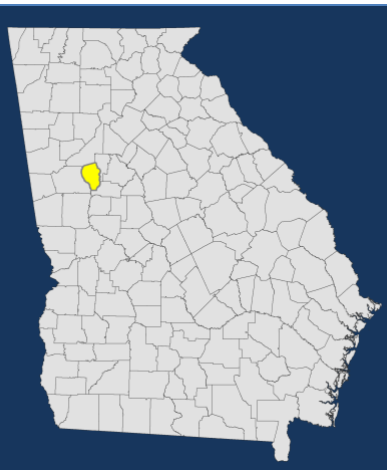
Fayette County Hazard Mitigation Plan Update

Meeting Sign-In Sheet

July 10, 2025

Name	Organization and Title	Email Address
Kenny WRIGHT	Town of Woolsey-Council Mem	KWright@bellsouth.net
Chris Hindman	City of Fayetteville Director	chindman@fayetteville-ga.gov
Cajen Rhodes	City of Fayetteville	arhodes@fayetteville-ga.gov
CHARLES PEACOCK	CITY OF FAYETTEVILLE FIRE	cpeacock@Fayetteville-ga.gov
Sam Anglin	Peachtree City Fire Div. Chief	Sanglin@peachtree-city.org
Bryan Clanton	Fayette Co. Marshal's Office	bclanton@fayettecountyga.gov
Brian Davis	Fayette Co. EMA Director	bdavis@Fayettecountyga.gov
Debbie Bell	Fayette Co. P+Z.	dbell@fayettecountyga.gov
Vanessa Tigert	Fayette Co Water System	vtigert@fayettecountyga.gov
ANITA GODBEE	FAYETTE CO. PARKS & RECREATION	AGODBEE@FAYETTECOUNTYGA.GOV
Clint Ripka	Fayette County 911	cripka@fayettecountyga.gov
ALAN JONES	CITY OF FAYETTEVILLE	AJONES@FAYETTEVILLE-GA.GOV
Ted Lombard	Fayette County Schools	lombard.ted@fcboe.net
RANDY MOODY	TYRONE PD	randy.moody@tyronega.gov

Appendix B HAZUS Analysis and 3A Worksheets



Hazard Risk Analyses
Supplement to the Fayette County Joint Hazard Mitigation Plan

Carl Vinson
Institute of Government
UNIVERSITY OF GEORGIA

TABLE OF CONTENTS

List of Tables

List of Figures

Introduction

The Federal Disaster Mitigation Act of 2000 (DMA2K) requires state, local, and tribal governments to develop and maintain a mitigation plan to be eligible for certain federal disaster assistance and hazard mitigation funding programs.

Mitigation seeks to reduce a hazard's impacts, which may include loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation must be based on a sound risk assessment that quantifies the potential losses of a disaster by assessing the vulnerability of buildings, infrastructure, and people.

In recognition of the importance of planning in mitigation activities, FEMA Hazus-MH, a powerful disaster risk assessment tool based on geographic information systems (GIS). This tool enables communities of all sizes to predict estimated losses from floods, hurricanes, earthquakes, and other related phenomena and to measure the impact of various mitigation practices that might help reduce those losses.

In 2024, the Georgia Department of Emergency Management partnered with the Carl Vinson Institute of Government at the University of Georgia to develop a detailed risk assessment focused on defining hurricane, riverine flood, and tornado risks in Fayette County, Georgia. This assessment identifies the characteristics and potential consequences of the disaster, how much of the community could be affected by the disaster, and the impact on community assets.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Fayette County. The Hazus-MH application includes default data for every county in the US. This Hazus-MH data was derived from a variety of national sources and in some cases the data are also several years old. Whenever possible, using local provided data is preferred. Fayette County provided building inventory information from the county's property tax assessment system. This section describes the changes made to the default Hazus-MH inventory and the modeling parameters used for each scenario.

County Inventory Changes

The default Hazus-MH site-specific point inventory was updated using data compiled from the Georgia Emergency Management Agency (GEMA). The default Hazus-MH aggregate inventory (General Building Stock) was also updated prior to running the scenarios. Reported losses reflect the updated data sets.

General Building Stock Updates

General Building Stock (GBS) is an inventory category that consists of aggregated data (grouped by census geography — tract or block). Hazus-MH generates a combination of site-specific and aggregated loss estimates based on the given analysis and user input.

The GBS records for Fayette County were replaced with data derived from parcel and property assessment data obtained from Fayette County. The county provided property assessment data was current as of November 2024 and the parcel data current as of November 2024. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary; then, each parcel point was linked to an assessor record based upon matching parcel numbers. The parcel assessor match-rate for Fayette County is 98.8%. The generated building inventory represents the approximate locations (within a parcel) of structures. The building inventory was aggregated by census block. Both the tract and block tables were updated. Table 1 shows the results of the changes to the GBS tables by occupancy class.

Table 1: GBS Building Exposure Updates by Occupancy Class*

General Occupancy	Default Hazus-MH Count	Updated Count	Default Hazus-MH Exposure	Updated Exposure
Agricultural	134	2	$31,907,000	$182,000
Commercial	2,221	2,227	$1,754,991,000	$1,556,722,000
Education	92	69	$96,192,000	$256,097,000
Government	63	44	$54,378,000	$102,952,000
Industrial	678	702	$402,728,000	$451,804,000
Religious	261	219	$233,523,000	$168,178,000
Residential	37,690	42,361	$11,912,440,000	$12,182,648,000
Total	**41,139**	**45,624**	**$14,486,159,000**	**$14,718,583,000**

*The exposure values represent the total number and replacement cost for all Fayette County Buildings

For Fayette County, the updated GBS was used to calculate hurricane wind losses. The flood losses and tornado losses were calculated from building inventory modeled in Hazus-MH as User-Defined Facility

(UDF)[1], or site-specific points. Figure 1 shows the distribution of buildings as points based on the county provided data.

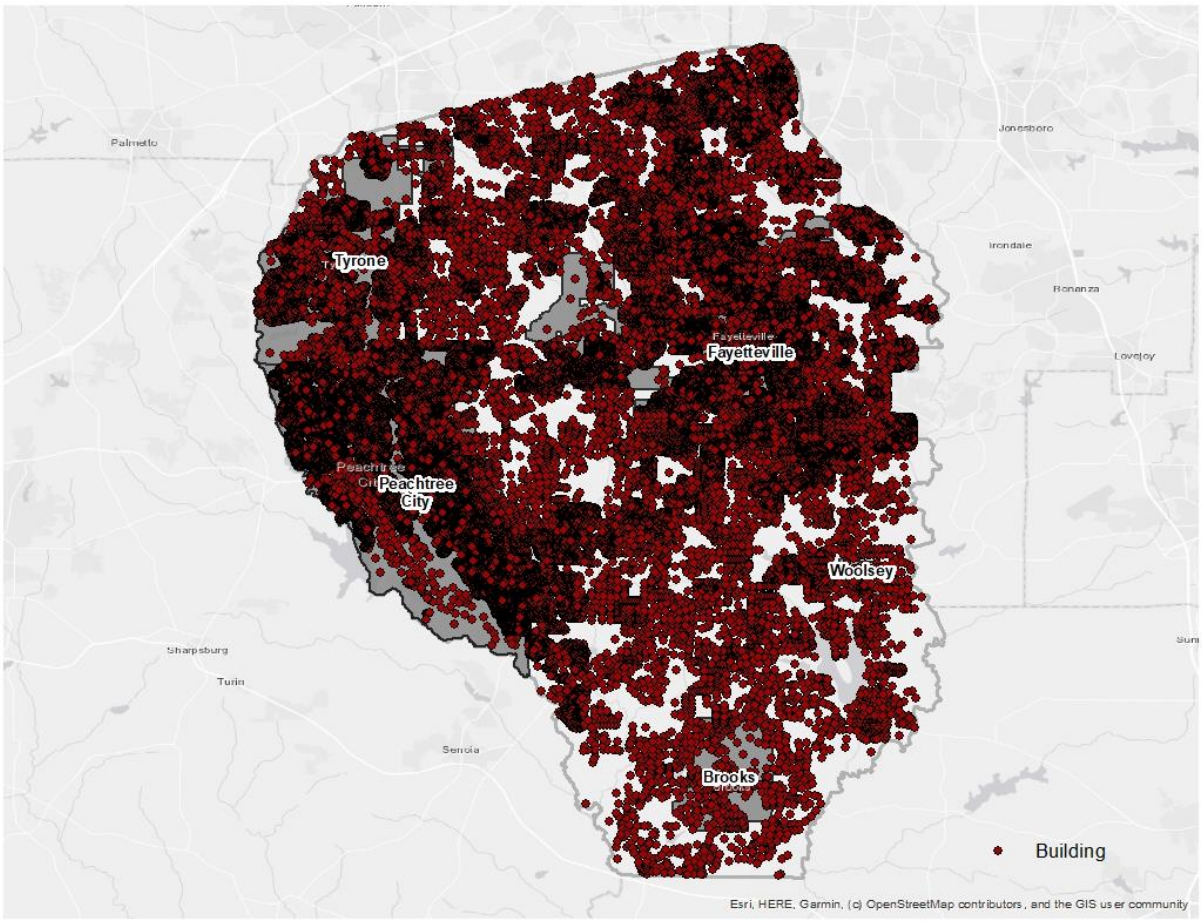


Figure 1: Fayette County Overview

Essential Facility Updates

The default Hazus-MH essential facility data was updated to reflect improved information available in the Georgia Mitigation Information System (GMIS) as of November 2024. For these risk analyses, only GMIS data for buildings that Hazus-MH classified as Essential Facilities was integrated into Hazus-MH because the application provides specialized reports for these five facilities. Essential Facility inventory was updated for the analysis conducted for this report. The following table summarizes the counts and exposures, where available, by Essential Facility classification of the updated data.

Essential facilities include:

- Care facilities
- EOCs
- Fire stations
- Police stations
- Schools

[1] The UDF inventory category in Hazus-MH allows the user to enter site-specific data in place of GBS data.

