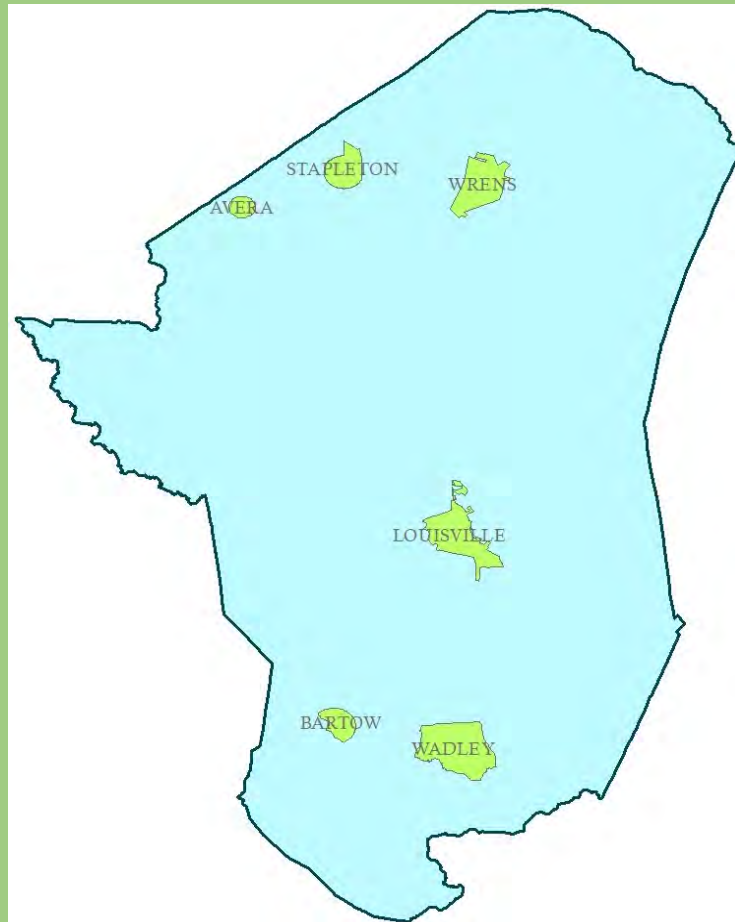


Jefferson County, Georgia
Multi-Hazard Pre-Disaster Mitigation Plan
Original Plan Approval: 03/27/2009
First Update Approval:
Second Update Approval:



Prepared For:
Jefferson County Board of Commissioners
P.O. Box 658
Louisville, Georgia 30830
(478) 625-3332
FAX (478) 625-4007

Prepared By:
Central Savannah River Area
Regional Commission
3626 Walton Way Extension, Suite 1
Augusta, GA 30909
(706) 210-2000
FAX (706) 210-2006

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CHAPTER I. INTRODUCTION TO THE PLANNING PROCESS

Table 1.1 provides a brief description of each section in this chapter and a summary of the changes made.

Table 1.1

Chapter I Section	Updates to Section
I. Purpose and need of the plan, authority & statement of problem.	Updated text of this section.
II. Local methodology, brief description of plan update process, Participants in update process.	Updated the participants, planning process and how data was collected.
III. Description of how each section of the original plan was reviewed and analyzed and whether it was revised.	There have been numerous changes to the GEMA -PDM planning template since the 2014 approval. All sections of the original plan were analyzed and revised.
IV. Organization of the plan.	The plan is organized by GEMA local planning template Local Hazard Mitigation Plan Update Template 5-23-12 and includes a timeline.
V. Local Hazard, Risk, and Vulnerability (HRV) summary, local mitigation goals and objectives.	Added new information to summary, new purpose for plan.
VI. Multi-Jurisdictional special considerations (HRV, goals, special needs).	Reviewed and updated information regarding multijurisdictional concerns.
VII. Adoption, implementation, monitoring and evaluation.	This was evaluated and remains the same. Additional text was added to clearly delineate the task of implementation and monitoring. Plan was adopted after GEMA and FEMA review and approves the update plan.
VIII. Community Data (demographics, census, commerce, history, etc.)	Updated demographic and added additional information by jurisdiction.

SECTION I. PURPOSE AND NEED OF THE PLAN, AUTHORITY AND STATEMENT OF PROBLEM

The Jefferson County 2024 Plan Update is the review and improvement to our Multi-Hazard Pre-Disaster Mitigation Plan approved on February 11, 2020. The plan fulfills the requirements of the Federal Disaster Mitigation Act of 2000 (DMA2K). The Act is administered by the Georgia Emergency Management Agency (GEMA) and the Federal Emergency Management Agency (FEMA). The act provides federal assistance to state and local emergency management and other disaster response organizations to reduce damage from disasters. The plan has involved many community partners including elected officials, city and county personnel, fire, emergency management, law enforcement, and public works. The goal of this plan is to identify natural hazards and develop strategies to lessen the impact on our community.

The 2024 update is written to comply with Section 409 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act Title 44 CFR as amended by Section 102 of the Disaster Mitigation Act of 2000. The act gives state and local governments the framework to evaluate and mitigate all hazards as a condition of receiving federal disaster funds. The 2024 update covers all of Jefferson County to include the cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens. The plan will identify all natural disasters that could threaten the lives and properties of our community. The scope of the update includes both short and long-term mitigation strategies, implementation policies and possible sources of project funding. It also identifies mitigation strategies implemented since the 2019 plan update.

The plan also contains the following information on:

- The vision of mitigation in our community.
- The profile of Jefferson County, its geography, history, physical features and other community indicators.
- The planning process and the involvement of all municipal, state and federal governments, the public, industry and other community players.
- Jefferson County's past and predicted exposure to natural hazards and the potential risks that include the impacts on critical infrastructure with anticipated losses was documented.
- An overview of Jefferson County's capabilities to implement hazard mitigation goals and objectives, and policies that will effectively mitigate risks to our community.
- Procedures for maintaining an effective, long range hazard mitigation plan and strategy to implement.
- An assessment of Jefferson County's current policies, goals and regulations that pertain to hazard mitigation.
- Documentation of the planning process.
- Updated hazard events that occurred since 2019.
- Updated critical facilities added since 2019.
- Documented current mitigation strategies implemented since 2019; and
- Examined and updated mitigation strategy goals, objectives and action steps.

The update is the product of the combined efforts of Jefferson County, and the cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens. Identifying the community's risks and working collectively toward the prevention of disasters in the community is in the county's best interest, the Jefferson County Emergency Management Agency (EMA) took the lead role in the update. Under the agency's leadership, there has been an endorsement and a commitment by Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens.

Continued mitigation planning is imperative to lessen the impacts of disasters in Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens. This plan serves as an excellent method to organize and document current and ongoing mitigation strategies; however, the implementation of the plan and its components is vital to achieve a community that is resistant to the impact of a disaster. The objective is implementation of this plan will result in a reduction of the loss of life and property, while allowing the county to prosper with minimal disruption of services to the community.

SECTION II. LOCAL METHODOLOGY, PLAN UPDATE PROCESS AND PARTICIPANTS

The Jefferson County Board of Commissioners contracted with the Central Savannah River Area Regional Commission (RC) to assist in the update to the 2024 plan. The RC was tasked to review the current plan and to identify new information that needs to be incorporated into the update. The RC in conjunction with the EMA Director, supervised the project, organized the data, set meeting dates, documented in-kind services, and worked with GEMA to complete the update.

EMA Director James Anderson assembled the Hazard Mitigation Planning Committee. The table below identifies the 2024 members.

Name	Agency/Title	Jurisdiction
Tommy Sheppard	Mayor	City of Avera
Amy Hadden	Clerk	City of Avera
James W. Miller	Police Chief	City of Louisville
James Davis	Fire Chief	City of Louisville
Jennifer Smith	Mayor	City of Louisville
Ricky Sapp	City Administrator	City of Louisville
Lisa Cranford	Mayor	City of Stapleton
Rita Hilton	City Clerk	City of Wadley
Darryl Allen	Public Works Director	City of Wadley
Keith Boulineau	Fire Chief	City of Wrens
John Maynard	Chief of Police Department	City of Wrens
Brian Usry	Public Works Director	City of Wrens
Arty Thrift	City Administrator	City of Wrens
James O. Anderson	EMA Director	Jefferson County
Jerry Coalson	County Administrator	Jefferson County
Tammy Bennett	Senior Center Director	Jefferson County
Leigh Davis	Nurse/ JC Health Dept.	Jefferson County
Gary Hutchins	Sheriff/Sheriff's Office	Jefferson County
Robert Chalker	Captain Sheriff's Office	Jefferson County
Johnny Davis	County Commissioner/BOC	Jefferson County
Adrian Snell	Building Dept. Supervisor	Jefferson County
Tim Moore	Colonel, Sheriff's Office	Jefferson County
Scott Tiner	Dir, of Maintenance Board of Education	Jefferson County
Ken Hildebrandt	Board of Education	Jefferson County
Parrish Howard	Jefferson Reporter	Jefferson County
Anna Anderson	EMA	Jefferson County
Jeff White	Mayor	Town of Bartow
Jason Jones	Police Chief	Town of Bartow

The 2024 committee was responsible for the organization, data collection and completion of the plan. It was the responsibility of the committee to include all pertinent departments within their respective governments and to request information as needed. The following

agencies/departments/organizations provided specific information and support for the original plan and provided any new information for the update:

- Jefferson County School District was responsible for providing structural replacement and content values for all schools as well as square footage and occupancy limits.
- Police Departments for the Cities of Bartow, Louisville, Stapleton, Wadley, and Wrens provided staff support and were responsible for providing structural replacement and content values for all critical facilities located in their respective cities as well as square footage and occupancy limits.
- Jefferson County Sheriff's Office provided staff support to the planning effort.
- Jefferson County Health Department identified vulnerable populations. They also provided replacement value estimates for their properties.
- Fire Departments of Jefferson County and the City of Louisville and Wrens provided staff support and assisted with identifying occupancy limits for some of the critical structures and replacement value estimates.
- City officials from the Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens provided information relative to their jurisdictions and provided replacement value estimates for their critical facilities.
- Georgia Forestry Commission provided data on wildfire events and assisted with the formulation of mitigation measures.
- Jefferson County Chamber of Commerce assisted in identifying major businesses.
- Jefferson County Board of Commission County Administrator provided information about Jefferson County government buildings including their respective replacement and content values and square footages.
- Jefferson County Tax Assessor's Office provided most of the aggregate values for the critical structures. The valuations had to be converted to full values since they are figured at 40 percent of actual value. This information, combined with demographic data, is compiled on GEMA Worksheet #3a in Appendix A for all jurisdictions.
- CSRA Regional Commission's Geographical Information System (GIS) Department produced several of the maps. Maps are located in Appendix A and C.

Several resources were consulted to facilitate the development of the update. Data was collected from numerous sources, including the National Oceanic and Atmospheric Administration (NOAA) National Centers for Environmental Information (NCEI), Spatial Hazard Events and Losses Database for the United States (SHELDUS™), National Weather Service, US Geological Survey (USGS), Southeast Regional Climate Center (SERCC), US Census Bureau, Georgia Department of Natural Resources (DNR), Georgia Forestry Commission (GFC), Georgia Tornado History Project Database, Georgia Department of Community Affairs (DCA), US Department of Agriculture (USDA), local and regional newspaper articles, as well as personal interviews. The table below provides a list of existing planning documents used during the update.

Record of Review		
Existing planning mechanisms	Reviewed (Yes/No)	Method of use in Hazard Mitigation Plan
Jefferson County Joint Comprehensive Plan 2023	Yes	Development trends, capability assessment, mitigation strategies
Local Emergency Operations Plan	Yes	Identifying hazards; Assessing vulnerabilities. Capability assessment
Georgia Emergency Operations Plan	Yes	Identifying hazards; Assessing vulnerabilities;
Flood Damage Protection Ordinance	Yes	Mitigation strategies, capability assessment
Building and Zoning Codes and Ordinances	Yes	Development trends; Future growth, capability assessment, mitigation strategies
Mutual Aid Agreements	Yes	Assessing vulnerabilities, determine assets added to disaster relief and response.
State Hazard Mitigation Plan	Yes	Risk assessment, review of recommended strategies
Land Use Maps	Yes	Assessing vulnerabilities; Development trends; Future growth
Critical Facilities Maps	Yes	Locations
Community Wildfire Protection Plan	Yes	Mitigation strategies, risk assessment
Flood Insurance Study	Yes	Review for historical Data and Information
The Jefferson County Assets Index	Yes	Reviewed for assets data, tax information
CSRA Regional Plan 2040	Yes	Development trends; Future growth, regional concerns and data

The committee held three meetings over a 5-month period to guide the development of the plan. Individual jurisdictions and/or agencies were contacted, as information was needed. The committee was responsible for developing the mission statement, as well as the goals, objectives, and action steps identified in the plan. The committee researched previous hazard information in the areas of earthquakes, flooding, wildfires, tornados, winter storms, hurricanes, high winds, dam failure, lightning, hail, and drought. However, some hazards were eliminated due to their low level of risk. Committee members collected critical facilities information based on their area of expertise or jurisdiction. The RC was responsible for assessing vulnerability and estimating potential losses from the information collected. Potential losses include people, structures/properties, infrastructure, and other important community assets.

The table below provides the dates and synopsis of committee meetings. All meetings were open to the public and meeting notices posted at all governmental offices. Of the meetings, two were advertised in *The Jefferson Reporter*, the County's legal organ. This is the most efficient means to disseminate information to residents and organizations located in the county. To meet the requirement for neighboring communities to be involved in the planning process, invitations were extended by email. Invitations were extended to the following counties: Burke, Emanuel, Glascock, Johnson, McDuffie, Richmond, and Washington. It is noted that no public comments or feedback was provided by the public. Copies of correspondence, emails and advertisements are in Appendix E.

Meeting Date	Purpose of Meeting
July 23, 2024	Advertisement ran in <i>The Jefferson Reporter</i> for public meeting on July 18, 2024.
July 23, 2024	Kickoff meeting to the public. April Young, RC provided a presentation to the attendees.
August 23, 2024	This meeting was to ensure all data collected to date was correct for critical facilities and to reviewed mitigation strategies and action steps
September 12, 2024	This meeting was a continuation of the August 23, 2024 meeting. Ensured all data collected was correct and reviewed mitigation strategies and action steps.
September 25, 2024	This meeting was at the Jefferson County Senior Center to ensure vulnerable populations were included in this review process.
October 16, 2024	Final overview of plan to ensure all jurisdictional information was correct and review final mitigation strategies.
TBD	Advertisement ran in <i>The Jefferson Reporter</i> Advertising for public review and the final meeting TBD
TBD	After GEMA submitted the plan to FEMA and FEMA Approved Pending Adoption (APA), the public was invited to review the final plan prior to adoption xxx time frame. The meeting was held after the review period to ensure that the public was afforded the opportunity provide input.

SECTION III. ORIGINAL PLAN REVIEW AND REVISION

The Federal Disaster Mitigation Act of 2000 requires an update to the Pre-Disaster Mitigation Plan every five years. The EMA Director was responsible for meeting this requirement. The committee, with the assistance of the RC, was involved in the planning process to ensure thorough data collection. All members of the committee were responsible for the evaluation of 2024 plan. During the review process, the committee noted mitigation accomplishments, updated and prioritized mitigation projects, added additional hazard information, developed new goals and objectives, solicited input from the public and made any needed or required revisions. The evaluation included analyzing any changes in the needs and/or capabilities of Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens.

SECTION IV. ORGANIZATION OF THE PLAN

The estimated time to complete the plan update was approximately 6 months. Plan completion is identified by adoption of resolution by all jurisdictions. The update contains a Hazard, Risk, and Vulnerability (HRV) Assessment describing the natural hazards typically occurring within the county, as well as a review of all mitigation goals, objectives, and related courses of action. In addition, plan implementation and maintenance are reviewed, which includes methods to provide opportunities for public involvement.

The hazards included in this plan are considered to have the highest probability of occurrence, vulnerability, potential loss/damages, and highest frequency of occurrence. The plan also identifies and prioritizes hazard mitigation opportunities in each vulnerable area based on the input from the committee members, relevant government agencies, local businesses, and Jefferson County citizens.

SECTION V. LOCAL HAZARD RISK AND VULNERABILITY, SUMMARY LOCAL MITIGATION PLANNING GOALS OBJECTIVES

The committee, early in the update process, established a set of goals and objectives to ensure the effectiveness of this plan. These goals and objectives established the paradigm for the planning process and proved very successful by the many accomplishments of the 2024 plan update. These goals and objectives are as follow:

- To actively involve and gain support from Avera, Bartow, Louisville, Stapleton, Wadley, Wrens and unincorporated Jefferson County for the reduction of disasters in our community.
- Prioritize identified mitigation projects.
- Seek and implement any grant funding for the reduction of disasters in Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens.
- Monitor, evaluate, and update the progress of the plan as needed.
- To form partnerships among local, state, and federal agencies to make Jefferson County more resistant to the effects of disasters.
- Strengthen our communities against the impacts of disasters through the development of new mitigation strategies and strict enforcement of current regulations that have proven effective.
- Reduce and where possible eliminate repetitive damage, loss of life and property from disasters.
- Bring greater awareness throughout the community about potential hazards and the need for community preparedness.
- To further enhance common mitigation projects and goals between Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens.

An HRV assessment was accomplished by compiling and reviewing historical data on the location of specific hazards, the value of existing structures/properties in hazard locations, and analyzing the risk to life, property and the environment that could potentially result from future hazard events. The committee accomplished the HRV goals and objectives by completing the following steps:

Inventory of Critical Facilities: Critical facilities are crucial for providing essential services necessary for preserving the safety and quality of life of its residents. In addition, these facilities fulfill important public safety, emergency response, and/or disaster recovery functions. All critical facilities were added to the Georgia Mitigation Information System (GMIS). Critical facilities for Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens were identified, updated, mapped, and illustrated in Appendix A.

Hazard Identification: Maps and historical data sources were studied and reviewed to identify the geographic extent, intensity, and probability of occurrence for various hazard events. The 2024 committee identified six major hazards that have the potential to affect Jefferson County: flooding, dam failure, drought, wildfire, severe weather (tornados, tropical storms, thunderstorms and lightning) and winter storms. The update committee reviewed current hazard data and added hail to the already identified hazard. Appendix A provides an updated comprehensive table for each hazard event.

Profiling Hazard Events: The committee analyzed the causes and characteristics of each hazard, and its effect on Jefferson County in the past to determine what segment of the population and infrastructure has historically been vulnerable to each specific hazard. A discussion of each hazard's updated profile is in Chapter 2.

Vulnerability Assessment: This step was accomplished by comparing each previously identified hazard with the inventory of affected critical facilities and population exposed to each hazard. An updated Worksheet #3a is provided in Appendix A.

Estimating Losses: Using the best available data, tax digest data, parcel maps and GMIS reports and maps for critical facilities allowed the committee to estimate damages and financial losses that might occur in a geographic area. Describing vulnerability in terms of dollar losses provides the county with a common framework in which to measure the effects of hazards on critical facilities. All information in this section has been updated (*Appendix A and Appendix D*).