Table 2: Updated Essential Facilities

Classification	Updated Count	Updated Exposure
Brooks		
EOC	0	$0
Care	0	$0
Fire	1	$1,900,000
Police	0	$0
School	1	$14,000,000
Total	**2**	**$15,900,000**
Fayetteville		
EOC	1	$7,500,000
Care	3	$248,000,000
Fire	4	$9,150,000
Police	4	$86,761,000
School	6	$122,000,000
Total	**18**	**$473,411,000**
Peachtree City		
EOC	0	$0
Care	0	$0
Fire	4	$7,000,000
Police	1	$2,300,000
School	8	$160,000,000
Total	**13**	**$169,300,000**
Tyrone		
EOC	0	$0
Care	0	$0
Fire	1	$5,200,000
Police	1	$6,500,000
School	0	$0
Total	**2**	**$11,700,000**

Classification	Updated Count	Updated Exposure
Woolsey		
EOC	0	$0
Care	0	$0
Fire	1	$2,500,000
Police	0	$0
School	0	$0
Total	**1**	**$2,500,000**
Unincorporated Areas of Fayette County		
EOC	0	$0
Care	0	$0
Fire	6	$16,400,000
Police	0	$0
School	11	$326,000,000
Total	**17**	**$342,400,000**

Assumptions and Exceptions

Hazus-MH loss estimates may be impacted by certain assumptions and process variances made in this risk assessment.

- The Fayette County analysis used Hazus-MH Version 2.2 SP1, which was released by FEMA in May 2015.
- County provided parcel and property assessment data may not fully reflect all buildings in the county. For example, some counties do not report not-for-profit buildings such as government buildings, schools and churches in their property assessment data. This data was used to update the General Building Stock as well as the User Defined Facilities applied in this risk assessment.
- Georgia statute requires that the Assessor's Office assign a code to all of the buildings on a parcel based on the buildings primary use. If there is a residential or a commercial structure on a parcel and there are also agricultural buildings on the same parcel Hazus-MH looks at the residential and commercial "primary" structures first and then combines the value of all secondary structures on that parcel with the value of the primary structure. The values and building counts are still accurate but secondary structures are accounted for under the same classification as the primary structure. Because of this workflow, the only time that a parcel would show a value for an agricultural building is when there are no residential or commercial structures on the parcel thus making the agricultural building the primary structure. This is the reason that agricultural building counts and total values seem low or are nonexistent.
- GBS updates from assessor data will skew loss calculations. The following attributes were defaulted or calculated:
  Foundation Type was set from Occupancy Class
  First Floor Height was set from Foundation Type
  Content Cost was calculated from Replacement Cost
- It is assumed that the buildings are located at the centroid of the parcel.
- The essential facilities extracted from the GMIS were only used in the portion of the analysis designated as essential facility damage. They were not used in the update of the General Building Stock or the User Defined Facility inventory.

The hazard models included in this risk assessment included:

- Hurricane assessment which was comprised of a wind only damage assessment.
- Flood assessment based on the 1% annual chance event that includes riverine assessments.
- Tornado assessment based on GIS modeling.

Hurricane Risk Assessment

Hazard Definition

The National Hurricane Center describes a hurricane as a tropical cyclone in which the maximum sustained wind is, at minimum, 74 miles per hour (mph)[2]. The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline. Hurricanes in the Atlantic Ocean, Gulf of Mexico, and Caribbean form between June and November with the peak of hurricane season occurring in the middle of September. Hurricane intensities are measured using the Saffir-Simpson Hurricane Wind Scale (Table 3). This scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time.

Hurricanes bring a complex set of impacts. The winds from a hurricane produce a rise in the water level at landfall called storm surge. Storm surges produce coastal flooding effects that can be as damaging as the hurricane's winds. Hurricanes bring very intense inland riverine flooding. Hurricanes can also produce tornadoes that can add to the wind damages inland. In this risk assessment, only hurricane winds, and coastal storm surge are considered.

Table 3: Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed (mph)	Damage
1	74 - 95	Very dangerous winds will produce some damage
2	96 - 110	Extremely dangerous winds will cause extensive damage
3	111 - 130	Devastating damage will occur
4	131 -155	Catastrophic damage will occur
5	> 155	Catastrophic damage will occur

The National Oceanic and Atmospheric Administration's National Hurricane Center created the HURDAT database, which contains all of the tracks of tropical systems since the mid-1800s. This database was used to document the number of tropical systems that have affected Fayette County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Fayette County but impacted the county. Note that the storms listed contain the peak sustained winds, maximum pressure and maximum attained storm strength for the entire storm duration. Since 1859, Fayette County has had 17 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Fayette County[3]

YEAR	DATE RANGE	NAME	MAX WIND(Knots)	MAX PRESSURE	MAX CAT
1859	September 15 - 18	UNNAMED	70	0	H1

[2] National Hurricane Center (2011). "Glossary of NHC Terms." National Oceanic and Atmospheric Administration. http://www.nhc.noaa.gov/aboutgloss.shtml#h. Retrieved 2012-23-02.

[3] Atlantic Oceanic and Meteorological Laboratory (2012). "Data Center." National Oceanic and Atmospheric Administration. http://www.aoml.noaa.gov/hrd/data_sub/re_anal.html. Retrieved 7-20-2015.

YEAR	DATE RANGE	NAME	MAX WIND(Knots)	MAX PRESSURE	MAX CAT
1887	July 20 - 28	UNNAMED	85	0	H2
1893	September 27 - October 05	UNNAMED	115	948	H4
1898	September 25 - October 06	UNNAMED	115	977	H4
1900	September 11 - 15	UNNAMED	45	0	TS
1902	October 03 - 13	UNNAMED	90	970	H2
1903	September 09 - 16	UNNAMED	80	988	H1
1907	September 18 - 23	UNNAMED	40	0	TS
1912	June 07 - 17	UNNAMED	60	0	TS
1940	August 05 - 14	UNNAMED	85	1008	H2
1957	September 07 - 09	DEBBIE	35	1003	TS
1959	May 28 - June 02	ARLENE	55	1002	TS
1994	June 30 - July 07	ALBERTO	55	1014	TS
2004	August 25 - September 10	FRANCES	125	1009	H4
2021	June 17 - 23	CLAUDETTE	40	1008	E
2021	August 09 - 20	FRED	55	1013	TS
2022	November 06 - 11	NICOLE	65	1005	H1

Category Definitions:

TS – Tropical storm

TD – Tropical depression

H1 – Category 1 (same format for H2, H3, H4, and H5)

E – Extra-tropical cyclone

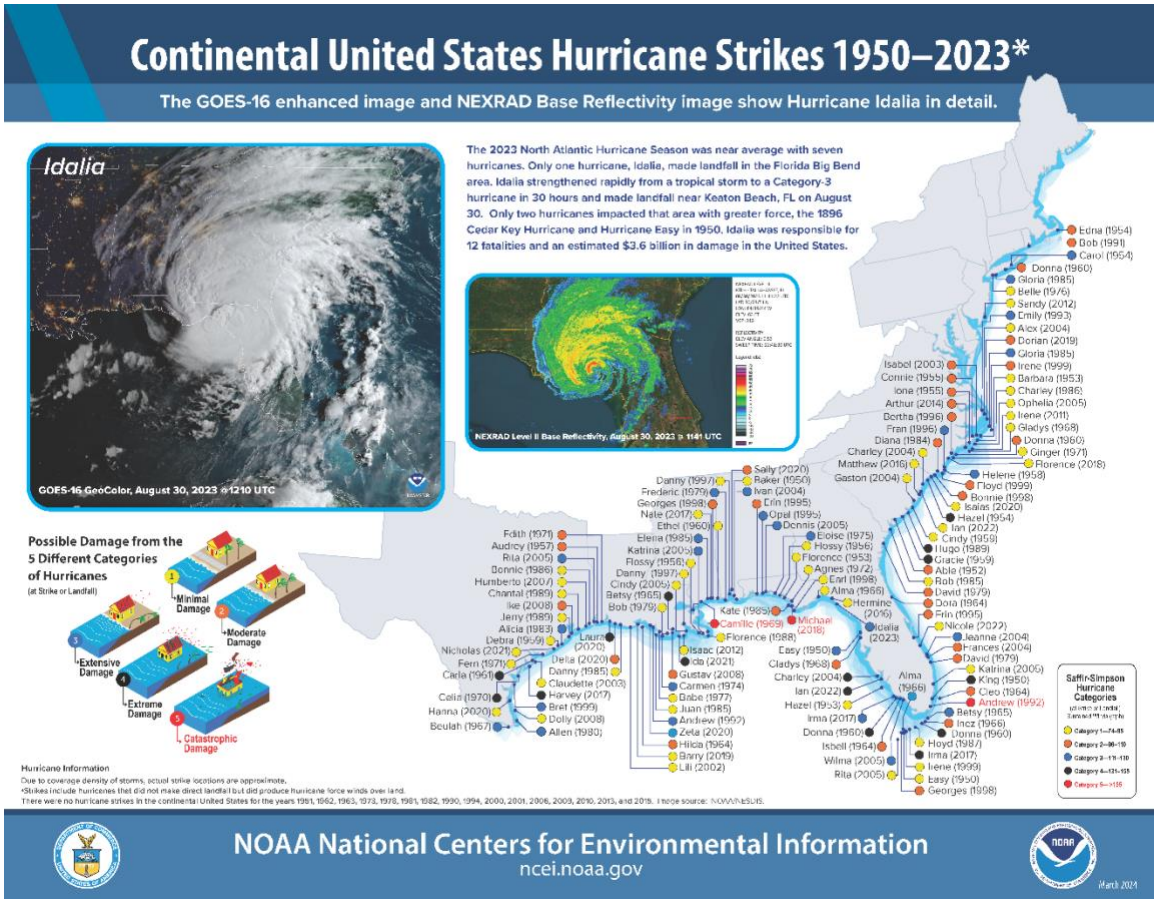


Figure 2: Continental United States Hurricane Strikes: 1950 to 2023[4]

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Tropical Storm with maximum winds of 69 mph.

Wind Damage Assessment

Separate analyses were performed to determine wind and hurricane storm surge related flood losses. This section describes the wind-based losses to Fayette County. Wind losses were determined from probabilistic models run for the Tropical Storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled Tropical Storm.