Mitigation Goals and Objectives: After ensuring that all those interested had been given ample opportunity to contribute to strategy development, mitigation action steps were next given priority status by committee members. To evaluate priorities, committee members used as a guide a planning tool prepared by FEMA known as STAPLEE (Social, Technical, Administrative, Political, Legal, Economic, and Environmental) criteria. Each mitigation strategy step was evaluated using STAPLEE criteria as the guiding principle to identify those steps best for Jefferson County. Steps were ranked as high priority, medium priority, or low priority. Past occurrences of disasters and historical trend data aided committee members in assigning priorities. A copy of the STAPLEE is in Appendix D.

SECTION VI. MULTI-JURISDICTIONAL SPECIAL CONSIDERATIONS

Jefferson County, and the cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens provided active participants in the planning process and have identified mitigation goals, objectives and action items specific to their jurisdiction. The governing bodies for the county and all municipalities have formally adopted the Jefferson County Multi-Hazard Pre-Disaster Mitigation Plan.

Representatives from all seven jurisdictions have worked collectively over the past months to gather data that included researching old records, newspaper articles, databases, historical data, past and present flood plain data, and technical information for the plan. Data was forwarded to the RC for review and plan development. The committee held subsequent meetings to ensure that all information was correct and that all agencies and organizations' input was included.

The EMA Director led activities for mitigation planning countywide. The committee's goals are to work in partnership with municipal partners toward a common mitigation strategy that significantly reduces vulnerability of natural disasters. Most natural threats overlap jurisdictions and are all susceptible to their effects. Jefferson County, and the cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens share the same passion and desire for protecting and reducing risk through mitigation projects. Specific risks and areas were identified through working relationships and data collection from all areas of the county and are identified in this plan.

SECTION VII. ADOPTION, IMPLEMENTATION AND MONITORING AND EVALUATION

Adoption Date

Jurisdiction	Adoption Date
Jefferson County	
City of Avera	
City of Bartow	
City of Louisville	
City of Stapleton	
City of Wadley	
City of Wrens	

The plan was submitted to GEMA for review and then to FEMA for approval. Their respective governing bodies have formally adopted the 2024 update after GEMA and FEMA approval. The plan is intended to be implemented into policy and to enhance state and federal recommendations for the mitigation of natural hazards in the following ways:

- Substantially reduces the risk of life, injuries, and hardship from the destruction of natural disasters.
- Create awareness among the public about the need for individual preparedness and about building safer, disaster resistant communities.
- Develop strategies for long term community sustainability during community disasters.
- Develop governmental and business continuity plans that will continue essential private sector and governmental activities during disasters.

FEMA publishes many guidance documents for local governments for mitigating natural disasters. The plan fully recognizes, adopts, incorporates, and endorses the following principles.

- Develop a strategic mitigation plan for Jefferson County.
- Enforce current building codes.
- Develop incentives to promote mitigation.
- Incorporate mitigation of natural hazards into land use plans.
- Promote awareness of mitigation opportunities throughout Jefferson County community on a continual basis.
- 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 as such:

- Develop mitigation incentives with insurance agencies and lending institutions.
- Encourage the creation of a business continuity plan for the continuance of commerce during disasters.
- Partner with businesses in effort to communicate with customers about the community hazards and possible solutions.

Individual citizens must be made aware of the hazards they face. Additionally, they must be educated in how to protect themselves from natural hazards. They must be shown 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 Jefferson County Plan supports the following FEMA recommendations regarding individual citizens:

- Become educated on the hazards that your community and you may face.
- Become part of the process by supporting and encouraging mitigation programs that reduce vulnerability to disasters.
- That individual responsibility for safeguarding you and your family prior to a disaster is essential.

Chapter IV. Plan Integration and Maintenance details the formal process that will ensure that the plan remains an active and relevant document. The plan maintenance process includes monitoring and evaluating the plan annually and producing a plan revision every five years. Additionally, Jefferson County will develop steps to ensure public participation throughout the plan maintenance process. Finally, this section describes how Jefferson County will incorporate the mitigation strategies identified in this plan into other relevant planning documents such as the Jefferson County Joint Comprehensive Plan, Short-Term Work program (STWP) and Local Emergency Operations Plan (LEOP).

SECTION VIII. COMMUNITY DATA

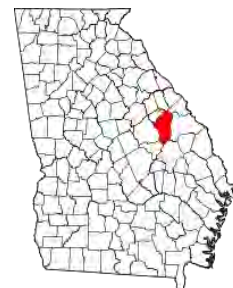
Political Boundaries - Jefferson County



Jefferson County



*GA Department of Community Affairs
Region 7*



Georgia

History: Jefferson County was created on February 20, 1796 and named for Thomas Jefferson, the third president of the United States. Jefferson County was originally part of Burke and

Warren counties. Louisville, the county seat, was named in honor of King Louis XVI of France, because of the support given by France to the Colonials in the Revolution. Louisville was Georgia's third state capital, but its first "permanent" one. Louisville was the site of the Constitutional Convention of 1798 in which the state's pre-Civil War constitution was adopted. Georgia's Great Seal, which is still in use today, was adopted at the same time.

Government: Jefferson County operates under a commission-based system of government in which five commissioners are elected to four-year terms. Other county officials are the County Attorney, Clerk of Superior Court, Code Enforcement Officer, Public Works, Roads and Bridges, Probate Judge, Coroner, Magistrate Judge, Sheriff, and Tax Commissioner. Jefferson County contains six municipalities, all of which operate under a mayoral system of government with additional officials providing services to residents.

Jefferson County Georgia: Municipal Governments	AVERA	BARTOW	LOUISVILLE	STAPLETON	WADLEY	WRENS
Mayor	X	X	X	X	X	X
# Council Members	4	5	5	5	5	5
City Clerk	X		X	X	X	X
City Coordinator/Administrator		X	X		X	X
City Attorney	X	X	X	X	X	X
Police Chief		X	X	X	X	X
Fire Chief	X	X	X	X	X	X
City Engineer						
Public Works Director	X		X			X
Gas Superintendent			X			X
Water Superintendent	X	X	X	X		X
Wastewater Superintendent		X	X			X
Sanitation Superintendent		X	X	X		
Building Inspector					X	X
Code Enforcement			X		X	X
Municipal Court Judge		X	X	X	X	X
Municipal Court Clerk		X	X	X	X	X

Source: Georgia Municipal Association

Demographics: In 2021, Jefferson County has a population of 15,708 people. The two tables below show current and historical comparisons of all jurisdictions.

Category	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens
Population	15,708	262	219	2,545	347	2,040	2,295

2024 Multi-Hazard Pre-Disaster Mitigation Plan Update

Number of Households	5,826	97	140	977	146	635	827
Average Household Size	2.59	2.56	1.56	2.57	2.52	3.06	2.49
Households with one or more people under 18	32%	34.0%	5.7%	35.4%	26.0%	39.4%	31.9%
Households with one or more people 60 years and over	45.3%	35.1%	59.3%	42.9%	47.3%	43.0%	51.0%
Mobile homes	30.4%	45.3%	32.8%	9.4%	16.7%	25.8%	8.8%
Median Age	40.7	40.6	59.5	33.0	49.1	36.4	42.5
Median HH Income	\$42,238	\$51,250	\$46,667	\$31,923	\$52,857	\$32,396	\$32,734

Source: US Census Bureau

Economy: In 2024, the average weekly wage for employment sectors was \$930, compared to the CSRA Regional Commission area average of \$1085. The July 2024 unemployment rate was 5.4 percent. In 2024, the labor force in Jefferson County totaled 6,771. Of the total work force, 42.9 percent were employed in the service providing sector, followed by 35.3 percent in the goods producing sector and 21.5 percent in the government sector the remaining 0.3 percent has been unclassified.

The North American Industry Classification System (NAICS) is the standard used by Federal statistical agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical data related to the U.S. business economy. The table below provides a list of jobs, number of establishments and jobs along with average weekly wages per job for 2024 in Jefferson County.

Annual Industry Distribution of Jobs and Average Wage in 2013 (NAICS)	Establishments	Jobs	Average Wage Per Job
Total Covered Employment and Wages	402	4,973	\$930
Total Private Sector	366	3,903	\$954
Total Government	36	1,068	\$842
Agriculture, forestry, fishing, hunting	32	219	\$848
Mining, Quarrying, and Oil and Gas Extraction	5	225	\$1,341
Construction	39	277	\$933
Manufacturing	40	1,033	\$1,159
Wholesale trade	11	160	\$699
Retail trade	57	620	\$448
Transportation, warehousing	12	115	\$1,191
Utilities	4	*	*
Information	3	15	\$665

Finance and Insurance	16	102	\$1,490
Real Estate, rental, leasing	12	29	\$927
Professional, Scientific, Technical services	15	64	\$1,298
Mgmt. of companies, enterprises	3	*	*
Administrative and support and waste management and remediation services	20	245	\$680
Educational services	2	*	*
Health care, social assistance	17	181	\$768
Arts, entertainment, recreation	2	*	*
Accommodation and food services	27	233	\$458
Other services, except public administration	21	81	\$543
Unclassified-Industry not assigned	29	14	\$1,032

Source: Georgia Department of Labor * Industry group does not meet criteria for disclosure

Climate: According to the National Weather Service, Central Georgia where Jefferson County is located experiences all four seasons. Jefferson County averages 45.6 inches of rain per year. The US average is 37. The number of days with any measurable precipitation is 93. On average, there are 218 sunny days per year in the county. The average July high is around 92 degrees, and the average January low is around 36 degrees.

Physical Features: Jefferson County encompasses an area of roughly 530 square miles or 339,200 acres. The County is located at the cusp of two geological regions, the Southern Piedmont and the Georgia Coastal Plain. This gives the county a mixture of geological features and provides for a variety of landscapes and available resources. The fall line, which runs through Jefferson County, is a geological boundary following the Appalachian Mountain range from Alabama to New York. In Georgia and South Carolina, the fall line separates the Southern Piedmont from the Southern Coastal Plain. The location has implications for how drinking water is retrieved in the county as the Floridian aquifer closely follows the boundaries of the Fall Line.

Jefferson County and its six incorporated cities are primarily within the Dothan-Fuquay-Tifton and Orangeburg-Faceville-Lucy Soil associations. These two make up 74% of the county. This soil is strong and well drained with slopes ranging from 0 to 15%. Excess surface water drains into a system of intermittent and perennial streams. There are few areas of open water. The soil is used mainly for field crops, hay, or pasture, but many areas are wooded. Roads, utility lines, fences, farm homes and associated structures are common. The degree of visual diversity is moderate. This soil is good for most urban and agricultural uses. Soil map is in appendix A.

Transportation

Vehicle Traffic: U.S. Highways 1, 221, 319, and Georgia Highways 102 and 80 all intersect a portion of the county and are the primary arterials in Jefferson County. Interstate Highway 16 passes 32 miles south of the county line, while Interstate Highway 20 passes just 22 miles away via Georgia Highway 17. Roads classified on the map, located in Appendix A, are considered

major county thoroughfares and serve as main transportation routes within the county and to surrounding areas. All other county or municipal roads not classified on the thoroughfare map are considered locally serving. Most of the roadway network is rural, with only a handful of urban roads in Louisville, Wadley and Wrens.

Mileage by Route and Road System Report 445 for 2020			
	Total Road Mileage	Lane Mileage	Vehicle Miles Traveled (VMT)
State Route	186.393	440	523,986
County Road	544.972	1,090	160,852
City Street	95.585	191	31,501
Total	826.950	1,721	716,340

Source: Georgia Department of Transportation, Office of Transportation Data, "445 Series Reports 2017."

Public Transportation: In addition to coordinated transportation through the Georgia Department of Human Resources, Jefferson County Transit (WCT) provides public transportation for county residents. Services include transporting residents to and from destinations for shopping, work, school, personal appointments, and recreational opportunities within and outside the county. The county and state fleets include a total of eight vans – two wheelchair accessible and six 12-15-passenger vans. Approximately 2,771 monthly trips are provided to county residents.

Rail Traffic: Rail companies provide crucial cargo transport for industries in Jefferson County. Many items and materials are too bulky or heavy to be shipped by truck and are moved by rail. Norfolk Southern has two lines that pass-through Wadley and Wrens en route to Warrenton and Atlanta. In addition, the Central Georgia Railroad has a short line connecting Wadley with Louisville.

Air Service: Airports located in Louisville and Wrens provide small craft aviation services. The airport in Wrens maintains a hangar space of 6,396 sf. and 50% paved taxiway. Wrens has 3 open hangers, 6 box hangers that hold individual planes, 2 corporate hangers that hold 3 planes. Wrens also has on site FBO Watson Arrow AMP repair and maintenance. The airport in Louisville has a 5,000-foot-long runway and offers hangars and tie-downs. There is 15,500 sf. of hangar space available as well as one T-hanger that will accommodate four planes. There are two parallel paved taxiways. The nearest commercial air service is in Augusta, 35 miles away. Atlanta-Hartsfield International Airport, located in Atlanta approximately 150 miles from Louisville, provides major commercial airline service.

Utilities

Electricity: Residential electrical service is provided by three companies: Georgia Power, Jefferson Energy Cooperative, and Washington Electric Membership Corp. A part of Georgia's modern integrated electrical transmission system, Jefferson County has excellent ability to supply industrial demands.

Natural gas: Natural Gas Services is provided by the City of Louisville and the City of Wrens. The service is available to residents of Louisville and Wrens and some residential customers in the unincorporated area of the county.

Sewer: Public sewer service is provided in Bartow, Louisville, Wadley, and Wrens. A small section of the County is served by the City of Louisville. The remaining unincorporated areas of the County, Avera, and Stapleton are not served with public sanitary sewer service.

Municipality	Sewer and Wastewater Systems
Avera	Septic tanks only.
Bartow	Wastewater Treatment Plant
Louisville	Two water pollution control plants, 2 oxidation ponds 2MGD Treatment plant.
Stapleton	Septic tanks only.
Wadley	One wastewater treatment plant, 1 oxidation pond
Wrens	Wastewater Treatment Plant

Water: Public water supply is provided by the Cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens to residents within their incorporated boundaries. Some unincorporated areas of the County are served by Louisville or Wrens the remainder is served by private wells.

Municipality	Water Distribution System
Avera	Complete water distribution and treatment system: Two wells, distribution lines, one elevated water storage tanks.
Bartow	Complete water distribution and treatment system: Two wells, distribution lines, one water storage tank.
Louisville	Complete water distribution and treatment system: Three water storage tanks, distribution lines, three elevated water storage tanks. Second water treatment plan with elevated tank.
Stapleton	Complete water distribution and treatment system: Two water storage tanks and distribution lines.
Wadley	Complete water distribution and treatment system: Two wells, two water storage tanks, distribution lines.
Wrens	Complete water distribution and treatment system: One main well and two back up wells. Four elevated storage tanks, distribution lines. Proposed project to build new well.

Solid Waste: Jefferson County operates a landfill along U.S.1 under permit # 081-011D (MSWL). The majority of solid waste comes from residential use or household garbage, including paper products, plastics, glass, aluminum, and ferrous metals. A limited amount of commercial and industrial waste consists of corrugated paperboard and wood waste. Green box collection is used in the unincorporated areas for solid waste disposal. Currently there are green boxes at twenty-five (25) separate sites in the county. The county provides solid waste services for Avera. Louisville and Bartow haul their waste to the county landfill while the rest of the municipalities contract with private haulers.

Communications: Jefferson County’s communication services are provided by three companies: Comcast, AT&T and Pineland Telephone. Local print media consists of *The News and Farmer and Wadley Herald/The Jefferson Reporter* (which serves as the legal organ of the county) and *The Augusta Chronicle*. Jefferson County is served by 2 local AM radio stations and 2 local FM radio stations. There are seven television stations in metro Augusta that broadcast in Jefferson County. They are WJBF, WAGT, WRDW, WAAU, WBPI, WCES, and WFXG.

Fire and Emergency Services

Response: All residents of Jefferson County have access to 911 service. The 911 service connects residents to police, fire and ambulance service. The dispatch office is in Louisville. The 911 service has 12 employees on staff utilizing 3 per 12-hour period (6a-6p and 6p-6a) with (2) shifts (A&B). The Jefferson County 911 service has mutual aid agreements with neighboring counties and therefore can respond to and assist in calls outside their jurisdiction.

Emergency Medical Services: Jefferson County gets its Emergency Medical Services (EMS) through a private corporation called Gold Cross. Services provided include emergency and nonemergency ambulance transportation. The Gold Cross has its main station at the Jefferson County Hospital. In addition, there is a substation located in Wrens. The Hospital Station and the Wrens substation operate on a 24-hour basis.

The Gold Cross service maintains three ambulances in the county but only operates two at any time. The third is kept as a backup. The ambulances are all ALS (Advanced Life Support) units.

Fire and Rescue: Jefferson County has seven fire departments throughout the county that provide service to both the incorporated and unincorporated areas. There is also a detachment of the Georgia Forestry Commission that combats woodland, wildlife and agricultural fires. Jefferson County itself has one station with 15 volunteer firefighters and a total of three bays. The county insures four fire trucks. The newest truck is a 2009 model.

Municipality	Fire Department
Avera	Served by an all-volunteer fire department, with 10 volunteer firefighters. The department owns vehicles; two pumpers and a brush truck. The ISO rating for the district is a 6 in the county and 4 within the city limits.
Bartow	Served by an all-volunteer fire department, with 19 volunteer firefighters. The department owns three pumpers, one 3,000-gal tanker, one 1,500-gal fire knocker and one rescue truck. The ISO rating for the district is a 7.
Louisville	Served by one fire department staffed with four full-time paid firefighters, and 28 volunteer firefighters. The department owns four vehicles: three pumpers and one fire knocker. The ISO rating for the district is a 4.
Stapleton	Served by an all-volunteer fire department, with 15 volunteer firefighters. The department owns four vehicles: two pumpers a fire knocker and a service truck. The ISO rating for the district is a 7.
Wadley	Served by an all-volunteer fire department, with 15 volunteer firefighters. The department owns four vehicles: four pumpers. The ISO rating for the district is a 5.
Wrens	Served by one fire department with five full-time firefighters and 25 volunteer firefighters. The fire department insures two pumper trucks with 1250 and 1500 gpm; a rescue/pumper with 2000 gpm, one 250 gal forestry truck, and one 3000-gallon tanker. The ISO rating for the department is 3.

Law Enforcement: Jefferson County Sheriff’s Office employs the Sheriff, 14 deputies, five jailers, three investigators and two clerical personnel. The Office has a total of 30 vehicles, including 20 police cars, one pickup truck and one van. The County is also served by regional offices of the Georgia Bureau of Investigation and The Georgia State Patrol.

Municipality	Law Enforcement
Avera	Served by Jefferson County Sheriff’s Office
Bartow	Served by Bartow Police Department with the Police Chief and one part-time officer.
Louisville	Served by Louisville Police Department with the Police Chief and seven full-time officers.
Stapleton	Served by Stapleton Police Department with the Police Chief and two part-time officers.
Wadley	Served by Wadley Police Department with the Police Chief, one investigator, and five full-time officers.
Wrens	Served by Wrens Police Department with the Police Chief, seven full-time and three part-time officers.

The Jefferson County Jail is currently the only place being used to house inmates at this time. All inmates are brought there instead of being incarcerated in the individual municipality. The Jefferson County Jail has 120 beds and eight holding cells.

CHAPTER II. NATURAL HAZARD, RISK AND VULNERABILITY (HRV)

The committee identified all-natural hazards that could potentially affect Jefferson County and all incorporated jurisdictions utilizing FEMA Worksheet #1 (Appendix D). Task A of Worksheet #1 instructed committee members to research newspapers and other historical records, existing community plans and reports, as well as internet websites to determine which hazards might occur. Task B then narrowed the list to only hazards most likely to impact the county by reviewing hazard websites to determine if Jefferson County is in a high-risk area.

As a result of the planning process, the committee determined that nine natural hazards pose a direct, measurable threat: flooding, dam failure, drought, wildfire, tornados, tropical storms, and severe weather (to include thunderstorm winds, lightning and hail), winter storms and earthquake. The committee profiled each of these hazards using FEMA worksheet #2 and #3a, which included obtaining a base map and then recording hazard event profile information. Of the six hazards mentioned, the entire County is exposed to four: severe weather, winter storms, wildfire and drought. Flooding is isolated to select areas within the floodplain, while dam failure is isolated to areas downstream of the event. Each of these potential hazards is addressed with relevant supporting data.

Chapter II. Section	Updates to Section
I. Natural Hazard Flood	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data. Added information from Hazus-MH analyses.
II. Natural Hazard Dam Failure	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
III. Natural Hazard Drought	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
IV. Natural Hazard Wildfire	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
V. Natural Hazard Tornados	Removed from Severe Weather Category. Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
VI. Natural Hazard Tropical Storms	Removed from Severe Weather Category. Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
VII. Natural Hazard Severe Weather	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data. Added information from Hazus-MH analyses.
VIII. Natural Hazard Winter Storms	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.
IX. Earthquake	Updated events, added critical facilities to GMIS, updated tax information. Recalculated hazard frequency data.

SECTION I. FLOODING

- A. Hazard Identification:** Flood plains are relatively flat lands that border streams and rivers that are normally dry but are covered with water during floods. The susceptibility of a stream to flooding is dependent upon several different variables. Among these are topography, ground saturation, rainfall intensity and duration, soil types, drainage, drainage patterns of streams, and vegetative cover. A large amount of rainfall over a short time can result in flash flood conditions. A small amount of rain can also result in floods where the soil is saturated from a previous wet period or if rain is concentrated in an area of impermeable surfaces such as large parking lots, paved roadways, etc. Topography and ground cover are contributing factors for floods where water runoff is greater in areas with steep slopes and little or no vegetation. The severity of a flood is usually measured in terms of depth of flooding.

Flooding occurs when the volume of water exceeds the ability of a water body (stream, river, or lake) to contain it within its normal banks. Floodplains serve three major purposes: Natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled to construct a building, valuable water storage and recharge areas are lost. This causes unnecessary flooding in previously dry areas and can damage buildings and other structures.

Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens will continue to comply with NFIP requirements and intend to remain in compliance by enforcing flood plain ordinances that prohibit or severely limit development in floodplains. The following table provides information about each jurisdiction's participation level. Avera has no identified flood plains. The following table provides information about each jurisdiction's participation level.

Community Name	Init FHBM Identified	Init. FIRM Identified	Curr. Eff. Map Date	Reg-Emer Date	Sanction Date
Jefferson County		12/17/10	12/17/10(M)	12/17/10	
Avera		N/A	N/A	N/A	
Bartow	08/22/75	01/01/92	12/17/10(M)	01/01/92	
Louisville	08/15/75	01/01/92	12/17/10(M)	01/01/92	
Stapleton	04/04/75	08/19/96	12/17/10(M)	08/19/86	
Wadley	08/22/75	08/19/86	12/17/10(M)	08/19/86	
Wrens	05/10/74	06/17/86	12/17/10(M)	06/17/86	

Source: FEMA Community Status Book

- B. Hazard Profile:** Severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and three lakes which makes the potential for flooding significant. The committee examined historical data from the USGS, NCEI, SHELDUS™, past newspaper articles and conducted interviews during its research on the effects of past flooding events.

In the last 89 years there have been eight reported flooding events, where seven occurred countywide and one in Bartow. There has been a total of approximately \$2.1 million in property and crop damage with three fatalities reported. The rainfall resulted in flash flooding which caused downed trees and power lines, apartments and schools to flood and washed out several roads. Limited data is available for the incorporated jurisdictions. The most complete data applies to the county. The table below is a result of information gathered from interviews, newspaper articles, the USGS, the NCEI and SHELDUS databases.

Details	Begin Date	End Date	Type	PrD	CrD
A result of a hurricane that came ashore at Pensacola Florida	9/30/1929	10/3/1929	Flood	0.00k	0.00
Flooding There was a 3-day rainfall of 19.89 inches in Louisville	10/11/1990	10/12/1990	Flooding	2000.00k	0.00
Flood	10/13/1990	10/15/1990	Flood	50.00k	0.00
Flash Flood	3/1/1991	3/1/1991	Flash Flood	5.00k	0.00
Tropical Storm Tammy caused heavy winds/minor flooding	10/5/1995		Flooding	0.00k	0.00
As a result of Hurricane Dennis widespread flooding	7/10/2005		Flooding	0.00k	0.00
Flood	5/6/2009	5/6/2009	Flooding	1.00k	0.000
The Jefferson County EOC reported washed out roads near Avera. Almost two inches of rainfall in a 3-hour period on already wet soils quickly overwhelmed the drainage systems.	7/13/2013		Flooding	0.00k	0.00
Tropical storm Salley produced heavy rainfall and damaging winds, 2 to 8 inches of rainfall. Floodwater from a nearby creek displaced 6 families from an apartment building. Road washed out near the intersection of Clarks Mill road and Highway 102/88.	9/17/2020	9/17/2020	Flash Flood	40.00K	0.00

Source: NCEI and SHELDUS

There have been two major flood events recorded: one in 1929 and one in October 1990. Torrential rain occurred in east-central Georgia on October 10-12, 1990. The largest 24-hour rainfall amount recorded was 16.42 inches at Louisville. Severe flooding caused by the intense rain occurred in several tributaries to the Ogeechee, Ochopee, and Savannah Rivers. There was a 3-day rainfall of 19.89 inches in Louisville. Based on interviews with city officials, the flood depth for this event exceeded 20 feet. Information from the newspaper according to EMA Director McGahee of the 800 miles of roads in the county at least 400-600 miles are affected. Roads were cut off in 58 places in the county.

Maximum discharges of streams in east-central Georgia had recurrence intervals ranging from 2-years to more than 100 years. Record-high stages and discharges occurred at 14 sites in east-central Georgia where stage and discharge data were collected.

The most severe flooding occurred on Big Creek near Louisville, Brushy Creek near Wrens and Buckhead Creek near Waynesboro where the maximum discharges were much greater than the respective 100-year discharges. Known dam failures upstream of the gaged sites on Big Creek and Brushy Creek contributed to the severity of the flooding. Also, there were at least six other streams within about a 50-mile radius of Augusta that experienced maximum discharges equal to or greater than those having a 100-year recurrence interval. All sites where discharge equaled or exceeded the 100-year discharge within this 50-mile radius had drainage areas of less than 100 square miles, except sites on the Ogeechee River. The Ogeechee River experienced maximum discharges having recurrence intervals ranging from 10 to more than 100 years. The maximum discharge of 27,000 cubic feet per second for the Ogeechee River near Louisville was the largest since 1929. (*Summary of Floods in the United States during 1990 and 1991 USGS*)

While severe flooding within the county is a relatively infrequent event, there is a potential for flooding. Flooding usually occurs from fall to mid-spring. Flash flooding is the most prominent flooding event that takes place as riverbanks overflow due to rainfall. To date there has been more than \$2 million dollars in reported damage and three fatalities. There are no NFIP mitigated properties, and no properties have encountered repetitive flooding. The GMIS flood hazard map assigns the following flood zone ratings for each jurisdiction:

- Bartow, Louisville, Stapleton, Wadley, Wrens and parts of Jefferson County have a flood zone rating of three where floodplains are known.
- Avera, Bartow, Louisville, Stapleton, Wadley, Wrens and unincorporated areas of the County have a flood zone rating flood zone rating of zero for areas outside of flood zones.

The magnitude of a major flood event could have approximately 75% of the county experiencing some damage from flooding. The FEMA Flood Zone maps shows the following conditions for:

- the unincorporated areas of the County have flood prone areas along waterways and the rest of the unincorporated areas are outside of known flood hazard areas;
- Avera has no identified flood prone areas;
- Bartow's flood prone areas run along the entire western boundary;
- Louisville's flood prone areas flood prone areas run along the western boundary;
- Stapleton's flood prone areas run through the city trickle throughout the city;
- Wadley's flood prone areas run along the entire southern, eastern and western borders of the city with a small area at the upper northern part of the city; and
- Wrens' flood prone areas run across the lower southern portion of the city, a small area at the northern top of the city and a section on the eastern portion that run into the middle of the city.

While data was collected looking at 95 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle the chance of an annual

flooding event occurring is 10% for all of Jefferson County and all jurisdictions. (See Appendix A, Section I and Appendix D).

C. Assets Exposed to Hazard and Estimates of Potential Loss: For determination of assets exposed to risk this plan used maps created from FEMA data and available parcel data. Based on FIRM, tax digests, parcel maps and FEMA Worksheet #3a for inventory of assets, the following assets are at risk during a flood event:

- Avera has no structures/properties at risk;
- Bartow has five structures/properties valued at approximately \$86,770 with an estimated population of eight;
- Louisville has 9 structures/properties valued at approximately \$978,136 with an estimated population of nine;
- Stapleton has 16 structures/properties valued at approximately \$176,486 with a population of 31;
- Wadley has 30 structures/properties valued at approximately \$2.2 million with a population of 30;
- Wrens has 46 structures/properties valued at approximately \$2.4 million with a population of 205; and
- Unincorporated Jefferson County has 102 structures/properties valued at approximately \$5.5 million with an estimated population of 75.

All 208 structures/properties have been identified by federal flood plain maps and/or parcel maps. Not all structures that have been identified will experience damage from floods. The extent of each flood varies according to the amount of rainfall in each area. If a 100 percent loss of the 208 structures/properties located within flood zones would result in approximately \$11.4 million in, a 75% loss would represent approximately \$8.6 million, a 50% loss would represent approximately \$5.7 million, and a 25% loss would represent approximately \$2.85 million.

The GMIS has two critical facilities with a hazard score of three: The Wrens Wastewater Treatment Plant and the West Walker Street Lift Station with a replacement value of slightly more than \$3.5 million. Of the 130 remaining critical facilities, 39 have a hazard score of one with a replacement value of more than \$111 million and 90 have a hazard score of zero with a replacement value slightly less than \$275 million. The table below shows the breakdown of critical facilities by jurisdiction, flood hazard score, replacement value, content value, and daily occupancy.

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Jefferson County	1	16	\$102,814,730	\$6,579,800	1,589	504
Jefferson County	0	25	\$215,985,363	\$5,493,300	2,695	160
Avera	1	3	\$737,500	\$400,000	1	0
Bartow	1	1	\$60,500	.00	0	0
Bartow	0	15	\$3,811,977	\$402,000	6	3

Louisville	1	6	\$2,656,165	.00	0	0
Louisville	0	14	\$35,286,225	\$1,700,000	271	204
Stapleton	0	4	\$2,584,292	\$774,000	2	0
Wadley	0	17	\$8,300,653	\$2,488,200	146	97
Wrens	3	2	\$3,550,000	\$125,000	0	0
Wrens	1	13	\$5,287,500	\$27,024	0	0
Wrens	0	15	\$9,137,357	\$1,024,200	50	0
TOTAL		131	\$390,212,262	\$19,013,524	4,760	968

The GMIS has no repetitive flooding NFIP property and no NFIP mitigated properties or properties that have encountered repetitive flooding where there was loss. There is no estimate for future structures since future development will be limited and regulated in areas where floodplains exist. (See Appendix A, Section I and Appendix D).

FEMA Hazus-MH Version 2.2 SP1 was used to analyze a probabilistic risk assessment of a 1% annual chance riverine flood event (100-Year Flood) for Jefferson County. A copy of the complete report can be found in Appendix C. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The County's flood risk assessment analyzed at risk structures in the SFHA. The results of the Riverine 1% Flood Scenario revealed that buildings 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. The Hazus analysis generated information to building loss, essential facility loss, food and shelter requirements and debris because of the Riverine 1% Flood Scenario. The results of this scenario are as follows:

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
Bartow					
Residential	131	2	\$15,746,501	\$54,999	0.35%
Louisville					
Residential	928	4	\$119,542,717	\$111,401	0.09%
Stapleton					
Residential	206	1	\$23,661,810	\$50,043	0.21%
Commercial	15	1	\$1,671,942	\$18,283	1.09%
Wadley					
Residential	856	8	\$89,204,716	\$203,482	0.23%
Wrens					
Industrial	50	1	\$24,594,320	\$125,797	0.51%
Commercial	170	1	\$42,835,976	\$9,514	0.02%

Residential	859	19	\$110,432,155	\$438,933	0.40%
Unincorporated					
Residential	4,553	56	\$426,350,839	\$1,444,609	0.34%
Industrial	107	2	\$61,163,807	\$57,905	0.09%
Commercial	136	4	\$52,527,364	\$41,634	0.08%
		County Total			
	8,011	99	\$967,732,148	\$2,556,555	

- **Essential Facility Losses:** The analysis identified no essential facilities being subject to damage.
- **Flood Shelter Requirements:** The scenario estimates 255 households are subject to displacement. Displaced households represent 764 individuals, of which 207 may require short-term publicly provided shelter.
- **Flood Debris:** Hazus-MH estimates that an approximate total of 7,446 tons of debris might be generated by the flood. The model breaks debris into three general categories:
 - Finishes (dry wall, insulation, etc.) – 2,233 tons generated;
 - Structural (wood, brick, etc.) – 2,371 tons generated; and
 - Foundations (concrete slab, concrete block, rebar, etc.) – 2,481 tons generated.

It is noted that the difference between the FEMA Hazus-MH results and the FEMA worksheet #3a is because Hazus-MH is only looking at buildings. The FEMA flood maps, and parcel maps include all parcels whether a building is on it or not. These communities are rural, and agriculture is an important industry. Flooding has the potential to devastate crops. All parcels are included in our analysis, just not structures.

D. Land Use and Development Trends: The Jefferson County Joint Comprehensive Plan 2023-2028 presents future development scenarios for Jefferson County and its municipalities. The county has experienced very little growth over the past decade, and future forecasts project relatively slow growth patterns. Despite the slow growth forecasts the county intends to work closely with the cities to preemptively manage future growth. The main areas of the county considered adequate for growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares.

Jefferson County's rural character is illustrated by its abundance of natural resources. The lack of development pressures in the county has contributed to the continued presence of these resources and projected development needs can be well managed without negatively impacting any environmentally sensitive area.

Similarly, the county has an abundance of cultural resources. These are truly fragile resources that must be treated in the same fashion as natural features because of the local importance that they hold. Future development needs to incorporate the preservation of locally significant historic resources as identified in that element of this plan.

Jefferson County's relative isolation from major urban markets decreases outside influences on local development patterns. Through the zoning ordinance, the county will limit and regulate development in known flood prone areas. (*Current and Future Land Maps and Tables for each jurisdiction can be found in Appendix B*)

- E. Multi-Jurisdictional Concerns:** Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens will continue to participate in the NFIP. Avera has no identified floodplains. During a natural hazard it is imperative that all emergency personnel can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County.

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personnel that are dispatched to the area, etc.

Since flooding has the potential to affect all of Jefferson County, any mitigation steps taken related to flooding should be undertaken on a countywide basis and include all incorporated jurisdictions.

- F. Hazard Summary:** While severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and three lakes which makes the potential for flooding significant. There have been eight flooding events recorded in the last 89 years. These events resulted in school closings, roads washing out and \$2 million in property damage. The flood of 1990 also caused a dam failure. The Jefferson County Hazard Frequency table calculates a 9.47% chance of an annual flooding event. Hazard frequency tables can be found in Appendix D for all jurisdictions. Severe flooding, although relatively rare in occurrence, has the potential to inflict significant damage in Jefferson County. Mitigation of flood damage requires the community to know where flood prone areas are, what roads and bridges may be affected, and which facilities fall below anticipated flood levels. The committee recognized the potential for losses caused by flooding and identified it as a hazard requiring mitigation measures.

Based on tax data, parcel and flood maps all or a portion of 208 known structures/properties valued at approximately \$11.4 million and a population of 358 located in known floodplains. The committee identified specific mitigation goals, objectives and action items related to flooding, which can be found in Chapter III, Section I.

- G. Climate Change:** Per the Fourth National Climate Assessment, the frequency and intensity of heavy precipitation events is expected to increase across the country. More specifically, it is "very likely" (90-100% probability) that most areas of the United States will exhibit an increase of at least 5% in the maximum 5-day precipitation by late 21st century. Additionally, increases in precipitation totals are expected in the Southeast and Jefferson County. The mean change in the

annual number of days with rainfall over 1 inch for the Southeastern United States is 0.5 to 1.5 days. Therefore, with more rainfall falling in more intense incidents, the region may experience more frequent flash flooding. Increased flooding may also result from more intense tropical cyclone. Researchers have noted the occurrence of more intense storms bringing greater rainfall totals, a trend that is expected to continue as ocean and air temperatures rise.

SECTION II. DAM FAILURE

- A. Hazard Identification:** Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve the total collapse of a dam, that is not always the case. Damaged spillways, overtopping of a dam or other problems may result in a hazardous situation. Dam failures may be caused by structural deficiencies in the dam itself. Dam failures may also come from other factors including but not limited to debris blocking spillways, flooding, earthquakes, improper operation and vandalism. Dam failures are potentially the worst flood events. When a dam fails, a large quantity of water is suddenly released downstream, destroying anything in its path and posing a threat to life and property.

Dams are classified into three categories:

- High Hazard – Dams where failure or disoperation will probably cause loss of human life.
- Significant Hazard – Dams where failure or disoperation will probably not result in loss of life, but can cause economic loss, environmental damage, and disruption of lifeline facilities or other concerns.
- Low Hazard – Dams where failure or disoperation will probably not result in loss of life and cause only low economic and/or environmental loss.