[4] Source: NOAA National Centers for Environmental Information

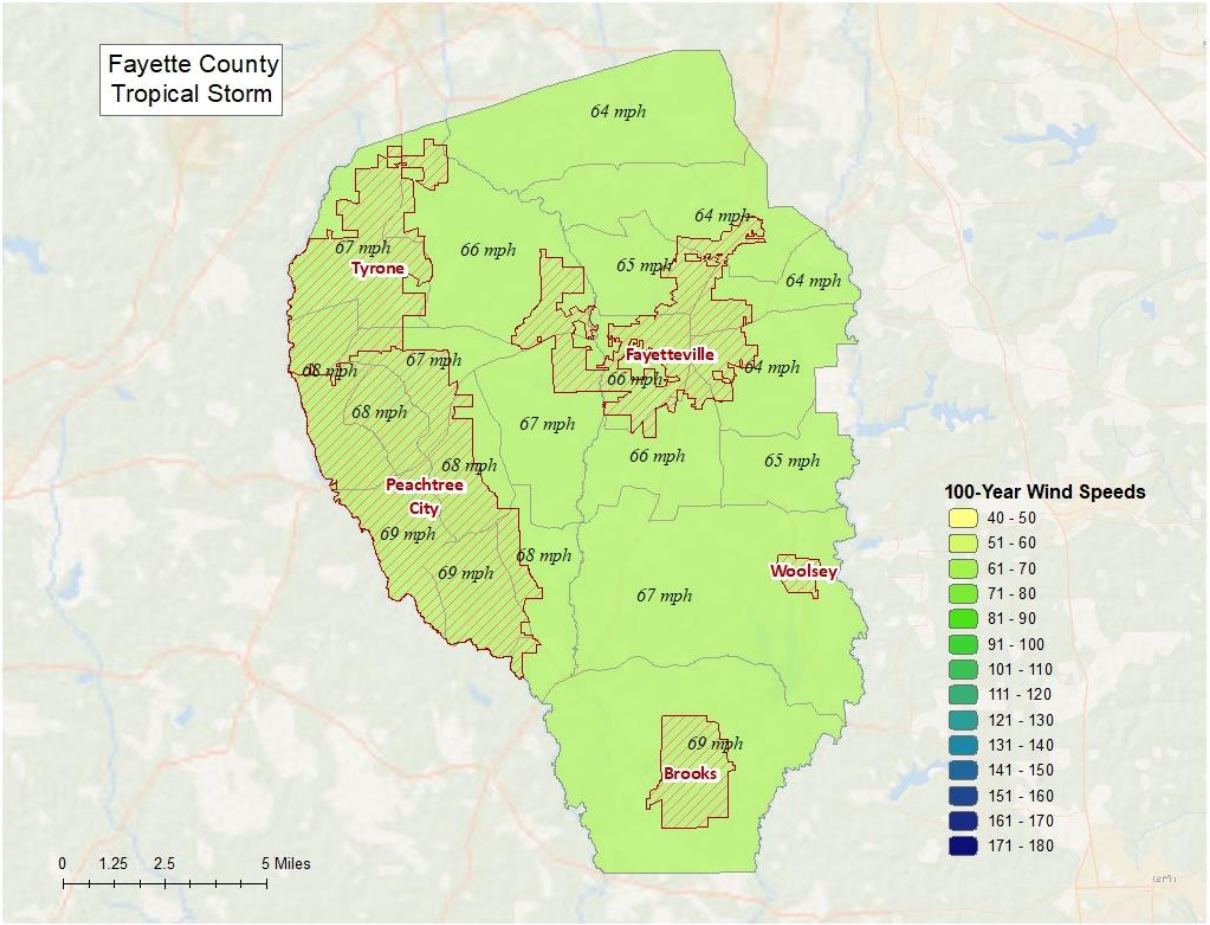


Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Fayette County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. The following table shows a summary of the results of wind-related building damage in Fayette County for the Tropical Storm (100 Year Event). The loss ratio expresses building losses as a percentage of total building replacement cost in the county. Figure 4 illustrates the building loss ratios of the modeled Tropical Storm.

Table 5: Hurricane Wind Building Damage

Classification	Number of Buildings Damaged	Total Building Damage	Total Economic Loss[5]	Loss Ratio
Tropical Storm	46	$11,277,560	$18,636,500	0.08%

[5] Includes property damage (infrastructure, contents, and inventory) as well as business interruption losses.

Note that wind damaged buildings are not reported by jurisdiction. This is due to the fact that census tract boundaries – upon which hurricane building losses are based – do not closely coincide with jurisdiction boundaries.

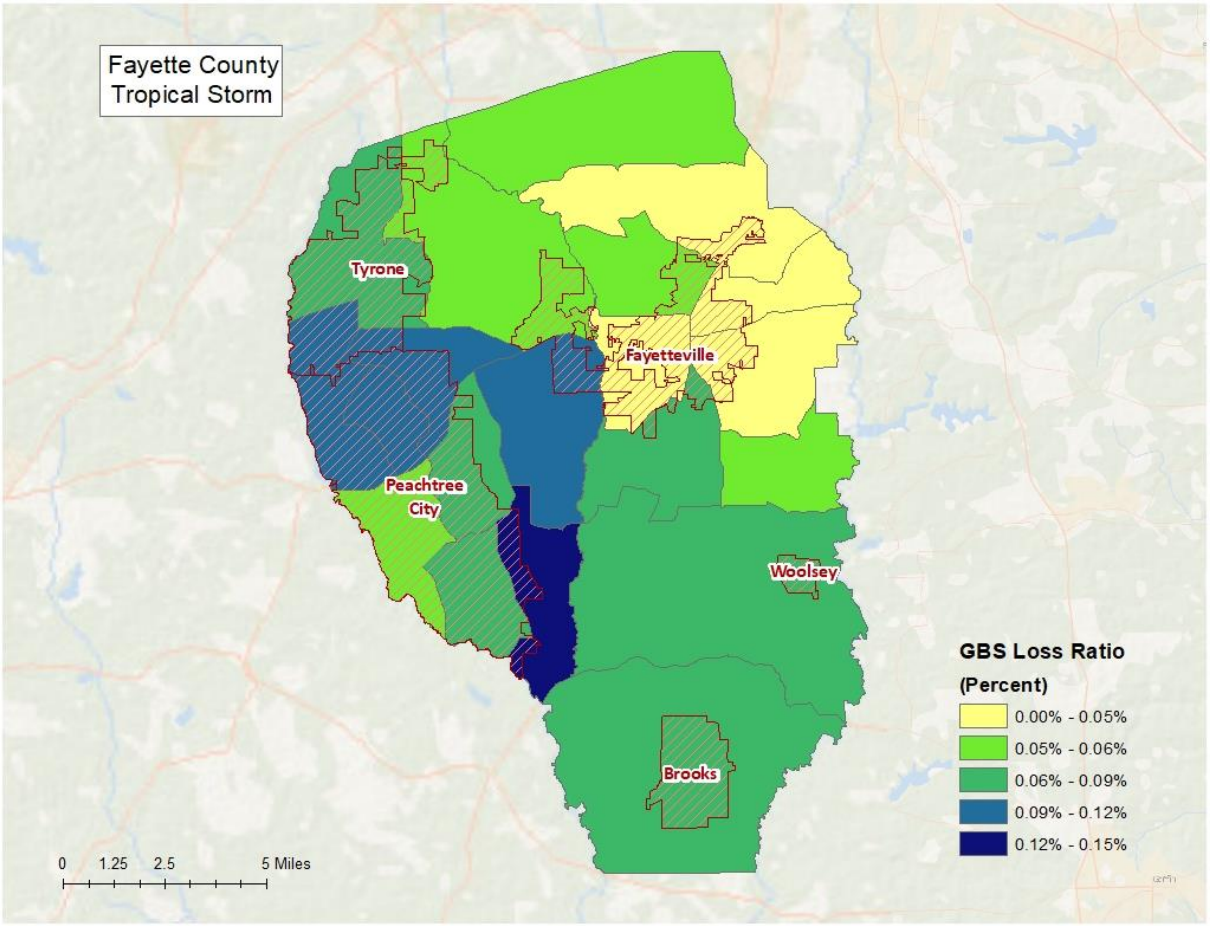


Figure 4: Hurricane Wind Building Loss Ratios

Essential Facility Losses

Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds. The results are compiled in Table 6.

There are 53 essential facilities in Fayette County.

Classification	Number
EOCs	1
Fire Stations	17
Care Facilities	3
Police Stations	6
Schools	26

Table 6: Wind-Damaged Essential Facility Losses

Classification	Facilities At Least Moderately Damaged > 50%	Facilities Completely Damaged > 50%	Facilities with Expected Loss of Use (< 1 day)
Tropical Storm	1	0	53

Shelter Requirements

Hazus-MH estimates the number of households evacuated from buildings with severe damage from high velocity winds as well as the number of people who will require short-term sheltering. Since the 1% chance storm event for Fayette County is a Tropical Storm, the resulting damage is not enough to displace Households or require temporary shelters as shown in the results listed in Table 7.

Table 7: Displaced Households and People

Classification	# of Displaced Households	# of People Needing Short-Term Shelter
Tropical Storm	0	0

Debris Generated from Hurricane Wind

Hazus-MH estimates the amount of debris that will be generated by high velocity hurricane winds and quantifies it into three broad categories to determine the material handling equipment needed:

- Reinforced Concrete and Steel Debris
- Brick and Wood and Other Building Debris
- Tree Debris

Different material handling equipment is required for each category of debris. The estimates of debris for this scenario are listed in Table 8. The amount of hurricane wind related tree debris that is estimated to require pick up at the public's expense is listed in the eligible tree debris column.

Table 8: Wind-Related Debris Weight (Tons)

Classification	Brick, Wood, and Other	Reinforced Concrete and Steel	Eligible Tree Debris	Other Tree Debris	Total
Tropical Storm	388	0	2,441	9,509	12,338

Figure 5 shows the distribution of all wind related debris resulting from a Tropical Storm. Each dot represents 20 tons of debris within the census tract in which it is located. The dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