- B. Hazard Profile:** Based on the current data from the National Inventory of Dams there are 42 dams located in Jefferson County. The average dam age is 58 years, 2% of the dams are regulated by state and non are regulated by federal agencies. All but three dams are in the unincorporated areas of the county, one in Louisville and two in Wadley. Of the 42 dams, 41 are low hazard and one is high hazard dam located at Lake Marion in Louisville. There has been one known dam failure to date during the flood of 1990. The committee felt that it was important to address the issue. A map and complete table of the dams can be found in Appendix A.

Based on interviews and best available data one dam failure has occurred within the last 34 years. Based on a 20-year hazard cycle the chance of an annual dam failure occurring is less than three percent for all of Jefferson County. Further study needs to be conducted to determine the precise probability of an annual dam failure event (*See Appendix A: Section II and Appendix D*).

- C. Assets Exposed to Hazard and Estimate of Potential Losses:** The number of dams posing potential loss of life hazards to Jefferson County residents and the number of residents living downstream from these potentially hazardous dams is unknown at this time. Based on best available data, Avera and Stapleton appear not to be at risk due to dam failure. The data is not available currently for the committee to determine what assets are exposed to risk due to dam failure in the unincorporated areas of Jefferson County, Bartow, Louisville, Wadley and Wrens.

The potential losses due to dam failure flooding are unknown and cannot be estimated at this time. The GMIS report has critical facilities replacement at more than \$1.3 Billion with a population of 16,930. (See Appendix A Section II and Appendix D).

D. Land Use and Development Trends: Projected changes in land use based on the county's multi-jurisdictional comprehensive plan shows that the county has experienced very little growth over the past decade and future forecasts project relatively slow growth patterns. The main areas of the county considered adequate for growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares. Vulnerability in terms of future buildings, infrastructure and critical facilities is not known currently. It can be surmised that this future development will bring an increase in population and efforts must be made to ensure new homes are not built downstream where a dam break may occur. Current and Future Land Use maps, tables and projections can be found in Appendix B. A dam break analysis study is recommended in Chapter III, Section II to determine the exact assets exposed to risk because of a dam failure.

E. Multi-Jurisdictional Concerns: Areas downstream of dams are most likely to be affected by a dam failure. Until a dam breach analysis is carried out it is hard to pinpoint what assets will be affected. Any mitigation steps taken related to dam failure should be undertaken on a countywide basis and include all incorporated jurisdictions.

During a natural hazard it is imperative that all emergency personnel can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personnel that are dispatched to the area, etc.

F. Hazard Summary: Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve total collapse of a dam, that is not always the case. Since there has been one reported dam failure event in Jefferson County, the committee felt that it was important to address the issue due to the fact there are 42 dams in the county with one classified as high hazard. The committee recognized the potential for losses caused by dam failure and identified it as a hazard requiring mitigation measures. To summarize, there are approximately 37,363 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930. The committee identified specific mitigation goals, objectives and action items related to dam failure, which can be found in

Chapter III, Section II.

- G. Climate Change:** Studies have been conducted to investigate the impact of climate change scenarios on dam safety. Climate change impacts on dam failure in Jefferson County will most likely be those related to changes in precipitation and flood likelihood. Climate change projections suggest that precipitation may increase and occur in more extreme events, which may increase the risk of flooding, putting stress on dams and increasing the likelihood of dam failure. The safety of dams for the future climate can be based on an evaluation of changes in design floods and the freeboard available to accommodate an increase in flood levels.

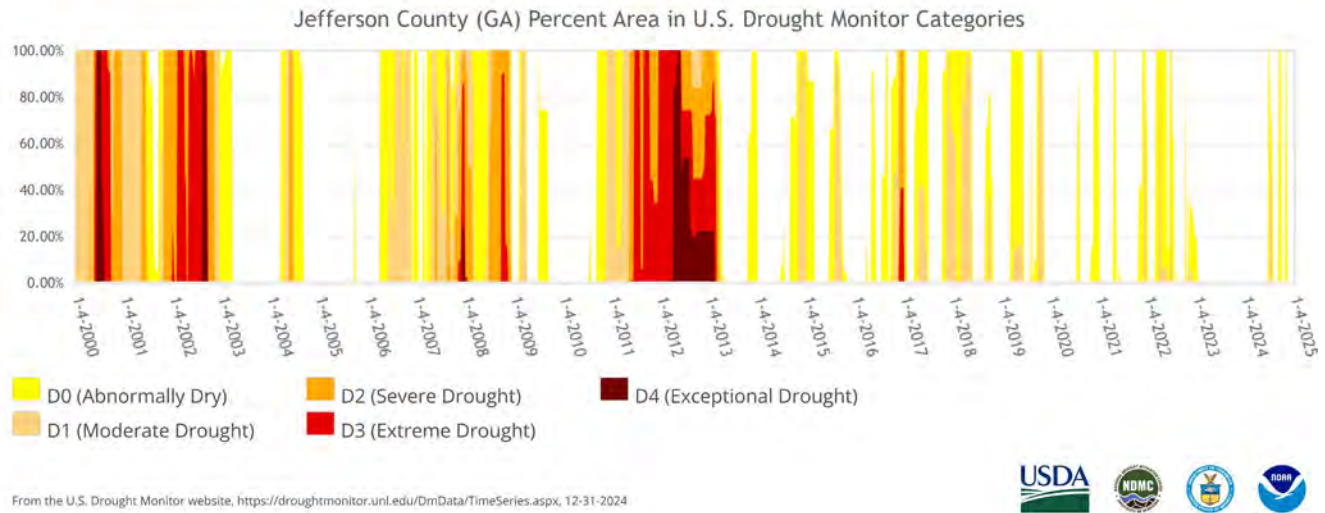
SECTION III. DROUGHT

- A. Hazard Identification:** The committee reviewed historical data from the Palmer Drought Index, NCEI, DNR, and USDA in researching drought conditions in Jefferson County. Drought conditions are identified by a prolonged period of moisture deficiency. Climatologists and hydrologists use five indicators of drought: rainfall, soil moisture, stream flows, lake levels and groundwater levels. Drought conditions affect the cultivation of crops as well as water availability and water quality. Drought is also a key factor in wildfire development. Wildfire will be addressed in a separate HRV.
- B. Hazard Profile:** Drought is not spatially defined and has the potential to affect the entire planning area equally. Jefferson County has a total area of 339,200 acres of which 151,521 acres are dedicated to farming. According to the USDA 2022 Census of Agriculture 13,373 head of livestock. Agricultural losses due to drought have been the primary losses. No critical facilities have sustained any damage or functional downtime due to dry weather conditions.

There have been 25 drought events in the county in the last 69 years with estimated crop losses at \$6.6 million. *Historical data is only for the county as a whole.* A severe, prolonged drought would mainly affect the 88.9% of the county that makes up the timber and agriculture business. This could result in loss of crops, livestock and create the conditions for a major wildfire event. This would also have an impact on the incorporated cities as water restrictions would be enforced. Based on a 20-year hazard cycle history there is a 91.67% chance of an annual drought event. The chance for an annual drought event is the same for the county as well as all jurisdictions (*See Appendix A, Section III, and Appendix D*)

The Palmer Index(<https://www.ncei.noaa.gov/access/monitoring/historical-palmers/>) is most effective in determining long-term drought, a matter of several months, and is not as good with short-term forecasts (a matter of weeks). The Palmer Index uses a zero for abnormally dry, and drought is shown in terms of minus numbers; for example, minus two is severe drought, minus three is extreme drought, and minus four is exceptional drought.

A review of The Palmer Index reveals there have been 731 drought events from January 2000 through November 2024. One of the longest running droughts in recent history began in September 2010 and ended in January 2013. The County was in extreme drought conditions from May 2011 to February 2013 and exceptional drought conditions from April 2012 to February 2013. The last drought ran from January 2022 to January 2023.

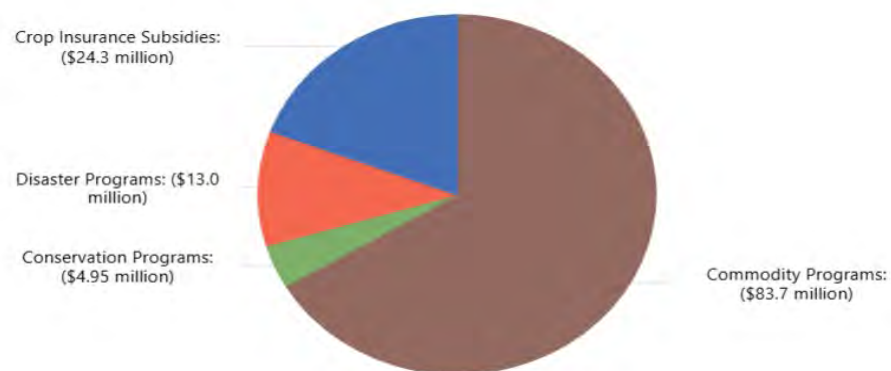


Based on the weekly data from the US Drought Monitor (<https://droughtmonitor.unl.edu/>) from January 2000 to November 2024 the county has experienced the following drought conditions:

- 737 weeks where all or a portion of the county has experienced of D0 - Abnormally Dry;
- 498 weeks where all or a portion of the county has experienced of D1 - Moderate Drought;
- 258 weeks where all or a portion of the county has experienced levels of D2 - Severe Drought;
- 163 weeks where all or a portion of the county has experienced levels of D3 - Extreme Drought; and
- 64 weeks where all or a portion of the county has experienced levels of D4 - Exceptional Drought. (US Drought Monitor Tables can be found in Appendix A.)

According to the USDA Farm Subsidies Database, from 1995-2023, Jefferson County received a total of \$125 million in farm subsidy payments of which \$13 million was for disaster assistance. The pie chart below depicts amounts and type of assistance. *Source: <https://farm.ewg.org>*

Jefferson County, Georgia Farm Subsidy Breakdown, 1995-2023



Historical data is only for the county. A severe, prolonged drought would mainly affect the 88.9 percent of the county that makes up the timber and agriculture business. This could result in loss of crops, livestock and create the conditions for a major wildfire event. This would also have an impact on the incorporated cities, as water restrictions would be enforced. Based on a 20-year hazard cycle history there is a 91.67 percent chance of an annual drought event for the county. (See Appendix A, Section III, for Worksheet 3a and Appendix D.)

C. Assets Exposed to Hazard and Estimate of Potential Losses: Drought conditions typically pose little or no threat to structures; however, fires can occur as a result of dry weather. The greatest threat to assets in the county is to forestry and agricultural properties and livestock. No damage to critical facilities is anticipated as a result of drought conditions. Crop damage cannot be accurately quantified due to several unknown variables: duration of the drought, temperatures during the drought, severity of the drought, different crops require different amounts of rainfall, and different growing seasons. Based on FEMA Worksheet #3a the potential loss in agricultural and forestry properties for each jurisdiction is:

- Avera has 15 structures/properties valued at approximately \$346,950 with an estimated population of 4.
- Bartow has 23 structures/properties valued at approximately \$619,517 with an estimated population of 0.
- Louisville has 20 structures/properties valued at \$469,970 with an estimated population of 8.
- Stapleton has 57 structures/properties valued at approximately \$1.3 million with an estimated population of 4;
- Wadley has 53 structures/properties valued at approximately \$2 million with a population of 12;
- Wrens has 21 structures/properties valued at \$898,697 with a population of 8;
- Unincorporated Jefferson County has 7,501 structures/properties valued at approximately \$461 million with an estimated population of 586.

There is a total of 7,690 agricultural/forestry properties in all of Jefferson County valued at more than \$467 million with a population of 622 that are at the greatest risk due to a drought event (Appendix A and Appendix D).

D. Land Use and Development Trends: Jefferson County currently has no land use or development trends related to drought conditions. When drought conditions do occur the county and all municipalities follow the restrictions set forth by the Georgia DNR Drought Management Plan and the Statewide Outdoor Water Use Schedule. All six water departments have adopted the Georgia Water Stewardship Act went into effect statewide on June 2, 2010. It allows daily outdoor watering for purposes of planting, growing, managing, or maintaining ground cover, trees, shrubs, or other plants only between the hours of 4 p.m. and 10 a.m. by anyone whose water is supplied by a water system permitted by the Environmental Protection Division.

The following outdoor water uses also are allowed daily at any time of the day by anyone:

- Commercial Agriculture
- Alternative sources of water (grey water, rain water, condensate, etc.)
- Irrigation of food gardens
- Irrigation of newly installed or reseeded turf for the first 30 days
- Drip irrigation or soaker hoses
- Hand watering with a shut off nozzle
- Water from a private well
- Irrigation of plants for sale
- Irrigation of athletic fields, golf courses or public recreational turf
- Hydroseeding

Outdoor water uses for any purposes other than watering of plants, such as power washing or washing cars, is still restricted to the current odd/even watering schedule.

- Odd-numbered addresses can water on Tuesdays, Thursdays and Sundays.
- Even-numbered and unnumbered addresses are allowed to water on Mondays, Wednesdays and Saturdays.

The main areas of the county considered to experience growth are those areas adjacent to Louisville, Wrens, and Wadley. The majority of planned commercial, industrial and residential expansion is appropriate for these areas because of their proximity to the cities and the community facilities and services that they provide, as well as their access to major thoroughfares. Growth for the unincorporated areas of the county will be minimal. Vulnerability in terms of future buildings, infrastructure and critical facilities is not known at this time. Current and Future Land Use maps, tables and projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns: Agricultural losses associated with drought are more likely to occur in the rural, less concentrated areas of the county. Although all incorporated jurisdictions are less likely to experience drought related losses, they should not be excluded from mitigation considerations. Drought creates a deficiency in water supply that affects water availability and water quality. Droughts can and have severely affected private wells, municipal and industrial water supplies, agriculture, stream water quality, recreation at major reservoirs hydropower generation, navigation, and forest resources.

F. Hazard Summary: Drought is not spatially defined and equally affects the entire planning area. Droughts do not have the immediate effects of other natural hazards, but sustained drought can cause severe economic stress to not only the agricultural interests in Jefferson County, but to the entire State of Georgia. The potential negative effects of sustained drought are numerous. *Historical data is available only for the county as a whole.* Based on a 20-year cycle hazard history along with available data there is a 91.67 % chance of an annual drought event in Jefferson County. In addition to an increased threat of wildfires, drought can affect municipal and industrial water supplies, stream-water quality, water recreation facilities, hydropower generation, as well as agricultural and forest resources.

In summary, for Jefferson County as a whole, there are a total of 7,690 agricultural/forestry properties in Jefferson County valued at more than \$467 million with a population of 622 and

includes 13,373 head of livestock that are at the greatest risk due to a drought event. There is a population of 16,930 and approximately 40,626 structures/properties in the county with a value just slightly less than \$1.3 billion which could be affected if wildfires break out as a result of drought conditions. Drought mitigation goals and objectives can be found in Chapter III, Section III.

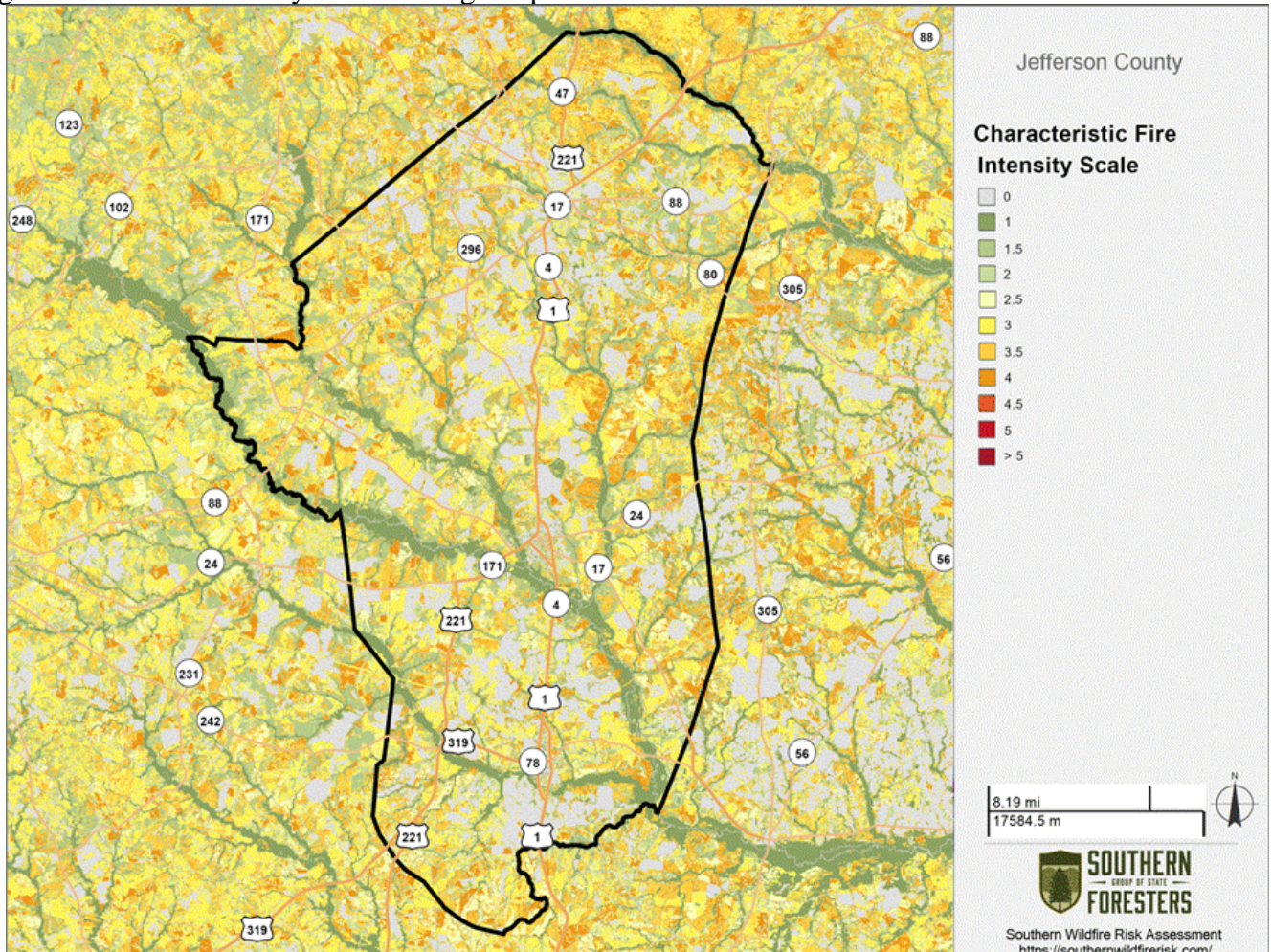
- G. Climate Change:** The Fourth National Climate Assessment reports that average and extreme temperatures are increasing across the country and average annual precipitation is decreasing in the Southeast. Heavy precipitation events are becoming more frequent, meaning that there will likely be an increase in the average number of consecutive dry days. As temperature is projected to continue rising, evaporation rates are expected to increase, resulting in decreased surface soil moisture levels. Together, these factors suggest that drought will increase in intensity and duration in Jefferson County.

SECTION IV. WILDFIRE

- A. Hazard Identification:** A wildfire is any uncontrolled fire occurring on undeveloped land that needs fire suppression. The potential for wildfire is influenced by three factors: the presence of fuel, the area's topography and air mass. There are three different classes of wildland fires. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around. Wildfires caused by lightning have a very strong probability of occurring during drought conditions. Drought conditions make natural fuels (grass, brush, trees, dead vegetation) more fire prone.
- B. Hazard Profile:** Jefferson County has a total area of 339,200 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. Given the right weather conditions and variables, wildfire, due to natural causes, creates a potential threat to the lives of residents and property in the planning area. The NCEI has never reported a significant wildfire event in Jefferson County.

The committee reviewed historical data from the Georgia Forestry Commission, which is not found in the NCEI database, to research wildfire events. The GFC provides wildfire data on man-made and natural wildfire occurrences for the county as a whole and not for individual jurisdictions. This plan will address only natural disasters. According to Georgia Forestry data, from 1957 to 2022, there have been 3,104 fire events burning a total of 17,277 acres for an average extent of 5.75 acres. Of these 3,104 fire events 168 were a result of lightning strikes that burned 1,505 acres. Based on best available data 180 wildfire events as a result of lightning. While data was collected looking at 60 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle there is a 276% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4 wildfires as a result of lightning annually. The drier the condition the more susceptible the county is to wildfire (*See Appendix A*).

Data from the Southern Wildfire Risk Assessment Summary Report summarizes wildfire related information for Jefferson County. This report is a detailed risk summary designed to help prioritize areas where mitigation treatments, or tactical analysis might be necessary to reduce risk from wildfires. The characteristic Fire Intensity Scale quantifies the potential fire intensity by order of magnitude as determined by fuel and range of possible wind and weather conditions.



C. Assets Exposed to Hazard and Estimate of Potential Losses: While wildfires are more likely to occur in the county outside of the incorporated areas. The committee concluded that wildfires present a threat to all existing buildings, infrastructure and critical facilities since wildfires can spread throughout the county and into the urban areas. Damages as a result of a wildfire event are more likely to occur in areas of the county where forestry and woodland are prevalent. Wildfire does have the potential to spread into the incorporated areas and cause extensive damage to existing structures/properties. FEMA Worksheet #3a located in Appendix D shows the number and types of buildings found in Jefferson County, as well as the value of these structures/properties and the population. The following assets by jurisdiction could potentially be exposed to wildfire hazard:

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286
Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
Wadley	3,740	\$118,237,863	2,061
Wrens	4,224	\$104,510,573	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

The following table reveals all critical facilities in the county by jurisdiction, number of facilities, hazard score, replacement value, and daily occupancy exposed to wildfire hazard. A complete breakdown of each jurisdiction by hazard can be found in Appendix A.

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Jefferson County	4	1	\$1,300,621	\$29,600	4	0
Jefferson County	3	31	\$257,906,697	\$9,727,000	2,326	589
Jefferson County	2	2	\$2,112,000	\$0	508	0
Jefferson County	1	1	\$1,500,000	\$5,233,000	0	0
Jefferson County	0	6	\$58,680,775	\$2,616,500	1,107	75
Avera	3	3	\$737,500	\$400,000	1	0
Bartow	4	6	\$2,263,730	\$348,500	2	2
Bartow	3	5	\$1,306,547	\$53,500	4	1
Bartow	2	4	\$238,500	0.00	0	0
Bartow	1	1	\$63,700	0.00	0	0
Louisville	4	1	\$5,000,000	0.00	225	200
Louisville	3	9	\$10,336,225	\$1,700,000	44	4
Louisville	2	3	\$1,037,500	0.00	0	0
Louisville	1	1	\$950,000	0.00	0	0
Louisville	0	6	\$20,818,665	0.00	2	0
Stapleton	3	4	\$2,584,292	\$774,000	4	0
Wadley	4	7	\$4,870,863	\$1,788,200	125	95
Wadley	3	10	\$3,429,790	\$700,000	21	2
Wrens	3	16	\$9,714,714	\$976,224	40	0
Wrens	2	3	\$1,325,000	\$50,000	0	0
Wrens	1	1	\$750,000	0.00	0	0
Wrens	0	10	\$6,185,143	\$150,000	10	0
TOTAL		131	\$393,112,262	\$14,843,540	4,423	968

The GMIS has 15 critical facilities with a hazard score of four (high), 78 with a hazards score of three (moderate), 12 with a hazard score of 2 (low) and four with a hazard score of one (very low)

probability). The remaining 22 critical facilities have a hazard score of zero. The 109 critical facilities with a wildfire hazard score greater than zero have an estimated potential loss of more than \$307 million. The loss for all critical facilities is \$393,112,262. According to FEMA Worksheet #3a there are 40,626 structures/properties with a population of 16,930 with a value of slightly less than \$1.3 billion worth of assets countywide. If a wildfire started, it is not likely that all of these structures/properties would be affected (*See Appendix A and Appendix D*).

- D. Land Use and Development Trends:** Jefferson County currently has no land use or development trends related to wildfire conditions. Land use codes do provide for fire protection to any proposed major and minor developments connected to the public water supply system, and minimum fire flows shall be computed based on standards promulgated by the Jefferson County Fire Department. For those proposed developments that will not have immediate access to the public water supply system, such standards and computations should be based on the National Fire Protection Association *Standards on Water Supply for Suburban and Rural Fire Fighting*.
- E. Multi-Jurisdictional Concerns:** The majority of Jefferson County is timber, forest or agricultural land. If a wildfire occurs it is imperative that all emergency personnel can communicate with each other throughout the entire planning area. The county and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The county and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the county will be without any adequate means to transmit signals. The county and all jurisdictions are aware of the need to develop communication capabilities that will serve their county.

Wildfire does have the potential to spread to urban areas thus affecting the entire county. As a result, any mitigation steps taken related to wildfire should be undertaken on a countywide basis and include all incorporated jurisdictions.

- F. Hazard Summary:** Jefferson County has a total area of 339,200 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. Given the right weather conditions and variables, wildfire due to natural causes creates a potential threat to the lives and property of residents in the planning area. Of the 3,104 fire events, 168 were a result of lightning strikes that burned 1,505 acres. Based on a 20-year hazard cycle there is a 276% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4 wildfires as a result of lightning annually. Mitigation Goals and Objectives concerning wildfires can be found in Chapter III, Section IV.
- G. Climate Change:** It must be taken into consideration that the daily chance of a wildfire event will continue to increase annually as a result of continuous climate changes. The wildfire season has lengthened in many areas due to factors including warmer springs, longer summer dry seasons, drier soils, and dead vegetation.

SECTION V. TORNADOS

- A. Hazard Identification:** The committee reviewed historical data from the NCEI, SHELDUSTM, newspapers and citizen interviews in researching the past effects of tornados in Jefferson County.

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm or the result of a hurricane and is produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornadoes are among the most unpredictable and destructive weather phenomena and can strike at any time of the year if the essential conditions are present. The damage from a tornado is a result of the high wind velocity and wind-blown debris. The positions of the subtropical and polar jet streams often are conducive to the formation of storms in the Gulf region. The table below shows the original Fujita Scale and the Enhanced Fujita Scale (in use since 2007) to rate the intensity of a tornado by examining the damage caused by the tornado after it has passed over a man-made structure.

FUJITA SCALE			DERIVED EF SCALE		OPERATIONAL EF SCALE	
F Number	Fastest 1/4-mile (mph)	3 Second Gust (mph)	EF Number	3 Second Gust (mph)	EF Number	3 Second Gust (mph)
0	40-72	45-78	0	65-85	0	65-85
1	73-112	79-117	1	86-109	1	86-110
2	113-157	118-161	2	110-137	2	111-135
3	158-207	162-209	3	138-167	3	136-165
4	208-260	210-261	4	168-199	4	166-200
5	261-318	262-317	5	200-234	5	Over 200

Source: NOAA

B. Hazard Profile: Based on historic data, there have been 15 reported tornadoes in the planning area. The highest magnitude reported was an F3. Total reported property damages were more than \$9.5 million in property damages with 12 injuries reported. Tornadoes tend to strike in somewhat random fashion, making the task of calculating a recurrence interval extremely difficult. Using a 20-year hazard cycle, frequency tables calculate a chance for a tornado event at 28% every three and a half years.

The following table was produced from the NCEI and SHELDTUS™ databases and shows the event, severity and estimate cost of damages reported. (See Appendix A, Section I and Appendix D).

Table 2.10

Date	Location	Mag	Inj	PD	CrD
7/22/1970	Jefferson	F0	0	\$0.00	\$0.00
7/19/1971	Jefferson	F1	0	\$25,000.00	\$0.00
1/13/1972	Jefferson	F3	21	\$2,500,000.00	\$0.00
3/18/1981	Jefferson	F1	1	\$2,500.00	\$0.00
7/25/1981	Jefferson	F1	0	\$250,000.00	\$0.00
12/4/1983	Jefferson	F0	2	\$5,000.00	\$0.00
10/1/1989	Jefferson	F1	2	\$2,500.00	\$0.00
06/01/1992	Jefferson	F0	0	\$5,000.00	\$0.00
3/7/1996	Wrens	F1	5	\$1,000,000.00	\$0.00
6/15/1996	Bartow	F0	0	\$10,000.00	\$0.00
7/1/2003	Jefferson	F1	0	\$0.00	\$0.00
3/15/2008	Jefferson	F2	0	\$500,000.00	\$0.00

5/11/2008	Grange	F0	0	\$5,000,000.00	\$0.00
4/10/2009	Stapleton	F1	0	\$100,000.00	\$0.00
04/03/2017	Grange	F0	0	\$25,000.00	\$0.00
4/13/2020	Almira	F0	0	\$20,000.00	\$0.00
1/4/2023	Magnolia	F0	0	\$0.00	\$0.00
Total				\$9,445,000.00	

Source NCEI and Sheldus

- C. Assets Exposed to Hazard and Estimate of Potential Losses:** All structures and facilities within the County could be damaged by a tornado, as tornadoes are among the most unpredictable of weather phenomena and are indiscriminate as to when or where they strike. In evaluating assets exposed to natural hazards, the committee determined that all critical facilities, as well as public, private and commercial property, are susceptible to tornado events. Table 2.11 provides data from FEMA Worksheet #3a that estimates the potential loss for each jurisdiction.

Table 2.11

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286
Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
Wadley	3,740	\$118,237,863	2,061
Wrens	4,224	\$104,510,572	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

Table 2.12 shows the number of critical facilities by jurisdiction, hazard score, replacement value, content value, and daily occupancy. GMIS critical facility reports and FEMA Worksheet #3a are located in Appendix A for each individual jurisdiction and the county as a whole.

Table 2.12

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Jefferson County	2	38	\$319,795,523	\$11,964,100	3,884	664
Jefferson County	0	3	\$1,704,570	\$409,000	95	0
Avera	2	3	\$737,500	\$400,000	1	0
Bartow	2	16	\$3,872,477	\$402,000	6	3
Louisville	2	16	\$22,842,390	\$1,700,000	269	204
Louisville	0	4	\$15,300,000	0.00	2	0
Stapleton	2	4	\$2,584,292	\$774,000	2	0
Wadley	2	17	\$8,300,653	\$2,488,200	146	97

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Wrens	2	30	\$17,974,857	\$51,176,224	50	0
TOTAL		131	\$393,112,262	\$69,313,524	4,455	968

- D. Land Use & Development Trends:** Since the previous plan was approved, there have not been any new developments, regulations, programs, or other changes in the community that would either increase or decrease the community's overall vulnerability to this hazard. Currently, the county has no land use or development trends related to tornado events. Information on current land use and future land use projections can be found in Appendix B.
- E. Multi-Jurisdictional Concerns** – Tornadoes tend to follow a straight path regardless of natural features or political boundaries, and no difference in severity is expected between jurisdictions. However, the impact may be more severe in places with higher population density due to more people being in danger, more people needing to evacuate, more debris from damaged buildings, and other impacts associated with higher population density. In jurisdictions without building codes and inspections, structures may exist that are not built to code and therefore may be especially vulnerable to the effects of strong winds and other hazards. In jurisdictions with a large number of mobile homes, the damage can be expected to be more severe.
- F. Hazard Summary:** Tornadoes do not touch down as frequently; however, the unpredictability and the potential for excessive damage caused by tornadoes makes it imperative that mitigation measures identified in this plan receive full consideration. Based on 54 years of historical data, there have been 15 reported tornadoes in the planning area. The highest magnitude reported was an F3. Reported property and crop damages for all 15 events totaled more than \$9.5 Million with 12 injuries. Tornadoes tend to strike in somewhat random fashion, making the task of calculating a recurrence interval extremely difficult. There is a 28 percent annual chance of a tornado event for the County as a whole. A breakdown of information for individual jurisdictions can be found in Appendix A and Appendix D. Specific mitigation actions for tornado events are identified in Chapter III, Section III.
- G. Climate Change:** Another aspect that must be taken into consideration is the effect climate change can have on the frequency, probability, and intensity of tornadoes. Increased greenhouse gases in the atmosphere are known to cause atmospheric warming. This warming raises convective available potential energy (CAPE), which is the measure of energy available for storms to form. This warming and increase of CAPE can significantly increase the number of days, frequency, and intensity of thunderstorm winds that affect Jefferson County and its municipalities. It's important to note that while there is a scientific consensus that climate change is happening and is largely driven by human activities, its exact impacts on specific weather phenomena like thunderstorm winds can also vary based on location and other natural factors such as changes in wind patterns, changes in land use and/or topography, etc.

SECTION VI. TROPICAL STORMS

- A. Hazard Identification:** The committee reviewed historical data from the NCEI, SHELDUS™, newspapers and citizen interviews in researching the past effects of Tropical Storms in Jefferson County. Tropical Storms are an organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots). In this area they generally occur because of a hurricane or tropical system that has come inland.

Tropical storms begin as tropical depressions over warm oceanic water, then develop into tropical cyclones. A tropical cyclone's life span can last from a few hours to close to three weeks. Most tropical cyclones last approximately five to ten days. If the winds are under or up to 39 mph, it is a tropical depression. If winds speeds are between 39 to 73 mph, it is considered a tropical storm. Any storm with over 74 mph wind speed is called a hurricane. As a rule, hurricanes occur in the western Atlantic Ocean when warm, humid conditions are prevailing. Hurricanes are usually accompanied by excessive rain, thunder and lightning. When hurricanes make landfall, they typically slow down. Unfortunately, at that time, another danger often appears – tornados. A storm surge, which is an abnormal rise in water levels in a coastal area, usually occurs with tropical storms. Jefferson County is not likely to experience a hurricane or storm surges.

Table 2.13

Saffir Simpson Scale for Hurricanes		
Category	Wind Speed	Expected Damage
One	74-95 mph	No real damage to building structures; primarily damage to trees, shrubbery, unanchored manufactured homes
Two	96-110 mph	Some roofing material, door, window damage; considerable damage to vegetation, manufactured homes.
Three	111-130 mph	Some structural damage to small residences and utility buildings; manufactured homes destroyed.
Four	131-155 mph	Some complete roof structure failure on small residences; more extensive curtain wall failures.
Five	155 mph up	Complete roof failure on many residences and industrial buildings; some complete building failures with small utility buildings blown over or away.

- B. Hazard Profile:** Tropical storms generally affect the entire county and all of Jefferson County is vulnerable to the threats. There have been 13 tropical storms reported in Jefferson County by the NCEI and SHELDUSTM. Damage as a result of the storms were due to power outages, downed trees and flash flooding. The tropical storms affected the entire planning area. Data for each jurisdiction is not available. Based on the hazard frequency table there is a 60% chance of a tropical storm event for all jurisdictions every one and a half years (See Appendix D).

Table 2.14

Details	Date	PrD	CrD
as a result of Tropical Storm Hanna	9/14/2002	0.00	0.00
as a result of Tropical Depression Bill	7/1/2003	0.00	0.00
as a result of Hurricane Frances	9/6/2004	0.00	0.00
as a result of Hurricane Ivan	9/16/2004	0.00	0.00

Details	Date	PrD	CrD
as a result of Hurricane Jeanne	9/26/2004	0.00	0.00
as a result of Tropical Storm Arlene	6/12/2005	0.00	0.00
as a result of Tropical storm Tammy	10/5/2005	0.00	0.00
As a result of tropical storm Fay	08/21/2008	0.00	0.00
as a result of Hurricane Ida	11/10/2009	0.00	0.00
as a result of Hurricane Jeanne	09/04/2011	0.00	0.00
as a result of Tropical Storm Irma	09/11/2017	0.00	0.00
as a result of Hurricane Michael	10/10/2018	0.00	0.00
Tropical Storm Faye	10/29/2020	0.0	0.0
As a result of Hurricane Helene	10/27/2024	0.0	0.0

- C. **Assets Exposed to Hazard and Estimate of Potential Losses:** In evaluating assets exposed to the natural hazard, the committee determined that all critical facilities, as well as all public, private and commercial property, are susceptible to tropical storms. The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. Table 2.15 provides data from FEMA Worksheet #3a that estimates the potential loss for each jurisdiction.

Table 2.15

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286
Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
Wadley	3,740	\$118,237,863	2,061
Wrens	4,224	\$104,510,571	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

Table 2.16 shows the number of critical facilities by jurisdiction, hazard score, replacement value, content value, and daily occupancy.

Table 2.16

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Jefferson County	2	38	\$319,795,523	\$11,964,100	3,884	664
Jefferson County	0	3	\$1,704,570	\$409,000	95	0
Avera	2	3	\$737,500	\$400,000	1	0
Bartow	2	16	\$3,872,477	\$402,000	6	3
Louisville	2	16	\$22,842,390	\$1,700,000	269	204
Louisville	0	4	\$15,300,000	0.00	2	0
Stapleton	2	4	\$2,584,292	\$774,000	2	0

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Wadley	2	17	\$8,300,653	\$2,488,200	146	97
Wrens	2	30	\$17,974,857	\$51,176,224	50	0
TOTAL		131	\$393,112,262	\$69,313,524	4,455	968

GMIS critical facility reports and FEMA Worksheet #3a are located in Appendix D for each individual jurisdiction and the county as a whole.

- D. Land Use & Development Trends:** Since the previous plan was approved, there have not been any new developments, regulations, programs, or other changes in the community that would either increase or decrease the community's overall vulnerability to this hazard. Jefferson County is located in FEMA wind zone III, which is associated with 200-mph wind speeds. Currently, the county has no land use or development trends related to tropical storms. Information on current land use and future land use projections can be found in Appendix B.
- E. Multi-Jurisdictional Concerns –** All of Jefferson County has the same design wind speed of 200 mph. The entire county has the potential to be affected by tropical storms. As a result, any mitigation steps taken related should be considered on a county-wide basis to include all jurisdictions.
- F. Hazard Summary:** The entire county has the potential to be affected by tropical storms. Based on 22 years of historical data, there have been 13 tropical storms reported by the NCEI and SHELDUSTM. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly more than \$1.2 Billion with a population of 16,930. A breakdown of information for individual jurisdictions can be found in Appendix A and Appendix D.
- G. Climate Change:** Another aspect that must be taken into consideration is the effect climate change can have on the frequency, probability, and intensity of tropical storms. Increased greenhouse gases in the atmosphere are known to cause atmospheric warming. This warming raises convective available potential energy (CAPE), which is the measure of energy available for storms to form. This warming and increase of CAPE can significantly increase the number of days, frequency, and intensity of thunderstorm winds that affect Jefferson County and its municipalities. It's important to note that while there is a scientific consensus that climate change is happening and is largely driven by human activities, its exact impacts on specific weather phenomena like thunderstorm winds can also vary based on location and other natural factors such as changes in wind patterns, changes in land use and/or topography, etc.