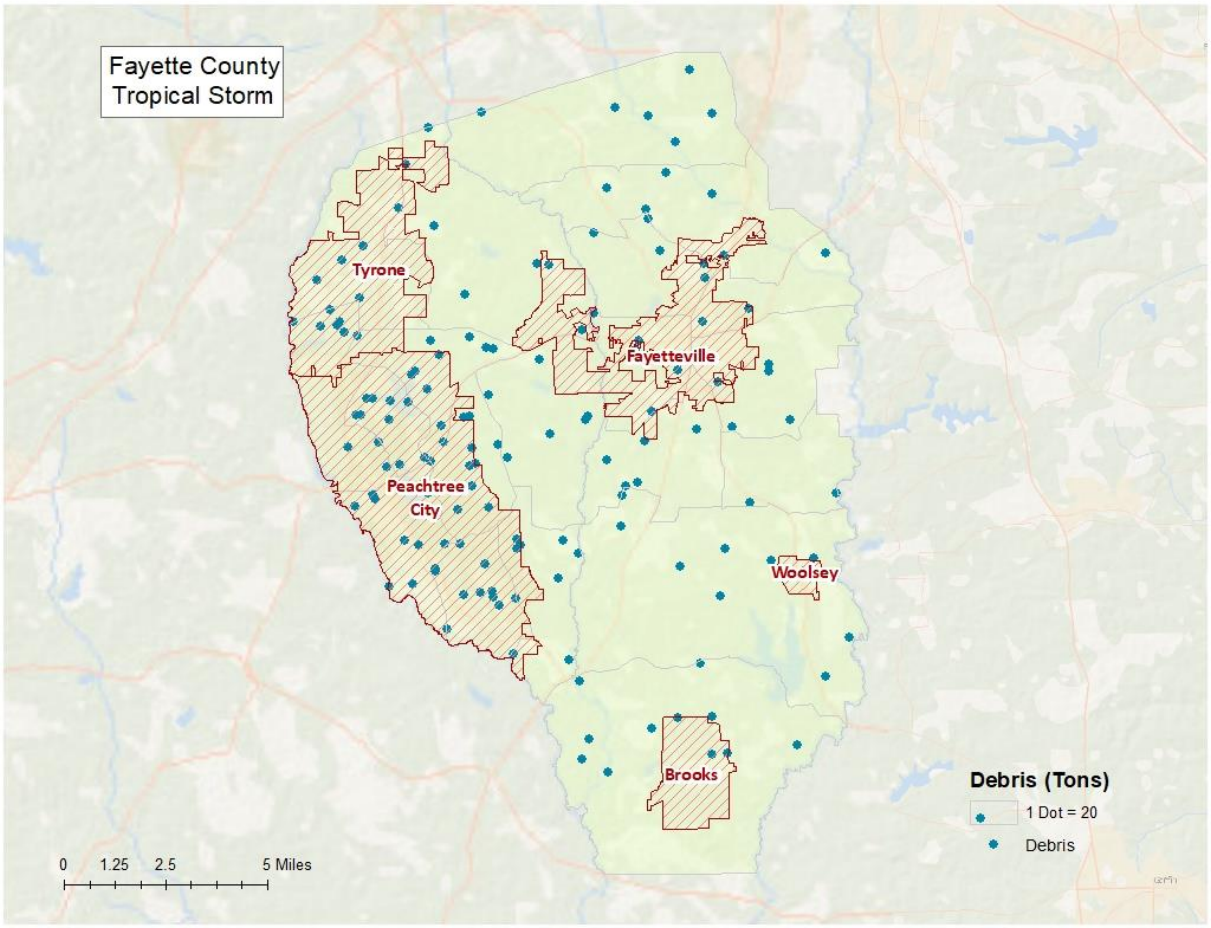


Figure 5: Wind-Related Debris Weight (Tons)

Flood Risk Assessment

Hazard Definition

Flooding is a significant natural hazard throughout the United States. The type, magnitude, and severity of flooding are functions of the amount and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Floods can be classified as one of three types: upstream floods, downstream floods, or coastal floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause damage over relatively localized areas, but they can be quite severe in the local areas in which they occur. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Georgia, but they are most common in the spring and summer months.

Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage.

Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings, leading to challenges in the determination of the base (1-percent-annual-chance) flood for hazard mapping purposes. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The Fayette County flood risk assessment analyzed at risk structures in the SFHA.

> The SFHA is the area where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The owner of a structure in a high-risk area must carry flood insurance, if the owner carries a mortgage from a federally regulated or insured lender or servicer.

The following probabilistic risk assessment involves an analysis of a 1% annual chance riverine flood event (100-Year Flood) and a 1% annual chance coastal flood.

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in November 2024. The flood boundaries were overlaid with the USGS 10 meter DEM

using the Hazus-MH Enhanced Quick Look tool to generate riverine depth grids. The riverine flood depth grid was then imported into Hazus-MH to calculate the riverine flood loss estimates. Figure 6 illustrates the riverine inundation boundary associated with the 1% annual chance.

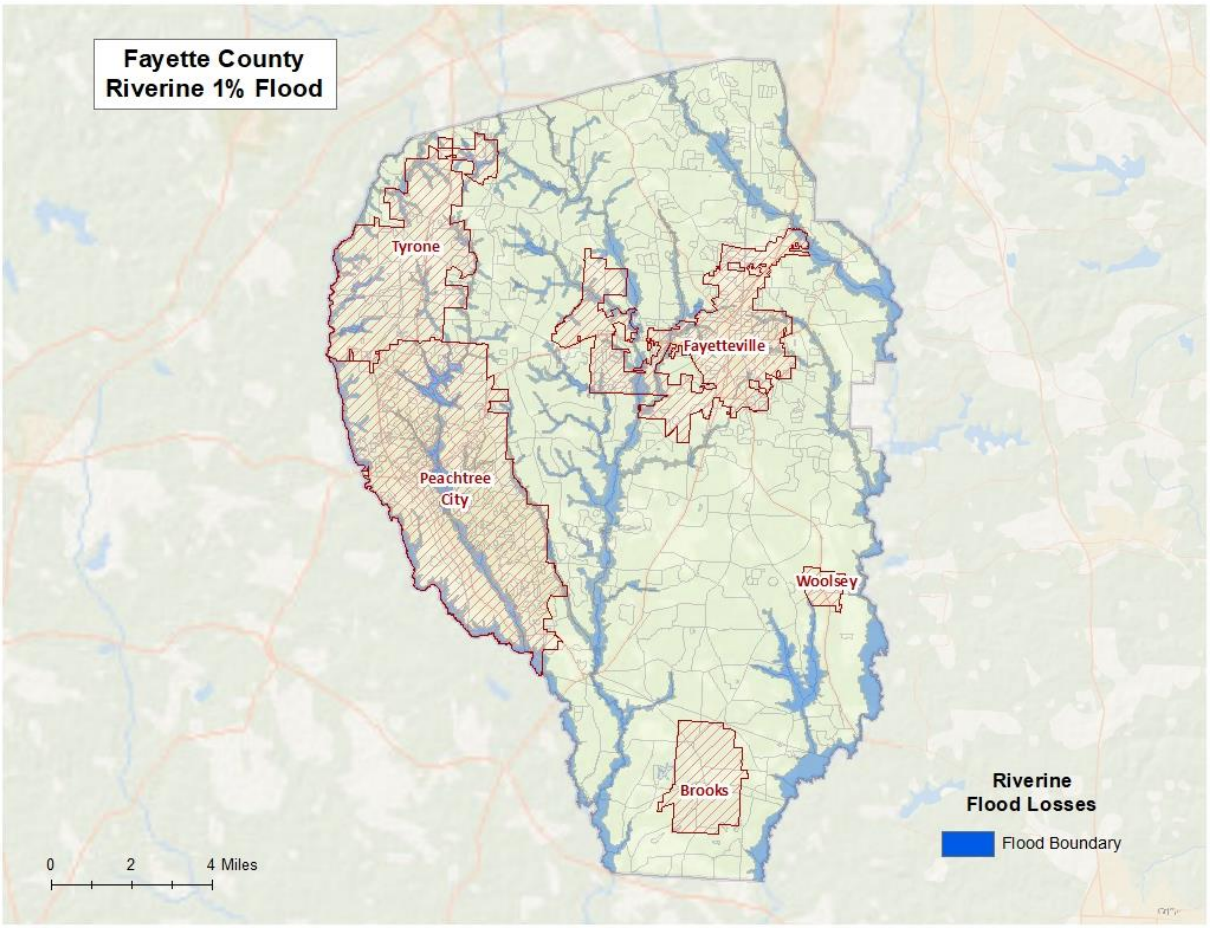


Figure 6: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Fayette County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 9 provides a summary of the potential flood-related building damage in Fayette County by jurisdiction that might be experienced from the 1% flood. Figure 7 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 8 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 9: Fayette County Riverine 1% Building Losses

Occupancy	Total Buildings in the Jurisdiction	Total Buildings Damaged in the Jurisdiction	Total Building Exposure in the Jurisdiction	Total Losses to Buildings in the Jurisdiction	Loss Ratio of Exposed Buildings to Damaged Buildings in the Jurisdiction
Fayetteville					
Residential	6,304	119	$1,800,709,650	$8,144,562	0.45%
Commercial	953	11	$715,032,101	$421,337	0.06%
Industrial	147	3	$61,567,601	$349,253	0.57%
Peachtree City					
Residential	13,329	249	$3,739,456,597	$16,240,115	0.43%
Industrial	259	21	$279,937,433	$620,639	0.22%
Commercial	678	5	$468,069,073	$965,416	0.21%
Tyrone					
Commercial	220	8	$100,358,088	$874,845	0.87%
Residential	2,742	121	$828,758,879	$11,060,720	1.33%
Industrial	93	2	$36,966,886	$1,192,378	3.23%
Unincorporated					
Commercial	348	21	$270,110,159	$9,467,556	3.51%
Industrial	196	15	$72,717,986	$2,207,361	3.04%
Residential	19,664	544	$5,713,157,958	$51,918,990	0.91%
County Total					
	44,933	**1,119**	**$14,086,842,412**	**$103,463,172**	

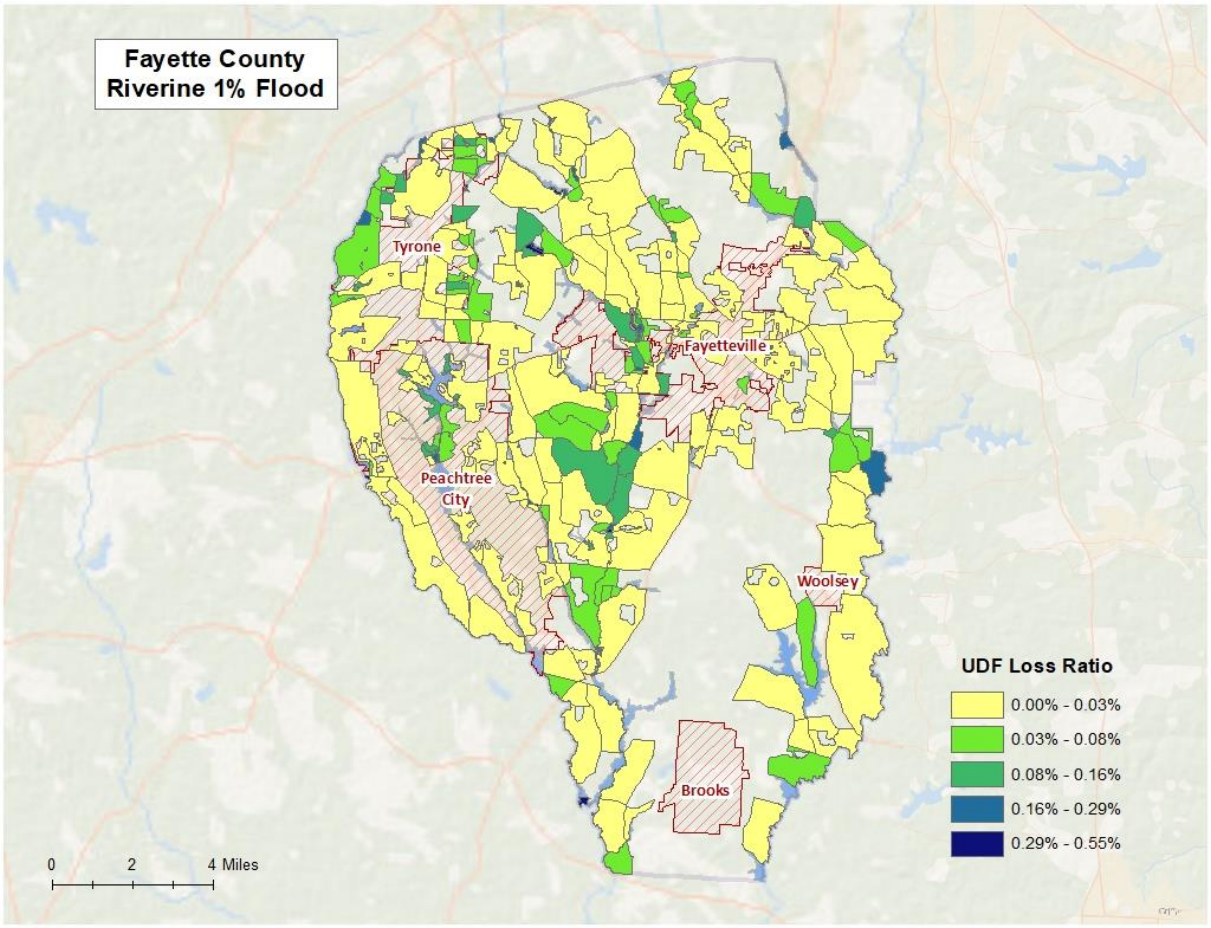


Figure 7: Fayette County Potential Loss Ratios of Total Building Exposure to Losses Sustained to Buildings from the 1% Riverine Flood by 2010 Census Block

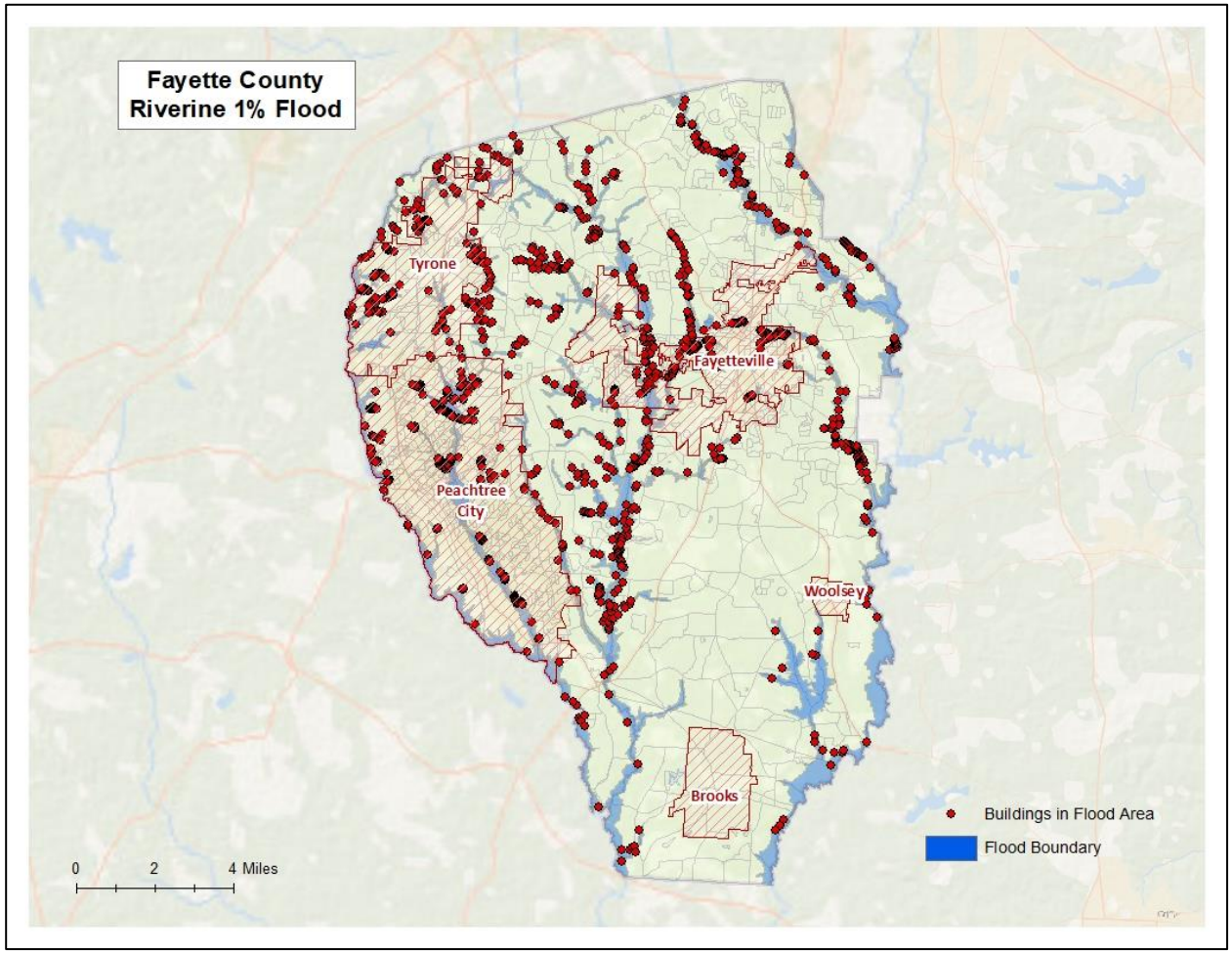


Figure 8: Fayette County Damaged Buildings in Riverine Floodplain (1% Flood)

Riverine 1% Flood Essential Facility Losses

An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis identified no essential facility that were subject to damage in the Fayette County riverine 1% probability floodplain.

Riverine 1% Flood Shelter Requirements

Hazus-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 3,115 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 9,345 individuals, of which 7,664 may require short term publicly provided shelter. The results are mapped in Figure 9.

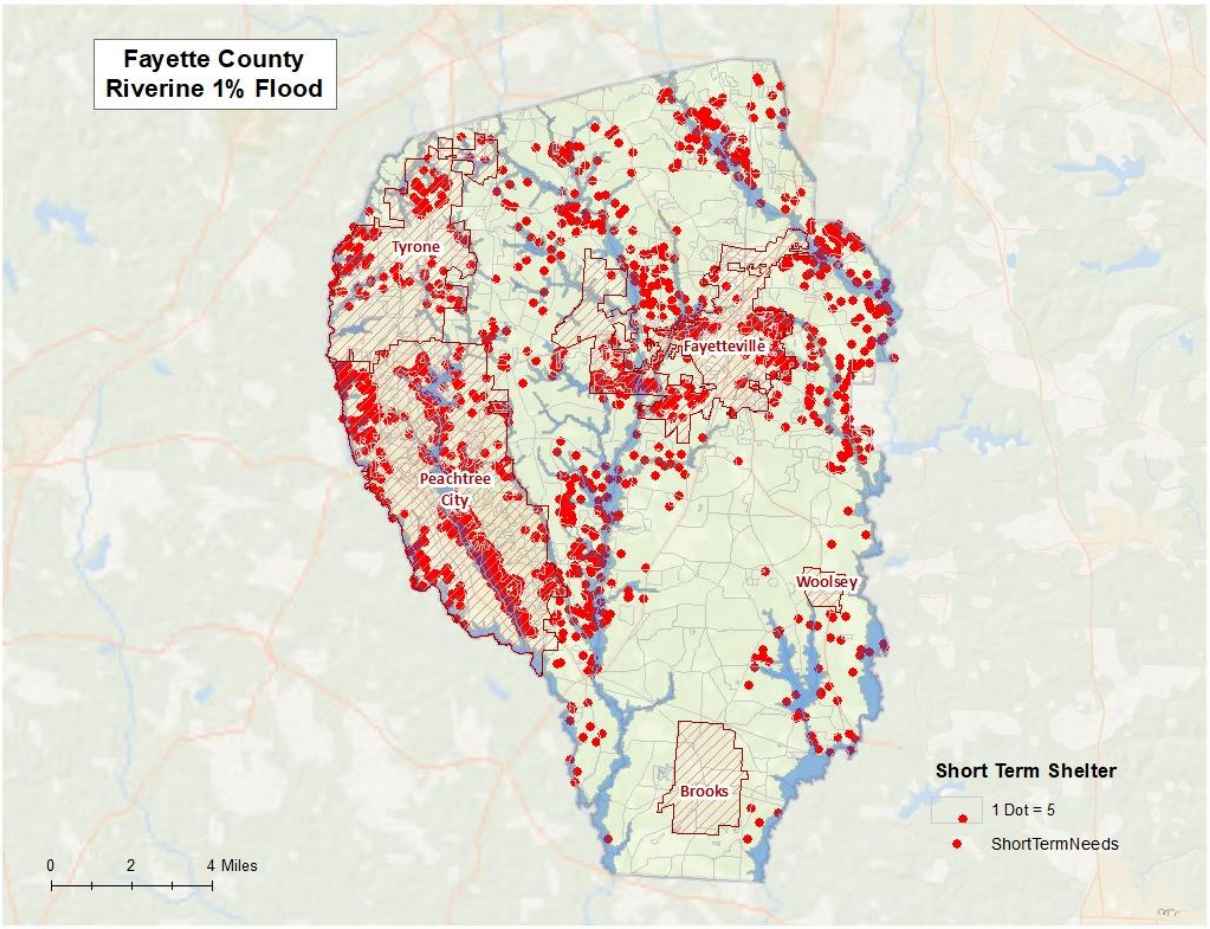


Figure 9: Riverine 1% Estimated Flood Shelter Requirements

Riverine 1% Flood Debris

Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 22,063 tons of debris might be generated: 1) Finishes- 7,334 tons; 2) Structural – 7,279 tons; and 3) Foundations- 7,450 tons. The results are mapped in Figure 10.