SECTION VII. SEVERE WEATHER INCLUDING THUNDERSTORM WINDS, LIGHTNING, AND HAIL

- A. Hazard Identification:** The committee reviewed historical data from the county's own weather database, the NCEI, SHELDUSTM, newspapers and citizen interviews in researching the past

effects of severe weather in Jefferson County. Three types of severe weather were identified by the mitigation team: (1) thunderstorm winds, (2) lightning and (3) hail.

Severe weather event, thunderstorm winds, can cause death and injury, power outages, property damage, and can disrupt telephone service, severely affect radio communications and surface/air transportation which may seriously impair the emergency management capabilities of the affected jurisdictions.

Thunderstorm winds are winds that arise from convection (with or without lightning), with speeds of at least 50 knots (58 mph), or winds of any speed producing a fatality, injury, or damage. Severe thunderstorms develop powerful updrafts and downdrafts. An updraft of warm, moist air helps to fuel a towering cumulonimbus cloud reaching tens of thousands of feet into the atmosphere. A downdraft of relatively cool, dense air develops as precipitation begins to fall through the clouds. Winds in the downdraft can reach more than 100 miles per hour. When the downdraft reaches the ground, it spreads out forming a gust front: the strong wind that kicks up just before the storm hits. As the thunderstorm moves through the area, the full force of the downdraft in a severe thunderstorm can be felt as horizontal, straight-line winds with speeds well over 50 miles per hour. Straight-line winds are often responsible for most of the damage associated with a severe thunderstorm. Damaging straight-line winds occur over a range of scales. At one extreme, a severe single-cell thunderstorm may cause localized damage from a microburst, a severe downdraft extending not more than about two miles across. In contrast, a powerful thunderstorm complex that develops as a squall line can produce damaging winds that carve a path as much as 100 miles wide and 500 miles long.

Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. Rising and descending air within a thunderstorm separates these positive and negative charges. Water and ice particles also affect charge distribution. A cloud-to-ground lightning strike begins as an invisible channel of electrically charged air moving from the cloud toward the ground. When one channel nears an object on the ground, a powerful surge of electricity from the ground moves upward to the clouds and produces the visible lightning strike. Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.

Hailstones are created when strong rising currents of air called updrafts carry water droplets high into the upper reaches of thunderstorms where they freeze. These frozen water droplets fall back toward the earth in downdrafts. In their descent, these frozen droplets bump into and coalesce with unfrozen water droplets and are then carried back up high within the storm where they refreeze into larger frozen drops. This cycle may repeat itself several times until the frozen water droplets become so large and heavy that the updraft can no longer support their weight. Eventually, the frozen water droplets fall back to earth as hailstones.

Hail can also be a destructive aspect of severe thunderstorms. Hail causes more monetary loss than any other type of thunderstorm-spawned severe weather in the United States, annually producing about one billion dollars in crop damage. Storms that produce hailstones only the size of a dime can produce dents in the tops of vehicles, damage roofs, break windows and cause significant injury or even death.

- B. Hazard Profile:** Thunderstorm winds, lightning and hail can affect the entire county given the right conditions. Since the exact time and location of a severe weather event is not always predictable, all of Jefferson County is vulnerable to the threats of severe weather.

Based on historic data, there have been 89 reported thunderstorms in the planning area in the last 63 years. Reported property damages totaled more than \$929,750 in property damages with 7 injuries reported. Using a 20-year hazard cycle, frequency tables calculates an annual chance for a thunderstorm event at 141% for Jefferson County as a whole at least twice a year.

The NCEI and SHELDUSTM databases and shows the event, severity and estimate cost of damages reported. (See Appendix A, Section I and Appendix D). A complete table of thunderstorm wind events can be found in Appendix A.

During the spring and summer months the county experiences numerous storms that can often produce lightning. There have been 4 reported lightning events to the NCEI and SHELDUS over 74 years with slightly more than \$235,500 in property and crop damages with no injuries reported. There have been 180 lightning strikes recorded in the same time frame that resulted in wildfires.

In the last 65 years there have been 32 hail events reported to the NCEI and SHELDUS databases with slightly less than \$ 430,000 in property and crop damages. While data was collected looking at 65 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Using a 20-year hazard cycle, frequency tables calculate an annual chance for a hail event at: 50% every two years.

- C. Assets Exposed to Hazard and Estimate of Potential Losses:** In evaluating assets exposed to the natural hazard, the committee determined that all critical facilities, as well as all public, private and commercial property, are susceptible to tornados, tropical storms, thunderstorm winds, lightning and hail events. The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. The table below provides data from FEMA Worksheet #3a that estimates the potential loss for each jurisdiction.

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286
Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
Wadley	3,740	\$118,237,863	2,061
Wrens	4,224	\$104,510,571	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

D. Land Use & Development Trends: Jefferson County is located in FEMA wind zone III, which is associated with 200-mph wind speeds. Currently, the county has no land use or development trends related to tornados, tropical storm, thunderstorm winds, lightning, or hail events. Information on current land use and future land use projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns – All of Jefferson County has the same design wind speed of 200 mph as determined by the American Society of Civil Engineers (ASCE) as evidenced by the map and table below.



		WIND ZONE			
		I	II	III	IV
NUMBER OF TORNADOES PER 1,000 SQUARE MILES	<1	LOW RISK	LOW RISK	LOW RISK	MODERATE RISK
	1 - 5	LOW RISK	MODERATE RISK	HIGH RISK	HIGH RISK
	6 - 10	LOW RISK	MODERATE RISK	HIGH RISK	HIGH RISK
	11 - 15	HIGH RISK	HIGH RISK	HIGH RISK	HIGH RISK
	>15	HIGH RISK	HIGH RISK	HIGH RISK	HIGH RISK

LOW RISK	MODERATE RISK	HIGH RISK
Need for high-wind shelter is a matter of homeowner preference	Shelter should be considered for protection from high winds	Shelter is preferred method of protection from high winds

★ Shelter is preferred method of protection from high winds if house is in hurricane-susceptible region

F. Hazard Summary: Overall, severe weather in the form of thunderstorm winds poses one of the greatest threats to Jefferson County in terms of property damage, injuries, and loss of life. Therefore, the committee recommends that mitigation measures identified in this plan should be aggressively pursued.

The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. All 118 critical facilities have a wind hazard score of two with a replacement cost of more than \$328 million. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930. A breakdown of information for individual jurisdictions can be found in Appendix A and Appendix D. Specific mitigation actions for tornados, tropical storms, thunderstorm winds, lightning and hail events are identified in Chapter III, Section V.

G. Climate Change: Another aspect to consider is the effect climate change can have on the frequency, probability, and intensity of tropical storms. Increased greenhouse gases in the atmosphere are known to cause atmospheric warming. This warming raises convective available potential energy (CAPE), which is the measure of energy available for storms to form. This warming and increase of CAPE can significantly increase the number of days, frequency, and intensity of thunderstorm winds that affect Jefferson County and its municipalities. It's important to note that while there is a scientific consensus that climate change is happening and is largely driven by human activities, its exact impacts on specific weather phenomena like thunderstorm winds can also vary based on location and other natural factors such as changes in wind patterns, changes in land use and/or topography, etc.

SECTION VIII. WINTER STORMS

- A. **Hazard Identification:** Southeastern snow or ice storms often form when an area of low pressure moves eastward across the northern Gulf of Mexico. To produce a significant winter storm in the south, not only must temperatures be cold enough, but there must also be enough moisture in the atmosphere to produce adequate precipitation. A major winter storm can last for several days and be accompanied by high winds, ice and freezing rain, heavy snowfall, and cold temperatures. These conditions can make driving conditions very dangerous, as well as bring down trees and power lines.
- B. **Hazard Profile:** Winter storms are not spatially defined and affect the entire planning equally. The committee researched historical data from the NCEI, SHELDUSTM, and SERCC, as well as information from past newspaper articles relating to winter storms in Jefferson County. There have been 17 winter storm events recorded in the county over the last 74 years with an estimated property damage of \$417,089.

The most recent ice storm on February 11-13, 2014 had travel halted, schools and businesses were closed and approximately 9,000 customers were without power at the height of the storm. Power company officials called the devastation to their lines and the ensuing outages historical for this area, which reportedly took the hardest hit of any in the state. In the more rural parts of the County individuals were without power for up to 10 days.

More than 25,000 cubic yards of storm debris was collected county-wide. FEMA reimbursement claims for the cost of debris removal total more than \$225,000. The dairy and beef producers felt

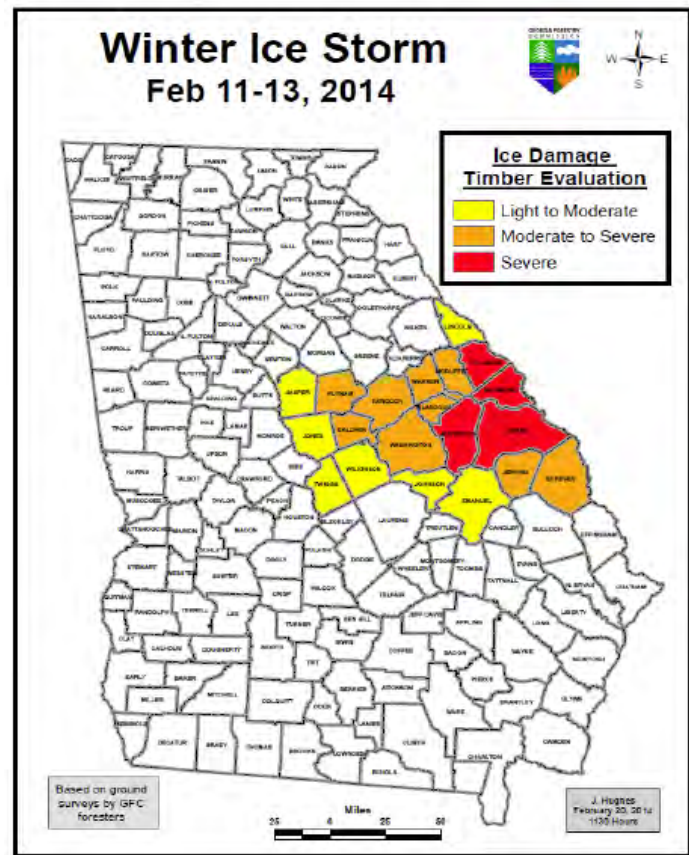
the effects as electric fences lost power, while others were downed by falling trees and limbs. Without power for their pumps many wells were inoperable. The dairy farms in the county relied on generators to milk their cows. Cows need to increase their calorie intake by 1 percent for every degree the temperature drops below 32 degrees.

The other major after effect was to the timber industry. Jefferson County was one of the four counties hardest hit by the storm and had severe timber damage according to the GFC. The GFC examined the levels of damage within two types of pine that were most frequently damaged: the young pine stands and pine stands on which a first thinning had recently occurred. The severe damage had more than 30 percent of stems broken, tops broken out across the stand, limbs stripped, and trees bent more than 45 degrees.

Senior Forester Cathy Black stated that the timber industry is a business that takes decades to turn a profit. Some landowners will be set back 30 years. Some of the hardest hit areas crops of trees, called stands in the business, have been reduced to splinters. The tops were broken off the pine trees, some trees were snapped in half, and others blown over laying on the ground. When this happens all that can be done is to clear cut it and plant new trees.

Although winter storms are infrequent in the south, they have the potential to cause excessive damage to a community and disrupt the lives of residents. Based on the hazard frequency table located in Appendix D there is an 23% chance of a winter storm event every 4 years. The percentage is the same for all jurisdictions.

- C. Assets Exposed to Hazard and Estimate of Potential Losses:** In evaluating assets that may potentially be impacted by the effects of winter storms, the committee determined that all critical facilities, as well as all public, private and commercial property, are susceptible. The table below shows assets by jurisdiction that could be at potential risk of damage from a winter storm event.



Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286

Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
Wadley	3,740	\$118,237,863	2,061
Wrens	4,224	\$104,510,571	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

The GMIS does not provide a report for winter storm damage but there is slightly less than \$1.3 billion worth of assets with potential loss to winter storm hazards countywide. The table below shows the number of critical facilities by jurisdiction, hazard score, replacement value and daily occupancy (See Appendix A, Section VI and Appendix D).

Jurisdiction	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
				Day	Night
Jefferson County	33	\$261,160,993	\$11,070,700	4073	795
Avera	3	\$737,500	\$400,000	1	0
Bartow	16	\$3,872,477	\$402,000	6	3
Louisville	19	\$38,442,390	\$1,700,000	271	204
Stapleton	4	\$1,778,500	\$730,000	2	0
Wadley	17	\$7,800,653	\$2,388,200	146	97
Wrens	26	\$15,112,500	\$1,174,200	50	0
TOTAL	118	\$328,905,013	\$17,865,100	4,549	1,099

D. Land Use & Development Trends: Jefferson County currently has no land use or development trends related to winter storms. Projected changes in land use based on the county's multi-jurisdictional comprehensive plan has minimal or no change to land use within the incorporated jurisdictions. The greatest change in land use and future development has a decrease in forest land that will be converted to residential. Since it is impossible to determine where future residents will move in the unincorporated areas of the county, vulnerability in terms of future buildings, infrastructure and critical facilities is not known at this time. It can be surmised that this will bring an increase in population and homes. Land use tables and projections can be found in Appendix B.

E. Multi-Jurisdictional Concerns: Jefferson County currently has no land use or development trends related to winter storms. All of the county can potentially be negatively impacted by winter storms. As a result, any mitigation steps taken related to winter storms should be undertaken on a countywide basis and include all incorporated jurisdictions. A concern is the lack of available data for the county and all municipalities. A database needs to be created and maintained that provides information on past and future occurring winter storm events.

Another major issue is county-wide communications capabilities. During a natural hazard it is imperative that all emergency personnel can communicate with each other throughout the entire planning area. The county and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The county and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever

removed the county will be without any adequate means to bounce signals. The county and all jurisdictions are aware of the need to develop communication capabilities that will serve the entire county.

- F. Hazard Summary:** There have been 17 recorded winter storms. There is an 23% chance of an winter storm event every four years. Winter storms can be more accurately predicted than most other natural hazards, making it possible to give advance warning to communities. The National Weather Service issues winter storm warnings and advisories as these storms make their way south. Given the infrequency of these types of storms, southern communities are still not properly equipped to sustain the damage and destruction caused by severe winter storms. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930. The committee recognized the dangers posed by winter storms and identified specific mitigation actions in Chapter III, Section VI.
- G. Climate Change:** The Environment Protection Agency reported in 2016 that the state of Georgia, including Jefferson County, will continue to experience an annual warming trend as a result of broader climate change. Though this may decrease the future risk of ice storms and severe winter weather, Jefferson County must remain vigilant in preparing for winter hazards, given its proclivity of unexpected storms to shudder the county's response resources.

SECTION VIII. EARTHQUAKE

- A. Hazard Identification -** Earthquakes are one of nature's most damaging hazards. An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of Earth's tectonic plates. The severity of these effects is dependent on the amount of energy released from the fault or epicenter. They usually occur without warning and after just a few seconds can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. If the earthquake occurs in a populated area, it may cause many deaths, injuries and extensive property damage.

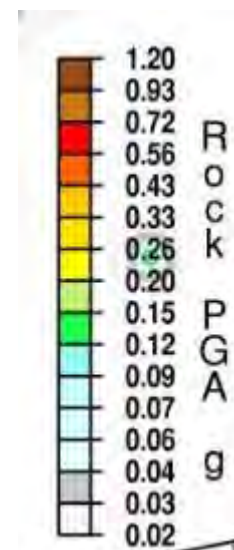
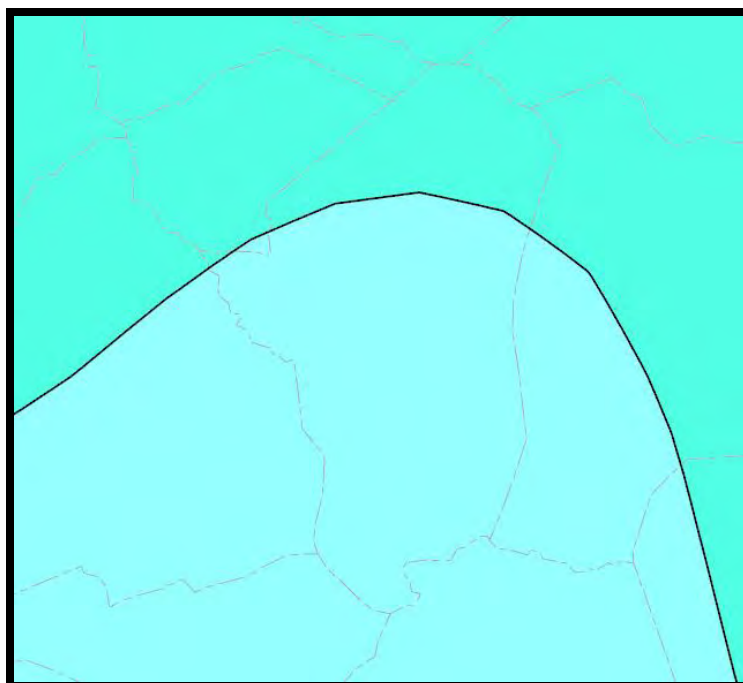
Magnitude and intensity measure different characteristics of earthquakes. Magnitude measures the energy released at the source of the earthquake and is determined from measurements on seismographs. Intensity measures the strength of shaking produced by the earthquake at a certain location and is determined from effects on people, human structures, and the natural environment. The following two tables describe the Abbreviated Modified Mercalli Intensity Scale and show intensities that are typically observed at locations near the epicenter of an earthquake event.

Magnitude	Typical Maximum Modified Mercalli Intensity
1.0 - 3.0	I
3.0 - 3.9	II - III
4.0 - 4.9	IV - V
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - IX
7.0 and higher	VIII or higher

Abbreviated Description of the 12 levels of Modified Mercalli Intensity.		
Intensity	Shaking	Description/Damage
I.	Not felt	Not felt except by a very few under especially favorable conditions.
II.	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III.	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV.	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V.	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI.	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
VII.	Very strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII.	Severe	Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
IX.	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X.	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
XI.	Extreme	Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
XII.	Extreme	Damage total. Lines of sight and level are distorted. Objects thrown into the air.