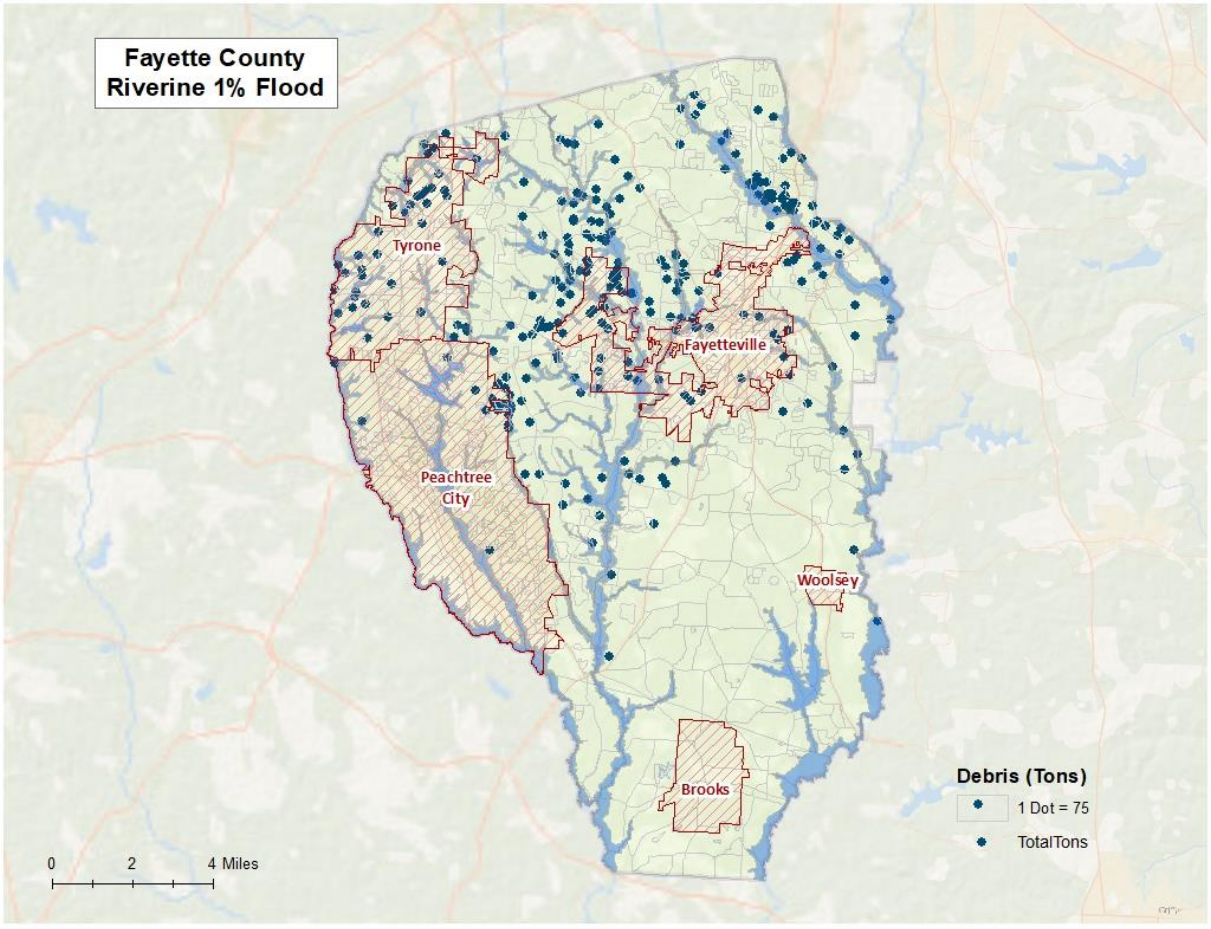


Figure 10: Riverine 1% Flood Debris Weight (Tons)

Tornado Risk Assessment

Hazard Definition

Tornadoes pose a great risk to the state of Georgia and its citizens. Tornadoes can occur at any time during the day or night. They can also happen during any month of the year. The unpredictability of tornadoes makes them one of Georgia's most dangerous hazards. Their extreme winds are violently destructive when they touch down in the region's developed and populated areas. Current estimates place the maximum velocity at about 300 miles per hour, but higher and lower values can occur. A wind velocity of 200 miles per hour will result in a wind pressure of 102.4 pounds per square foot of surface area—a load that exceeds the tolerance limits of most buildings. Considering these factors, it is easy to understand why tornadoes can be so devastating for the communities they hit.

Tornadoes are defined as violently-rotating columns of air extending from thunderstorms and cyclonic events. Funnel clouds are rotating columns of air not in contact with the ground; however, the violently-rotating column of air can reach the ground very quickly and become a tornado. If the funnel cloud picks up and blows debris, it has reached the ground and is a tornado.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 10.

Table 10: Enhanced Fujita Tornado Rating

Fujita Number	Estimated Wind Speed	Path Width	Path Length	Description of Destruction
EF0 *Gale*	65-85 mph	6-17 yards	0.3-0.9 miles	Light damage, some damage to chimneys, branches broken, sign boards damaged, shallow-rooted trees blown over.
EF1 Moderate	86-110 mph	18-55 yards	1.0-3.1 miles	Moderate damage, roof surfaces peeled off, mobile homes pushed off foundations, attached garages damaged.
EF2 Significant	111-135 mph	56-175 yards	3.2-9.9 miles	Considerable damage, entire roofs torn from frame houses, mobile homes demolished, boxcars pushed over, large trees snapped or uprooted.
EF3 Severe	136-165 mph	176-566 yards	10-31 miles	Severe damage, walls torn from well-constructed houses, trains overturned, most trees in forests uprooted, heavy cars thrown about.
EF4 Devastating	166-200 mph	0.3-0.9 miles	32-99 miles	Complete damage, well-constructed houses leveled, structures with weak foundations blown off for some distance, large missiles generated.
EF5 Incredible	> 200 mph	1.0-3.1 miles	100-315 miles	Foundations swept clean, automobiles become missiles and thrown for 100 yards or more, steel-reinforced concrete structures badly damaged.

Source: http://www.srh.noaa.gov

Hypothetical Tornado Scenario

For this report, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados (southeast to northwest). The tornado path was placed to travel through Fayetteville. The selected widths were modeled after a re-creation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths. There is no guarantee that every tornado will fit exactly into one of these categories. Table 11 depicts tornado path widths and expected damage.

Table 11: Tornado Path Widths and Damage Curves

Fujita Scale	Path Width (feet)	Maximum Expected Damage
EF-5	2,400	100%
EF-4	1,800	100%
EF-3	1,200	80%
EF-2	600	50%
EF-1	300	10%
EF-0	300	0%

Within any given tornado path there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. After the hypothetical path is digitized on a map, the process is modeled in GIS by adding buffers (damage zones) around the tornado path. Figure 11 describes the zone analysis.

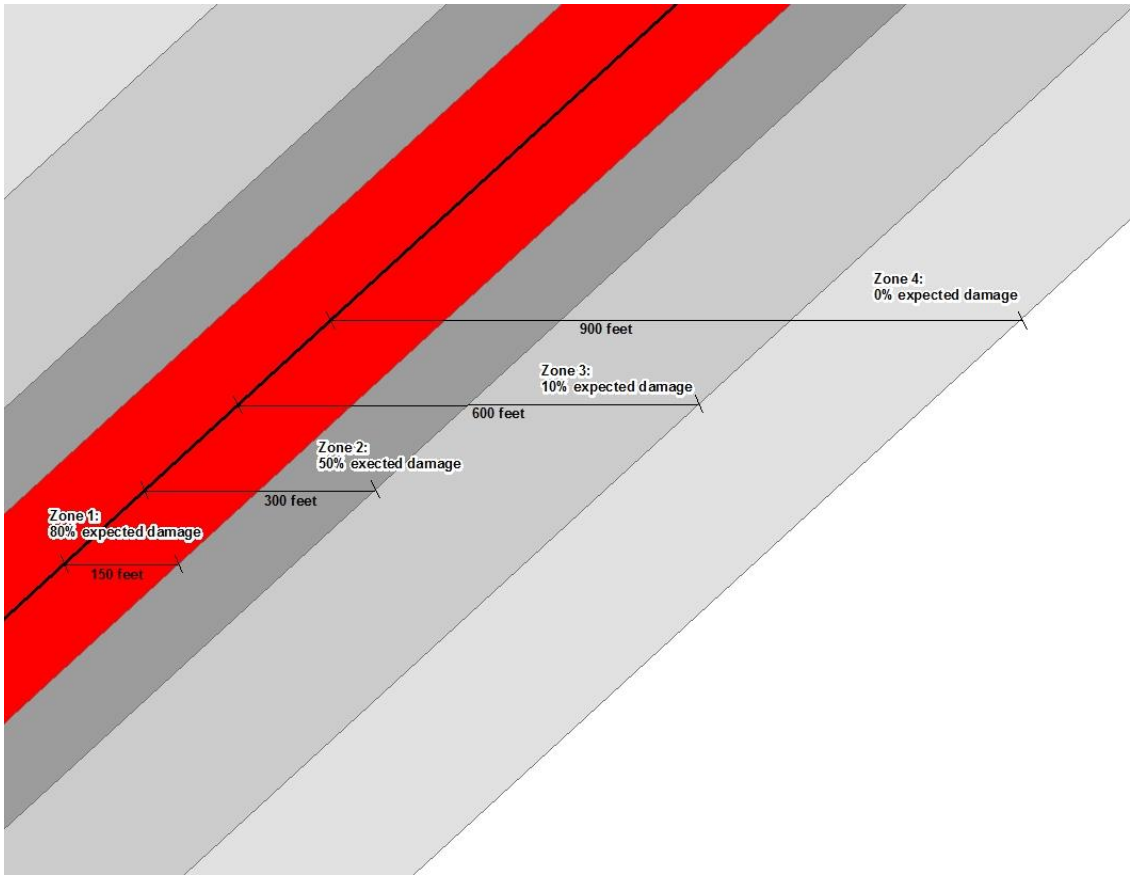


Figure 11: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 12. Major damage is estimated within 150 feet of the tornado path. The outer buffer is 900 feet from the tornado path, within which buildings will not experience any damage. The selected hypothetical tornado path is depicted in Figure 12 and the damage curve buffer zones are shown in Figure 13.