Source: USGS

Based on U.S. Geological Survey Two-percent probability of exceedance in 50 years map of peak ground acceleration is between one and nine percent (see map below). As discussed above, such predictions are based on limited information, and cannot necessarily be relied upon for their precision. However, they do help demonstrate that the threat of earthquakes cannot be overlooked even in a relatively inactive geographic area such as Jefferson Co. **PGA with 2% 50 year PE**



Source: <https://earthquake.usgs.gov/>

B. Hazard Profile – The planning committee examined historical data from the NCEI, past newspaper articles, and conducted interviews during its research on the effects of past earthquake events. While earthquake events have never occurred in Jefferson County, they hope to be prepared if one does. *All data covers the county as a whole, no data is available by jurisdiction.* GMIS has 25 percent of the county with a seismic hazard score of three and the remaining one percent with a seismic hazard score of two.

C. Assets Exposed to Hazard and Estimate of Potential Losses: All critical facilities, personal, and public property in Jefferson County are susceptible to damage caused by an earthquake. There are no damage records available in relation to earthquakes. Loss would be determined based on intensity and magnitude and would vary in each case. All critical facilities, personal, and public property in Jefferson County are susceptible to damage caused by an earthquake. Worksheet #3a has assets exposed to an earthquake hazard for each jurisdiction as:

Jurisdiction	Number of Structure/Properties	Value	Population
Jefferson County (Unincorporated)	25,319	\$919,281,333	9,219
Avera	776	\$6,507,938	246
Bartow	745	\$11,059,155	286
Louisville	4,741	\$115,404,410	2,493
Stapleton	1,081	\$13,367,033	438
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Wrens	4,224	\$104,510,571	2,187
TOTAL FOR COUNTY	40,626	\$1,288,368,303	16,930

Source: Jefferson County Tax Assessor

The table below shows the number of critical facilities potentially at risk by jurisdiction, daily occupancy and replacement value (See Appendix A and Appendix D).

Jurisdiction	Hazard Score	# of Critical Facilities	Replacement Value \$	Content Value \$	Occupancy	
					Day	Night
Jefferson County	3	4	\$222,598,143	\$9,070,700	3,101	795
Jefferson County	2	29	\$38,562,850	\$2,000,000	972	0
Avera	2	3	\$737,500	\$400,000	1	0
Bartow	2	16	\$3,872,477	\$402,000	6	3
Louisville	3	1	\$15,000,000	0.00	2	0
Louisville	2	16	\$23,142,390	\$1,700,000	269	204
Louisville	0	2	\$300,000	0.00		
Stapleton	2	4	\$1,778,500	\$730,000	2	0
Wadley	2	17	\$7,800,653	\$2,388,200	146	97
Wrens	3	26	\$15,112,500	\$1,174,200	50	0
TOTAL		118	\$328,905,013	\$17,865,100	4,549	1,099

- D. Land Use and Development Trends**—There are no specific land use and development trends in relation to earthquakes at this time.
- E. Multi-jurisdictional Concerns** - All of Jefferson County can potentially be negatively impacted by an earthquake. As a result, any mitigation steps taken related to earthquakes should be undertaken on a countywide basis to include all municipalities. A concern is the lack of available data for the county and all incorporated jurisdictions. A database needs to be created and maintained that provides information on past and future occurring earthquake events.
- F. Hazard Summary** - An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of Earth's tectonic plates. The severity of these effects is dependent on the amount of energy released from the fault or epicenter. The effects of an earthquake can be felt far beyond the site of its occurrence. They usually occur without warning and after just a few seconds can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. If the earthquake occurs in a populated area, it may cause many deaths, injuries and extensive property damage. The committee recognized the potential for losses caused by an earthquake and identified it as a hazard requiring mitigation measures. There has never been a reported earthquake event events reported in the last 68 years. Based on a 20-year cycle hazard history there is less than a 1% probability of an annual earthquake event. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930. The planning committee identified specific mitigation goals, objectives and action items related to earthquakes, which can be found in Chapter III, Section II and III.
- G. Climate Change:** Scientists are beginning to believe there may be a connection between climate change and earthquakes. Changing ice caps and sea levels redistribute weight over fault lines, which could potentially have an influence on earthquake occurrences. However, currently, no studies quantify the relationship to a high level of detail, so recent earthquakes should not be linked with climate change. While not conclusive, early research suggests that more intense earthquakes and tsunamis may eventually be added to the adverse consequences that are caused by climate change.

CHAPTER III. MITIGATION STRATEGIES

Table 3.1 provides a brief description of each section in this chapter and a summary of the changes that have been made.

Chapter III. Section	Updates to Section
I. Flooding	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
II. Dam Failure	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
III. Drought	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
IV. Wildfire	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
V. Severe Weather	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
VI. Winter	Completed action steps were removed. Action Steps that apply to all jurisdictions were combined. New goals were added where necessary along with any existing or new multijurisdictional concerns. Goals, Objective, and Actions Steps were updated to new format.
VII. Earthquake	This hazard was added was not in last plan. Developed Goals, Objective, and Actions Steps.
VIII. All Hazards	Category added to take goals that apply to all Hazards to reduce redundancy.

SECTION I. INTRODUCTION TO MITIGATION STRATEGY

This chapter addresses the mitigation strategy requirements of 44 CFR Section 201.6 (c)(3): “A mitigation strategy that provides the jurisdiction’s blueprint for reducing the potential losses identified in the risk assessment, based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools. This section shall include:

- i) A description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.
- ii) A section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effects of each hazard, with

- particular emphasis on new and existing buildings and infrastructure. All plans approved by FEMA after October 1, 2008, must also address the jurisdiction's participation in the NFIP, and continued compliance with NFIP requirements, as appropriate.
- iii) An action plan describing how the actions identified in paragraph (c)(3)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction. Prioritization shall include a special emphasis on the extent to which benefits are maximized according to a cost benefit review of the proposed projects and their associated costs.
 - iv) For multi-jurisdictional plans there must be identifiable action items specific to the jurisdiction requesting FEMA approval or credit of the plan.”

A. Priority Changes from Previously Approved Plan

There have been no significant priority changes from the previous plan. The goal of Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens is to protect the safety, health and well-being of all county citizens, and to protect public and private property and to lessen the overall effects of a hazard event.

There has been limited new development since the previous plan and no increase in population that would affect the overall vulnerability of the community from identified hazards. This has been no new adoption of development or building regulations to increase or decrease the overall vulnerability to hazard events.

B. Capability Assessment

The County identified current capabilities for implementing hazard mitigation activities. The capability assessment identifies administrative, technical, legal and fiscal capabilities. This includes a summary of departments, and their responsibilities associated with hazard mitigation as well as codes, ordinances, and plans already in place that contain mitigation activities or programmatic structure. The second part of the assessment examined the fiscal capabilities applicable to providing financial resources to implement identified mitigation action items. Below are the annual budgets for each jurisdiction:

- Jefferson County: \$17,950,217
- Avera: \$140,000
- Bartow: \$219,800
- Louisville: \$1,934,100
- Stapleton: \$395,624
- Wadley: \$2,018,000
- Wrens: \$4,900,000

It should be noted that mitigation action steps with high dollar amounts cannot be completed without grant funds and careful budget planning by all jurisdictions.

While not all technical and administrative skills are found in-house, all jurisdictions have access to multiple staff through the RC and can contract out with private firms for any professional services needed. The three tables below identify the administrative, technical, legal and fiscal capabilities of each jurisdiction.

Table 3. 2 Legal and Regulatory Capability (Y/N)

Regulatory Tools (ordinances, codes, plans)	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Does State Prohibit
Building code	Y	N	N	Y	N	Y	Y	N
Zoning ordinance	N	N	N	Y	N	Y	Y	N
Subdivision ordinance or regulations	N	N	N	Y	N	N	Y	N
Special purpose ordinances (floodplain management, storm water management, soil erosion)	Y	N	Y	Y	Y	Y	Y	N
Growth management ordinances (also called “smart growth” or anti- sprawl programs)	N	N	N	N	N	N	N	N
Site plan review requirements	Y	N	N	Y	N	N	Y	N
General or comprehensive plan	Y	Y	Y	Y	Y	Y	Y	N
A capital improvements plan	Y	N	N	Y	N	N	Y	N
An economic development plan	Y	N	N	N	N	N	N	N
An emergency response plan	Y	Y	Y	Y	Y	Y	Y	N
A post-disaster recovery plan	N	N	N	N	N	N	N	N
A post-disaster recovery ordinance	N	N	N	N	N	N	N	N
Real estate disclosure requirements	N	N	N	N	N	N	N	N

Table 3. 3 Fiscal Capability

Financial Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Accessible or Eligible to Use (Yes/No)
Community Development Block Grants (CDBG)	Y	Y	Y	Y	Y	Y	Y	Y
Capital improvements project funding	Y	N	N	Y	N	N	Y	Y
Authority to levy taxes for specific purposes	Y	Y	Y	Y	Y	Y	Y	Y – Vote required

Financial Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Accessible or Eligible to Use (Yes/No)
Fees for water, sewer, gas, or electric service	N	Y	Y	Y	Y	Y	Y	Y
Impact fees for homebuyers or developers for new developments/homes	N	N	N	N	N	N	N	N
Incur debt through general obligation bonds	Y	Y	Y	Y	Y	Y	Y	Y
Incur debt through special tax and revenue bonds	Y	Y	Y	Y	Y	Y	Y	Y – Vote required
Withhold spending in hazard-prone areas	N	N	N	N	N	N	N	N
Other Grants	Y	Y	Y	Y	Y	Y	Y	N

Table 3.4 Administrative and Technical Capacity

Staff/Personnel Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Dept./Agency and Position
Planner(s) or engineer(s) with knowledge of land development and land management practices	Y	Y	Y	Y	Y	Y	Y	Building Dept./ Code Enforcement/ Public Works CSRA RC
Engineer(s) or professional(s) trained in construction practices related to buildings and/or infrastructure	Y	N	N	Y	N	Y	Y	Building Dept./ Code Enforcement
Planners or Engineer(s) with an understanding of natural and/or manmade hazards	Y	N	N	Y	N	Y	Y	Public Works/CSRA RC Staff
Floodplain manager	N	N	N	N	N	N	N	Building Dept.
Surveyors	N	N	N	N	N	N	N	Contracted as needed

Staff/Personnel Resources	Jefferson County	Avera	Bartow	Louisville	Stapleton	Wadley	Wrens	Dept./Agency and Position
Staff with education or expertise to assess the community's vulnerability to hazards	Y	Y	Y	Y	Y	Y	Y	Public Safety/EMA
Personnel skilled in GIS and/or HAZUS	Y	Y	Y	Y	Y	Y	Y	CSRA RC Various
Emergency manager	Y	Y	Y	Y	Y	Y	Y	EMA
Grant writers	Y	Y	Y	Y	Y	Y	Y	CSRA RC

C. Community Mitigation Goals

Collectively, the jurisdictions reviewed the hazard profiles and the loss estimates information in Section II and used it as a basis for developing mitigation goals, objectives and action steps. Mitigation goals are preventive measures to lessen the effect of and losses due to hazard events and are typically long-range visions adapted toward jurisdictional policy. Mitigation objectives are strategies to attain identified goals. Goals and objectives are formulated by reviewing historical hazard data, existing local plans, policy documents, regulations, and public input. Each jurisdiction developed objectives and actions unique to specific vulnerabilities or concerns within its boundaries.

Mitigation actions were developed as the means to carrying out the objectives and achieve goals. All action steps should be compatible with the plans, policies, and regulations of each jurisdiction. The jurisdictions must also have the legal, administrative, fiscal, and technical capacities to perform each action.

The capabilities assessment above aided in forming realistic mitigation actions. This capabilities assessment can then incorporate results of the STAPLEE worksheet to identify obstacles that may hinder the completion actions. Each jurisdiction identified and prioritized actions steps along with an implementation schedule, funding source, and coordinating individual or agency.

Based on the capabilities assessment, the STAPLEE and six categories listed above the county and all jurisdictions identified the following goals:

- Goal 1: Protect the safety, health and well-being of all county citizens;
- Goal 2: Protect public infrastructure and private property;
- Goal 3: Educate the community about natural hazards;
- Goal 4: Manage development to minimize loss;
- Goal 5: Natural Resources Protection; and
- Goal 6: Structural modifications to reduce the impacts of hazard events.

D. Identification & Analysis of Range of Mitigation Actions

The framework used to guide jurisdictions in identifying mitigation measures was developed by FEMA and is captured by the following six categories:

- **Prevention:** Government administrative or regulatory actions or processes that influence the way land and buildings are developed and built. These actions also include public activities that reduce hazard losses. Examples include building and construction code revisions; zoning regulation changes; and computer hazard modeling.
- **Property Protection:** Actions that involve the modifications of existing buildings or structures to protect them from a hazard, or removal from the hazard area. Examples include roadway elevations, improving wind and impact resistance, and flood proofing.
- **Public Education and Awareness:** Action to inform and educate citizens, elected officials, and property owners about the hazards and potential ways to mitigate them. Examples include programs that target repetitive loss properties and vulnerable populations.
- **Natural Resources Protection:** Actions that, in addition to minimizing hazard losses also preserve or restore the function of natural systems. Examples include projects to create open space, green space, and stream restoration.
- **Structural Projects:** Actions that involve the construction of structures to reduce the impact of a hazard. Examples include projects that control floodwater, reconstruction of dams, and construction of regional retention areas.
- **Emergency Services:** Actions that protect people and property during and immediately after a disaster event or hazard event. Examples include enhancements that provide advanced warning and redundant communications.

i. Structural and Non-Structural

Mitigation relates to concrete actions which are put into practice to reduce the risk of destruction and casualties. Mitigation is generally split into two main types of activities: structural and non-structural. Structural mitigation refers to any physical construction to reduce or avoid possible impacts of hazards, which include engineering measures and construction of hazard-resistant and protective structures and infrastructure. Non-structural mitigation refers to policies, awareness, knowledge development, public commitment, and methods and operating practices, including participatory mechanisms and the provision of information, which can reduce risk with related impacts. The committee has identified both structural and non-structural mitigation measures to ensure that the community adequately addresses all relevant dam failure issues. Structural and non-structural actions are identified in Table 3.7.

ii. Existing Policies, Regulations, Ordinances, and Land Use

Louisville, Wadley and Wrens has adopted the following Mandatory codes:

- Georgia State Minimum Standard Building Code (International Building Code with Georgia State Amendments).

- Georgia State Minimum Standard One- and Two-Family Dwelling Code (International Residential Code for One- and Two-Family Dwellings with Georgia State Amendments).
- Georgia State Minimum Standard Fire Code (International Fire Code with Georgia State Amendments).
- Georgia State Minimum Standard Plumbing Code (International Plumbing Code with Georgia State Amendments).
- Georgia State Minimum Standard Mechanical Code (International Mechanical Code with Georgia State Amendments).
- Georgia State Minimum Standard Gas Code (International Fuel Gas Code with Georgia State Amendments).
- Georgia State Minimum Standard Electrical Code (National Electrical Code with Georgia State Amendments).
- Georgia State Minimum Standard Energy Code (International Energy Conservation Code with Georgia State Supplements and Amendments).
- Life Safety Code (NFPA 101).

They have also adopted the Permissive codes:

- International Property Maintenance Code.
- International Existing Building Code.

Other types of ordinances that have been adopted are:

- Currently Jefferson County as well as the cities of Bartow, Louisville, Stapleton, Wadley and Wrens have zoning ordinances, which offer groundwater protection and ensure best practices.
- Jefferson County has adopted a Wetlands Protection Ordinance.
- Louisville has adopted historic preservation ordinances.
- Jefferson County, Wrens and Louisville has adopted a Soil Erosion and Sedimentation Control Ordinance
- Jefferson County has adopted a Solid Waste Management Facility Ordinance.
- Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens have flood plain ordinances.
- Louisville and Wrens have adopted zoning ordinances and subdivision regulations.

The *Jefferson County Comprehensive Plan 2004-2024* was adopted by resolution by the Jefferson County Board of Commissioners and the City Councils of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens. The planning process examines the current and future trends and assess the strengths and opportunities available to achieve their community vision. This document drives the decision-making process for the County and each municipality. The joint comprehensive plan also examines existing land use and projects future land use.

iii. Community Values, Historic & Special Considerations

Historical-Cultural

There are four National Register of Historic Places in Jefferson County:

- **Cunningham Coleman House**, listed 1984, southeast of Wadley. An 1825 sand hills house type with Greek Revival details. Raised, weatherboard, two over four room central hall house plan of one and half stories. Representative of a middle-sized, antebellum cotton plantation and post-Civil War farm area known as “Cunningham Corner.”

- **Jefferson County Courthouse**, listed 1980 in Georgia Courthouse Thematic NR nomination, built 1904, architect Willis Franklin Denny, builder F. P. Heifner. Style, Classical Revival. The courtroom was remodeled in 1980; Elevator added and new windows in 1990s. Features prominent domed clock tower and two-story pediment porticos supported by classical columns. State level of significance.



- **Louisville Commercial Historic District**, listed 1994. Includes 180 acres, 43 buildings, 1 structure (Old Market NR listed individually). Period of significance, 1750-1949. Architectural styles, Beaux Arts, Romanesque, Early Commercial. Includes Courthouse (NR thematic courthouse nomination). Extends four blocks NW to SE along Broad Street. The majority of buildings brick, typical of small commercial towns. Significant structures, post office designed by U.S. Supervising Architect Louis A. Simon, county jail, telephone exchange, former Baptist Church Sunday School, Jefferson Hotel, Abbot and Stone building, Planter’s Cotton Warehouse, Pal Theater. Native Louisville architect Willis F. Denny designed three of the two-story commercial buildings. State level of significance.

- **Old Market House**, Louisville, built 1758. Constructed as a trading market pre-dating the city of Louisville. The open-air market is the only building of its kind still standing in Georgia and one of only a few such remaining in the United States. The market rests on a 24'-square foundation and features twelve heavy wooden piers supporting a pyramidal roof. A small cupola with pointed-arch gothic windows and vent openings rests atop the roof. The historic 1772 bell that hangs serves as a reminder of the gift that was intended for King Louis XVI but was stolen by a pirate ship before it found its way in Louisville's Market House. State level of significance.