Table 12: EF3 Tornado Zones and Damage Curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%
4	600-900	0%

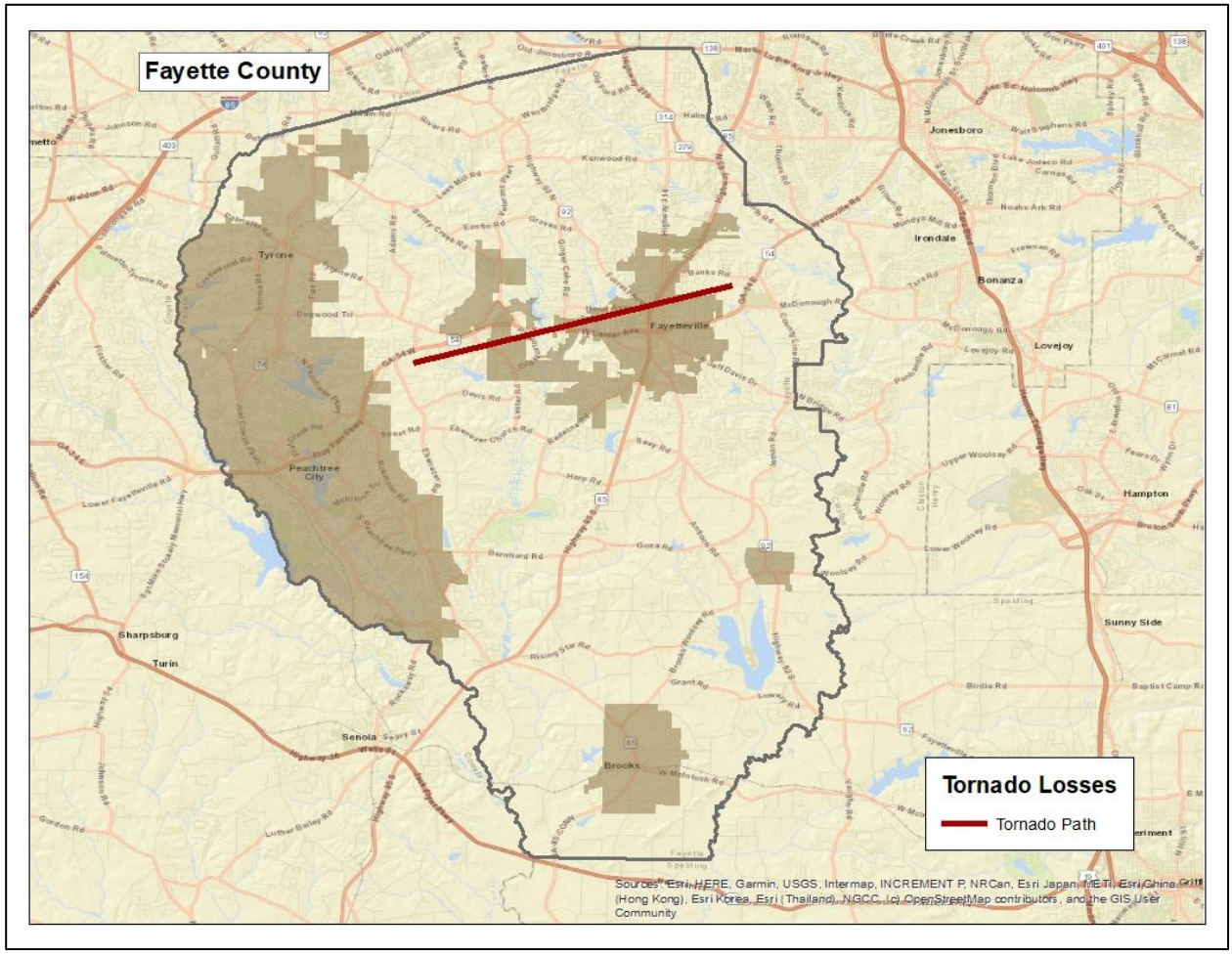


Figure 12: Hypothetical EF3 Tornado Path in Fayette County

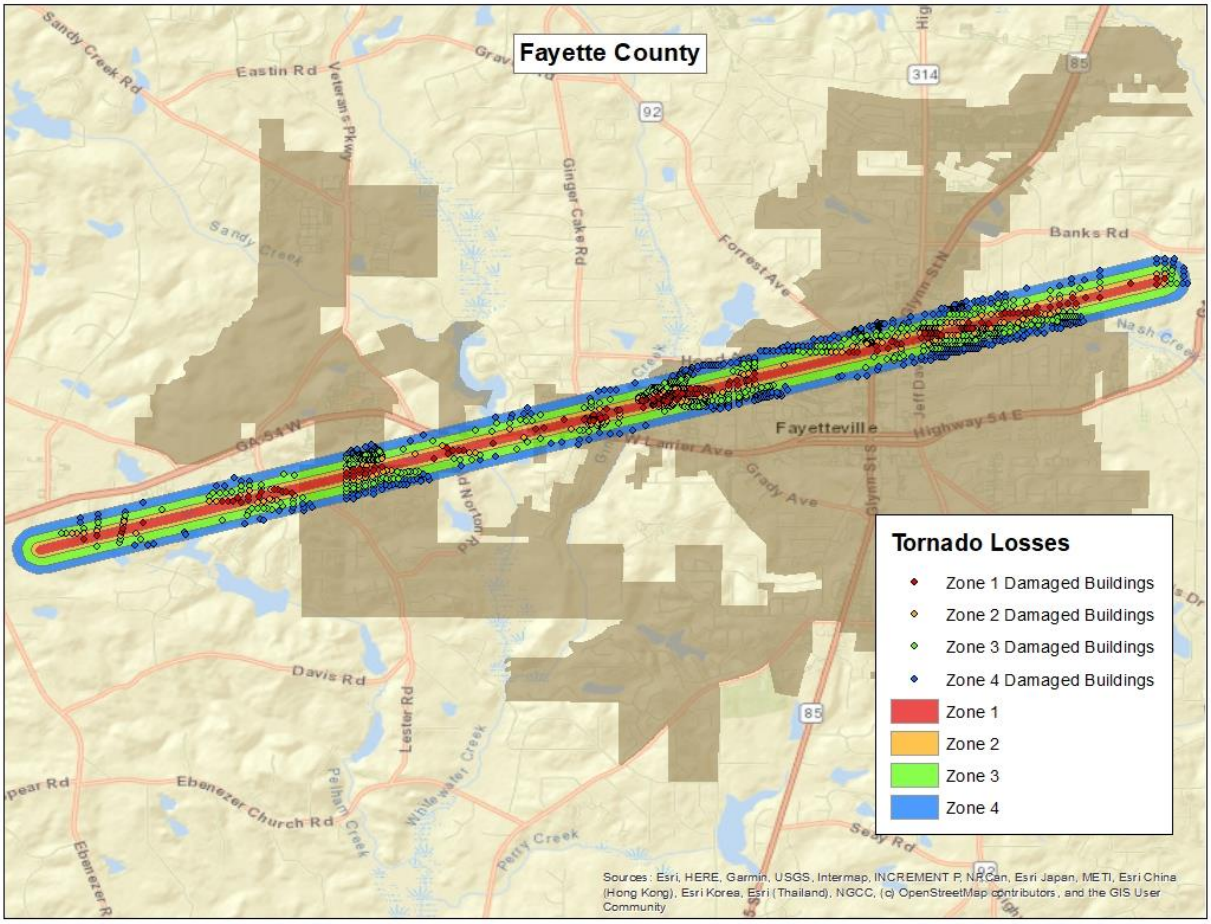


Figure 13: Modeled EF3 Tornado Damage Buffers in Fayette County

EF3 Tornado Building Damages

The analysis estimated that approximately 1,462 buildings could be damaged, with estimated building losses of $84 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Fayette County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 13.

Table 13: Estimated Building Losses by Occupancy Type

Occupancy	Buildings Damaged	Building Losses
Residential	1,242	$58,537,225
Commercial	207	$16,887,780
Industrial	4	$57,339
Religious	3	$92,567
Education	6	$8,062,517
Total	**1,462**	**$83,637,428**

EF3 Tornado Essential Facility Damage

There were five essential facilities located in the tornado path – four school and one medical care facility. Table 14 outlines the specific facility and the amount of damage under the scenario.

Table 14: Estimated Essential Facilities Damaged

Facility	Amount of Damage
Cleveland Elementary School	Major Damage
Fayetteville Elementary School	Major Damage
Bennett's Mill Middle School	Minor Damage
Fayette County High School	Minor Damage
Fayette Medical Clinic	Minor Damage

According to the Georgia Department of Education, Cleveland Elementary School's enrollment was approximately 414 students, Fayetteville Elementary School's enrollment was approximately 507 students, Bennett's Mill Middle School's enrollment was approximately 876 students, and Fayette County High School's enrollment was approximately 1,360 students as of October 2024. Depending on the time of day, a tornado strike as depicted in this scenario could result in significant injury and loss of life. In addition, arrangements would have to be made for the continued education of the students in another location.

The location of the damaged Essential Facility is mapped in Figure 14.

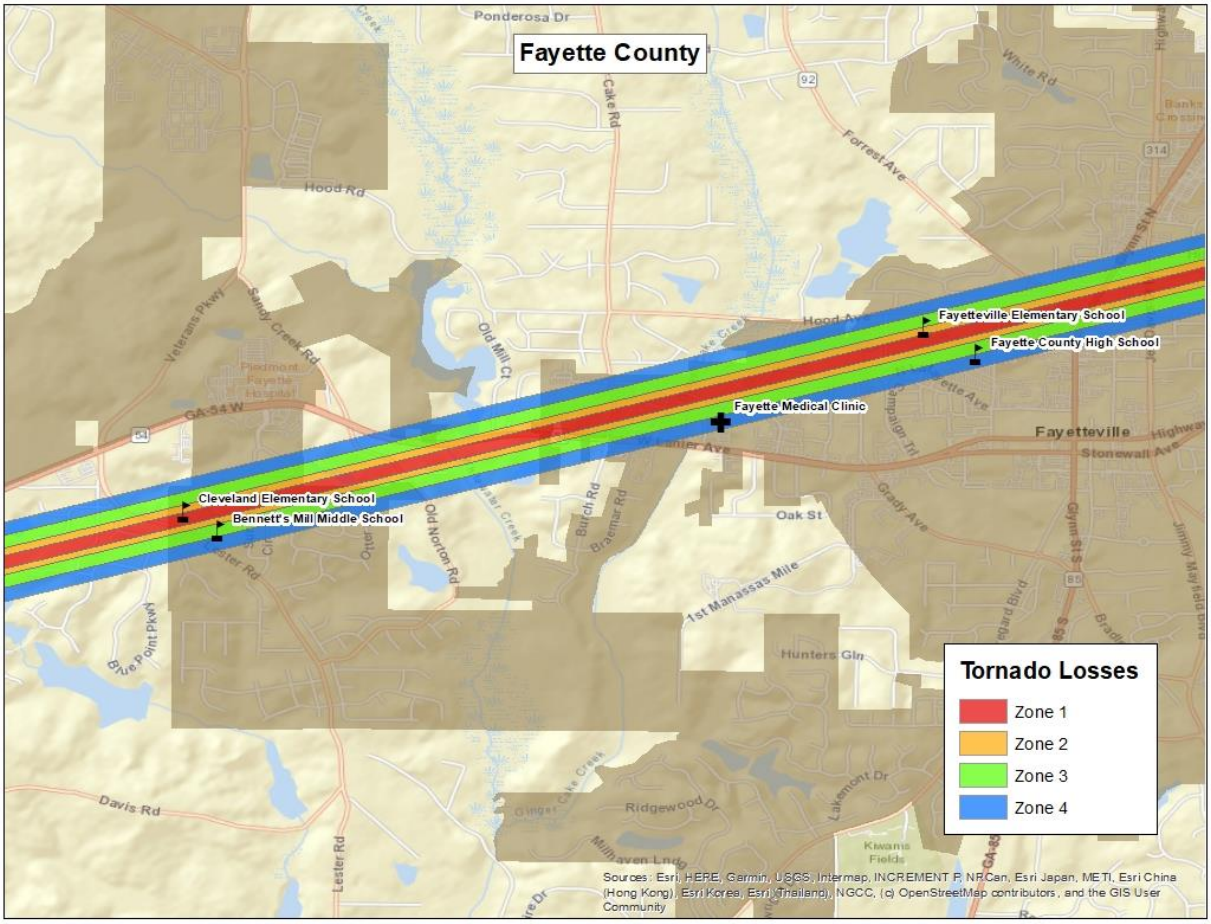


Figure 14: Modeled Essential Facility Damage in Fayette County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Fayette County, Georgia. Changes made to the default Hazus-MH inventory and the modeling parameters used to setup the hazard scenarios are described within this document.

Reported losses reflect the updated data sets. Steps, algorithms and assumptions used during the data update process are documented in the project workflow named PDM_GA_Workflow.doc.

Statewide Inventory Changes

The default Hazus-MH Essential Facility inventory was updated for the entire state prior to running the hazard scenarios for Fayette County.

Updates to the Critical Facility data used in GMIS were provided by Fayette County in November 2024. These updates were applied by The Carl Vinson Institute of Government at the University of Georgia. Table 15 summarizes the difference between the original Hazus-MH default data and the updated data for Fayette County.

Table 15: Essential Facility Updates

Site Class	Feature Class	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
EF	Care	$146,850,000	3	$248,000,000	3
EF	EOC	$880,000	1	$7,500,000	1
EF	Fire	$12,141,000	15	$42,150,000	17
EF	Police	$8,234,000	4	$95,561,000	6
EF	School	$386,141,000	31	$622,000,000	26

County Inventory Changes

The GBS records for Fayette County were replaced with data derived from parcel and property assessment data obtained from Fayette County. The county provided property assessment data was current as of November 2024 and the parcel data current as of November 2024.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Fayette County. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary. Each parcel point was linked to an assessor record based upon matching parcel numbers. The generated Building Inventory represents the approximate locations (within a parcel) of building exposure. The Building Inventory was aggregated by Census Block and imported into Hazus-MH using the Hazus-MH Comprehensive Data Management System (CDMS). Both the 2010 Census Tract and Census Block tables were updated.

The match between parcel records and assessor records was based upon a common Parcel ID. For this type of project, unless the hit rate is better than 85%, the records are not used to update the default aggregate inventory in Hazus-MH. The Parcel-Assessor hit rate for Fayette County was 98.8%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 16 outlines the adjustments made to Fayette County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	353	1%
Construction Unknown	3,787	8%
Condition Unknown	0	0%
Foundation Unknown	5,134	11%
Year Built Unknown	1,945	4%
Total Buildings	**46,215**	**5%**

Approximately 5% of the CAMA values were either missing (<Null> or '0'), did not match CAMA domains or were unusable ('Unknown', 'Other', 'Pending'). These were replaced with 'best available' values. Missing YearBuilt values were populated from average values per Census Block. Missing Condition, Construction and Foundation values were populated with the highest-frequency CAMA values per Occupancy Class. Missing Area values were populated with the average CAMA values per Occupancy Class.

The resulting Building Inventory was used to populate the Hazus-MH General Building Stock and User Defined Facility tables. The updated General Building Stock was used to calculate flood and tornado losses. Changes to the building counts and exposure that were modeled in Fayette County are sorted by General Occupancy in Table 1 at the beginning of this report. If replacements cost or building value were not present for a given record in the Assessor data, replacement costs were calculated from the Building Area (sqft) multiplied by the Hazus-MH RS Means ($/sqft) values for each Occupancy Class.

Differences between the default and updated data are due to various factors. The Assessor records often do not distinguish parcels by occupancy class when the parcels are not taxable; therefore, the total number of buildings and the building replacement costs for government, religious/non-profit, and education may be underestimated.

User Defined Facilities

Building Inventory was used to create Hazus-MH User Defined Facility (UDF) inventory for flood modeling. Hazus-MH flood loss estimates are based upon the UDF point data. Buildings within the flood boundary were imported into Hazus-MH as User Defined Facilities and modeled as points.

Table 17: User Defined Facility Exposure

Class	Hazus-MH Feature	Counts	Exposure
BI	Building Exposure	45,624	$14,718,710,391
Riverine UDF	Structures Inside 1% Annual Chance Riverine Flood Area	1,220	$417,775,068

Assumptions

- Flood analysis was performed on Building Inventory. Building Inventory within the flood boundary was imported as User Defined Facilities. The point locations are parcel centroid accuracy.
- The analysis is restricted to the county boundary. Events that occur near the county boundary do not contain loss estimates from adjacent counties.
- The following attributes were defaulted or calculated:
  First Floor Height was set from Foundation Type
  Content Cost was calculated from Building Cost

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Fayette 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.

	Number of Structures			Value of Structures			Number of People		
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	42,361	42,361	100.000%	12,182,648,000	12,182,648,000	100.000%	53,599	53,599	100%
Commercial	2,227	2,227	100.000%	1,556,722,000	1,556,722,000	100.000%	0	0	0%
Industrial	702	702	100.000%	451,804,000	451,804,000	100.000%	0	0	0%
Agricultural	2	2	100.000%	182,000	182,000	100.000%	0	0	0%
Religious/ Non-profit	219	219	100.000%	168,178,000	168,178,000	100.000%	0	0	0%
Government	44	44	100.000%	102,952,000	102,952,000	100.000%	0	0	0%
Education	69	69	100.000%	256,097,000	256,097,000	100.000%	0	0	0%
Utilities	0	0	#DIV/0!	0	0	#DIV/0!	0	0	0%
Total	45,624	45,624	100.000%	14,718,583,000	14,718,583,000	100.000%	53,599	53,599	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?	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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Fayette County (Unincorporated)
Hazard: Flood

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.

	Number of Structures			Value of Structures			Number of People		
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	19,664	544	2.766%	5,713,157,958	51,918,990	0.909%	53,599	1,483	3%
Commercial	348	21	6.034%	270,110,159	9,467,556	3.505%	0	0	#DIV/0!
Industrial	196	15	7.653%	72,717,986	2,207,361	3.036%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Government	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Education	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Utilities	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Total	20,208	580	2.870%	6,055,986,103	#DIV/0!	#DIV/0!	53,599	#DIV/0!	#DIV/0!

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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Fayetteville

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.

	Number of Structures			Value of Structures			Number of People		
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	6,304	6,304	100.000%	1,800,709,650	1,800,709,650	100.000%	19,364	19,364	100%
Commercial	953	953	100.000%	715,032,101	715,032,101	100.000%	0	0	#DIV/0!
Industrial	147	147	100.000%	61,567,601	61,567,601	100.000%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Government	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Education	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Utilities	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Total	7,404	7,404	100.000%	2,577,309,352	2,577,309,352	100.000%	19,364	19,364	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?	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?	N	
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	

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Fayetteville
Hazard: Flood

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.

	Number of Structures			Value of Structures			Number of People		
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	6,304	119	1.888%	1,800,709,650	8,144,562	0.452%	19,364	366	2%
Commercial	953	11	1.154%	715,032,101	421,337	0.059%	0	0	#DIV/0!
Industrial	147	3	2.041%	61,567,601	349,253	0.567%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Government	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Education	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Utilities	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Total	7,404	133	1.796%	2,577,309,352	#DIV/0!	#DIV/0!	19,364	#DIV/0!	#DIV/0!

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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Peachtree City
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.

	Number of Structures			Value of Structures			Number of People		
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	13,329	13,329	100.000%	3,739,456,597	3,739,456,597	100.000%	38,977	38,977	100%
Commercial	259	259	100.000%	279,937,433	279,937,433	100.000%	0	0	#DIV/0!
Industrial	678	678	100.000%	468,069,073	468,069,073	100.000%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Government	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Education	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Utilities	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Total	14,266	14,266	100.000%	4,487,463,103	4,487,463,103	100.000%	38,977	38,977	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?	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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Peachtree City
Hazard: Flood

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.

	Number of Structures			Value of Structures			Number of People		
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	13,329	249	1.868%	3,739,456,597	16,240,115	0.434%	38,977	728	2%
Commercial	259	21	8.108%	279,937,433	620,639	0.222%	0	0	#DIV/0!
Industrial	678	5	0.737%	468,069,073	965,416	0.206%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Government	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Education	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Utilities	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Total	14,266	275	1.928%	4,487,463,103	#DIV/0!	#DIV/0!	38,977	#DIV/0!	#DIV/0!

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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Tyrone

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.

	Number of Structures			Value of Structures			Number of People		
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	2,742	2,742	100.000%	828,758,879	828,758,879	100.000%	7,803	7,803	100%
Commercial	220	220	100.000%	100,358,088	100,358,088	100.000%	0	0	#DIV/0!
Industrial	93	93	100.000%	36,966,886	36,966,886	100.000%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Government	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Education	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Utilities	0	0	#DIV/0!	0	0	#DIV/0!	0	0	#DIV/0!
Total	3,055	3,055	100.000%	966,083,853	966,083,853	100.000%	7,803	7,803	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?	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?		N
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

GEMHSA Worksheet #3a Inventory of Assets

Jurisdiction: Tyrone
Hazard: Flood

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.

	Number of Structures			Value of Structures			Number of People		
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	2,742	121	4.413%	828,758,879	11,060,720	1.335%	7,803	344	4%
Commercial	220	8	3.636%	100,358,088	874,845	0.872%	0	0	#DIV/0!
Industrial	93	2	2.151%	36,966,886	1,192,378	3.226%	0	0	#DIV/0!
Agricultural	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Religious/ Non-profit	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Government	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Education	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Utilities	0	0	#DIV/0!	0	#DIV/0!	#DIV/0!	0	#DIV/0!	#DIV/0!
Total	3,055	131	4.288%	966,083,853	#DIV/0!	#DIV/0!	7,803	#DIV/0!	#DIV/0!

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?		N
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