Willis Franklin Denny II (1874-1905) was an important transitional figure in the development of Georgia architecture at the turn of the 20th century. A native of Louisville, he was one of the first trained architects in America. There are nine Willis Franklin Denny II buildings in Louisville that should be NR listed and noted for preservation opportunities. They are:

- J.D. Polhill Sr. House, 9th and Peachtree, (moved to rural Jefferson County)
- Ramsey-Smith-Ethridge House, 401 Broad
- Rhodes-Stone House, 707 Peachtree (owned by United Methodist Church)
- Abbott House, Mulberry and 8th
- Phillips-Seebach House, 206 West 7th (demolished in 1990)
- Wright-Livingston-Agel House, 208 East 8th
- Denny Building (three storefronts), Broad Street, NR listed in Commercial HD
- Enterprise Building, Broad Street, NR listed in Commercial HD
- Jefferson County Courthouse, Broad Street, NR listed

There is one residential NRHP listing located in Wadley. The Cunningham Coleman House, located southeast of Wadley, was listed on the National Register in 1984. This home is an 1825 sand hills house type with Greek Revival details. Potential National Register of Historic Places residential properties include:

- McDaniel-Little-Patterson House, 702 Mulberry, circa 1880
- Dixon-Cobb House, 718 Screven Street, circa 1880
- Little Brewton House, 403 Broad Street, built 1873
- Marion Little House, 401 Broad Street, built circa 1900
- Ramsey-Smith-Ethridge House, 33 West Broad, built late 1870's
- Abbot House, Mulberry and 8th, built pre-1860
- Sigmund Zacharias House, 115 8th street, built 1879 (owned by the Rollins)
- Austin House, 208 8th street, circa 1830 (oldest house in Louisville)

- Lowry-Edwards-Willie House, US 1, poet Harry Stillwell Edwards lived here with his son.

Recreation

Jefferson County is home to a segment of the Ogeechee River. This 250-mile river runs through the center of Jefferson County and is the only major river in Georgia with no dam. The river serves many purposes including drinking water, wildlife habitat and recreation such as fishing and boating. The Ogeechee River has been designated as a protected river by the Georgia Department of Natural Resources and an Ogeechee River Corridor Protection plan was adopted by Jefferson County in 2000. The Ogeechee River Protection District includes the land within 100 feet, horizontally, on both sides of the river.

The Atlanta Journal/Constitution and The Macon Telegraph call Bartow the smallest town in America with a thriving community theater. But, in truth, the Schoolhouse Players have evolved into a regional performing group that draws its actors and technicians, as well as its large audiences, from a wide radius. The Players, known for their attention to sets, lighting, and costumes, present a full season of plays and musicals, as well as additional concerts, which range from classical to country.

Economic Drivers

Jefferson County offers a nationally favorable tax and a 100 percent Freeport inventory tax exemption for qualified companies. Under the Georgia Business Expansion Support Team (BEST) Act, qualified companies that expand in our state may be eligible for incentives to reduce costs and increase the bottom line. The Development Authority of Jefferson County is a driving force in the success of business development here, working with existing and new businesses to ensure quick response time in developing training, infrastructure capacities, or distribution supports. The Development Authority and The Chamber of Commerce have developed strategic partner programs to support local businesses.

Jefferson County has:

- Metal fabrication cluster with excess water and treatment capacity
- Three industrial sites:
 - 353-acre industrial park adjacent to the airport
 - 650-acre park rail served
 - 170-acre industrial park
- Two airports
 - a 5,000-foot paved runway, perfect for corporate aircraft, at a regionally designated airport with terminal
 - a second airport with a 3,500-foot paved runway with plans to extend to a 5,000-foot runway

There is a network of well-maintained highways and airports, with quick access to one of the nation's largest seaports, links Jefferson County to world markets. US Highways 1 (expanding to four lanes), 88 (four lanes), 221 and 319 traverse Jefferson

County while Interstate 16 is just south and Interstate 20 to the north. These main routes are accented by seven different state highways.

Currently expanding airports in Louisville and Wrens service private planes with lighted runways and hangars. Commercial flights are easily accessible at Augusta Airport roughly 35 miles away and two hours away at Savannah International Airport and Atlanta's Hartsfield-Jackson Airport.

The existing Jefferson County business community is strong and diversified. Major Industries: agriculture, aquaculture, timber, kaolin, and metal fabrication Major Employers: Fulghum, Battle Lumber, ThermoKing, Glit/Microtron

iv. **Prioritization of Actions:**

Those Mitigation Actions given high priority are in two groups: life safety-related actions that can be accomplished relatively quickly and changes to protect critical facilities on which other emergency management systems are dependent, for example communications focal points. Those actions likely to require extended time frames to accomplish received medium priority status.

The committee used the STAPLEE worksheet to select and prioritize the most appropriate mitigation alternatives. This methodology requires that seven categories be considered when reviewing potential actions. This process helped ensure that the most equitable and feasible actions would be undertaken based on each jurisdictions capability. Table 3.6 provides information regarding the review and selection criteria for alternatives.

Table 3.6

STAPLEE REVIEW AND SELECTION CRITERIA FOR ALTERNATIVES

- Is the proposed action acceptable by the community?
- Is the action compatible with current and future community values?
- Are equity concerns involved that would result in unjust treatment of any segment of the population?
- Will the proposed action cause social disruption?

TECHNICAL

- Will the proposed action achieve the stated objective and further mitigation goals?
- Will the proposed action create more problems than it solves?
- Does the proposed action resolve the problem completely or partially?
- It is the most useful action in light of other community values?

ADMINISTRATIVE

- Does the community have the capability to implement proposed action?
- Is there someone to lead or coordinate the proposed action?
- Is there sufficient funding, staff and technical support to implement the proposed action step?
- Are there ongoing administrative needs that are required?

POLITICAL

- Is the proposed action politically acceptable?
- Have political leaders participated in the planning process?
- Who are the stakeholders for this proposed action?

- Have all stakeholders been afforded an opportunity to participate in the planning process?
- Is there public support to implement and maintain the action?

LEGAL

- Does the community have the authority to implement the proposed action?
- Is there a clear legal basis for the proposed action?
- Are there legal side effects? (i.e. could the action be construed as a taking)
- IS the proposed action allowed in the general plan?
- Will the community be liable for action or lack thereof?
- Will the proposed action be challenged??

ECONOMIC

- What is the cost-benefit of the proposed action (do the benefits exceed the cost)?
- Have initial, maintenance and administrative costs been taken into account??
- Has funding been secured for the proposed action? If not have funding sources been identified?
- Will the proposed action affect the fiscal capabilities and/ or budget of the jurisdiction?
- Will the proposed action place a tax burden on the community?
- Does the proposed action contribute to other community goals? (capital improvements, economic development)

ENVIRONMENTAL

- Will the proposed action have a positive or negative effect on the environment?
- Does the proposed action require environmental regulatory approvals?
- Does the proposed action meet local and state regulations?
- Does the proposed action impact a threatened or endangered species?

E. Introduction to Action Plan

The next two sections of Chapter III., Section II. Natural Hazards and Section III. Mitigation Actions, comprise the strategies that Jefferson County together with Avera, Bartow, Louisville, Stapleton, Wadley and Wrens have identified to reduce the effects of natural hazards. Mitigation actions given high priority are in two groups: (1) life safety-related actions that can be accomplished relatively quickly and (2) changes to protect critical facilities on which other emergency management systems are dependent, for example communications focal points. Those actions likely to require extended time frames to accomplish received medium priority status.

SECTION II. NATURAL HAZARDS

A. Flooding Action Plan

The committee determined that due to the presence of flood plains in the county efforts to reduce the level of exposure to flooding should be considered. In previous flooding instances, damage has been sustained primarily to roads, bridges and natural resources. Specific mitigation measures identified by the committee are designed to lessen the effects of such damage to new and existing structures in the future.

Objective A1. Improve the effectiveness of existing flood insurance programs.

Objective A2. Evaluate and improve the present drainage infrastructure.

Objective A3. Warn citizens when the potential for flooding exist.

- Objective A4.** Lessen the impact to existing buildings, critical facilities and infrastructure as a result of flooding.
- Objective A5.** Limit future development in flood prone areas.
- Objective A6.** Reduce the threat of water contamination caused by flooding.

B. Dam Failure Action Plan

Dam failure mainly affects areas that are downstream of the event. Further study of this type event is required to determine where property damage and loss of life has the greatest potential to occur. Critical facilities and vulnerable populations are located in all jurisdictions as well as the unincorporated areas of the County. As a result, any mitigation steps taken related to dam failure events should be undertaken on a countywide basis and specifically include all incorporated jurisdictions.

- Objective B1.** Identify at risk population and properties.
- Objective B2.** Develop proposal to regulate protective measures for dam breach zones

C. Drought Action Plan

As indicated in Chapter II, Section III, drought conditions can cause costly damage to crops. However, from a danger or hazard perspective, the greatest threat posed by drought conditions is from potential wildfires. As 84.5% of the county is made up of forest and woodlands, the possibility for wildfires is distinct and poses a significant threat. In general, wildfires are the result of dry conditions combined with lightning or carelessness. The committee determined that mitigation goals were necessary to prevent crop damage, as well as damage to new and existing structures.

- Objective C1.** Ensure that there is an adequate water supply during periods of drought.
- Objective C2.** Educate citizens on water conservation issues.

D. Wildfire Action Plan

As indicated in Chapter II, Section IV, wildfires have the potential to cause costly damage in Jefferson County. From a danger or hazard perspective, the greatest threat posed by wildfire is the damage to forest, woodlands and agriculture property. The possibility for wildfires is distinct and poses a significant threat to the county. Forest fires are generally the result of dry conditions combined with lightning or carelessness. The committee determined that mitigation goals were necessary to prevent damage to undeveloped areas of the county as well as damage to new and existing structures caused by wildfires.

- Objective D1.** Ensure that adequate fire protection is available.
- Objective D2.** Reduce threat of wildfire occurrence.
- Objective D3.** Increase public awareness of wildfire dangers.

E. Severe Weather (Tornados, Tropical Storms, Thunderstorm Winds, Lightning, Hail)

As with many Georgia communities, if a tornado or tropical storm were to strike Jefferson County, significant damage to both property and agricultural crops could result. In addition, the potential for injuries and loss of life is substantial due to the unpredictability and violent nature of these storms. The committee recognizes the important role advance planning plays in the mitigation process. There is great benefit in identifying appropriate steps that can be taken to help minimize losses to new and existing structures in Jefferson County as a result of a severe weather event. As indicated in Chapter II, Section V, of all of the natural hazards profiled in this plan, tornados have the potential to inflict the greatest amount of damage while

thunderstorm winds are the most frequently occurring natural hazard in the county and have the greatest chance of affecting the county each year. The committee has identified several courses of action that both local officials and citizens can use in their mitigation efforts against the effects of tornados, tropical storms, thunderstorm winds, lightning and hail to both new and existing structures.

Objective E1. Minimize damage to property from severe weather events.

Objective E2. Minimize damage to public buildings and critical facilities to ensure continual operations of vital services.

Objective E3. Protect vulnerable populations from the effects of severe weather events.

Objective E4. Educate the public including citizens and business owners on disaster preparedness and safety.

F. Winter Storms Action Plan

Within Jefferson County, and the southeast region in general, there is great concern over the threat of winter storms. Although this area does not typically receive the amounts of snow and ice that other regions do, nor do they experience winter storms as frequently as other regions, Jefferson County and other southeastern communities must be prepared for the damage caused by winter storms. The fact that winter storms hit Jefferson County infrequently results in other problems, such as lack of equipment and supplies to combat treacherous winter storm conditions. In Jefferson County, the formation of ice on roads and bridges, tree limbs, and power lines is the cause of most damage. In Chapter II, Section VI additional winter storm hazards are addressed, as well as information related to potential losses for the county. The Committee has determined that several steps could be undertaken to minimize the effects of winter storms to protect the health and safety of citizens, as well as damage to new and existing structures.

Objective F1. Educate the public on preparedness and safety issues for winter storm events.

Objective F2. Prevent property damage as a result of a winter storm event.

Objective F3. Minimize power outages during winter storms.

G. Earthquake Action Plan

As indicated in Chapter II, Section VII. Earthquake conditions have the potential to affect all of Jefferson County. Critical facilities and vulnerable populations are located in the County and the City. As a result, any mitigation steps taken related to an earthquake event should be undertaken on a countywide basis and specifically include all incorporated jurisdictions.

Objective G1. Minimize damage to property from earthquake events.

Objective G2. Minimize damage to public buildings and critical facilities to ensure continual operations of vital services.

Objective G3. Educate the public on preparedness and safety issues for earthquake events.

H. All Hazard Action Steps

The purpose of this section is to allow the committee to recommend mitigation measures within this plan that transcend individual hazards. Certain common mitigation measures are needed regardless of the specific hazard event. Rather than list these multiple times within

each different hazard category, the committee decided to list these “all-hazards” mitigation measures within a separate section of the plan. The goal with these mitigation measures is again to minimize the loss of life and property, and to prevent disruption of services to the public to the greatest extent possible.

- Objective H1.** Ensure communication capabilities exist between all Emergency Service Personnel and Agencies.
- Objective H2.** Ensure the ability to travel for county residents, organizations, and providers of essential services such as Law Enforcement Personnel, hospitals and utilities after a hazard event.
- Objective H3.** Protect critical facilities from the effects due to power outages as a result of all hazards to ensure a continuation of all vital services.
- Objective H4.** Provide adequate notification to citizens of Jefferson County pertaining to hazard event.
- Objective H5.** Guarantee all evacuation plans are up to date and adequate to meet the needs of the citizens of Jefferson County.
- Objective H6.** Guarantee that all Emergency Response Plans are up to date and adequate to meet the needs of citizens of Jefferson County.
- Objective H7.** Ensure all emergency shelters are ready to meet the needs of the population of Jefferson County and all jurisdictions.
- Objective H8.** Provide the citizens of Jefferson County educational information on Emergency Preparedness.
- Objective H9.** Provide the citizens of Jefferson County with accurate and timely information pertaining to Emergency Preparedness.
- Objective H10.** Collect accurate and complete data pertaining to hazard events within Jefferson County and all jurisdictions.

SECTION III. MITIGATION ACTIONS

Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
1.	Investigate ways to increase Participate in the CRS	Jefferson County, Bartow, Louisville, Stapleton, Wadley and Wrens	BOC/City Councils	Flood	A1, A2	1, 2, 4, 5	Non-Structural	Staff Time	General Funds	3 years	Stalled due to funding	Low
2.	Continue to assess stormwater runoff.	Jefferson County/All Municipalities	Public Works	Flood	A5, C2	2, 6	Non-Structural	Staff time	General Funds	1year and Continual	Ongoing	High
3.	Construct as needed, more storm water retention facilities, storm drain improvements and channel improvements to protect existing and new developments.	Jefferson County/All Municipalities	BOC/City Council/ Public Works	Flood/ Drought	A3,	2, 6	Structural	2,000,000	CDBG, USDA, EPA, DNR, FEMA General Fund,	1year and Continual	Ongoing As funding becomes available	High
4.	Clear run-off and water retention ditches.	Jefferson County/All Municipalities	Public Works/Road Dept.	Flood	A5	2, 1	Structural	Staff Time	General Funds	1year and Continual	Ongoing As part of road dept. work duties	High
5.	Promote the preservation of areas in and around watercourses.	Jefferson County, Wadley, Louisville, Wrens	BOC/City Council/	Flood	A6	1, 2, 4, 5	Non-Structural	Staff time	CDBG, USDA, EPA, DNR	2 years	Ongoing	High
6.	Add greenspace to known flood prone areas.	Jefferson County, Louisville, Wadley and Wrens	BOC/City Council/	Flood	A6	1, 2, 4, 5	Non-Structural	Staff time	CDBG, USDA, EPA, DNR	1year and Continual	Ongoing	Medium
7.	Evaluate existing water systems upgrade as needed	All Municipalities	Public Works	Flood/ Drought/ Wildfire	A7, C1	1, 2, 6	Structural	1,000,000	General Fund, CDBG, USDA, EPA, DNR	1year and Continual	Ongoing As funding becomes available	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
8.	Investigate methods to reduce non-point source pollution.	Jefferson County	Public Works	Flood	A1	1, 2, 5	Non-Structural	500,000	USDA, EPA, DNR	2 years	Ongoing Stalled as no projects have been identified	Low
9.	Promote increased surface water usage and surface artesian flow for irrigation.	Jefferson County/All Municipalities	BOC/City Councils/ Public Works	Drought	C1, C2	2, 3, 4	Structural/ Non-Structural	Staff time	USDA, EPA, DNR, General Funds	2 years and Continual	Ongoing	Medium
10.	Enact a program to educate the residents about water conservation issues	Jefferson County/All Municipalities	BOC/City Councils	Drought	C1, C2	1, 3	Non-Structural	\$2,000.00	USDA, EPA, DNR, General Funds	1year and Continual	Ongoing	High
11.	Increase public awareness of watering restrictions and bans.	Jefferson County/All Municipalities	BOC/City Councils	Drought	C1, C2	1, 3	Non-Structural	Staff Time	General Funds	1year and Continual	Ongoing	High
12.	Develop a public awareness campaign to promote water-saving campaigns (i.e. low-flow water saving devices)	Jefferson County/All Municipalities	BOC/Public Works	Drought	C1, C2	1, 3	Non-Structural	Staff Time	Staff Time	1year and Continual	New	High
13.	Continue training of all firefighters to include wildland fire training.	Jefferson County/All Municipalities	BOC/City Councils /EMA	Wildfire	D1	1, 2	Non-Structural	50,000.00	General Funds	1year and Continual	Ongoing	High
14.	Seek funding for needed firefighting equipment	Jefferson County/All Municipalities	Public Works	Wildfire	D1	1, 2	Non-Structural	2,000,000	General Funds, FEMA	Continual	Ongoing	High
15.	Inventory and replace or install more fire hydrants as needed.	Jefferson County/All Municipalities	BOC/City Council/ Public Work's	Wildfire	D1	1, 2	Structural	150,000	General Funds, FEMA	1year and Continual	Ongoing	High
16.	Seek funding for more fire truckers and tankers for local fire departments.	Jefferson County/All Municipalities	BOC	Wildfire	D1	1, 2	Non-Structural	\$750,000	General Funds, FEMA	1year and Continual	Ongoing	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
17.	Seek funding for communication towers and voice repeater systems.	Jefferson County/All Municipalities	EMA/ Police/ Sheriff	All hazards	H1, H9	1	Structural	\$1,000,000	General Fund, FEMA, CJCC, JAG, USDA, DOJ	Continual	Ongoing	High
18.	Enforce defensible space (30-ft minimum setbacks) between buildings and flammable brush and forestland where possible.	Jefferson County/All Municipalities	Road Dept.	Wildfire	D2, D3	1, 2, 3	Structural	Staff Time	General Funds, FEMA	Continual	Ongoing	Medium
19.	Continue following GFC service of construction and maintenance of firebreaks around forests and structures, along abandoned roadbeds.	Jefferson County/All Municipalities	BOC/City Councils/ Road Dept.	Wildfire	D2, D3	1, 2, 3	Non-Structural	Staff Time	General Fund	Continual	Ongoing	High
20.	Strictly follow GFC guidelines for control burns and permits.	Jefferson County/All Municipalities	BOC/City Councils/ Road Dept.	Wildfire	D2, D3	1, 2, 3	Non-Structural	Staff Time	General Funds,	Continual	Ongoing	High
21.	Implement the Firewise Community Initiative where appropriate	Jefferson County/All Municipalities	BOC/City Councils/ EMA	Wildfire	D2, D3	1, 2, 3	Non-Structural	\$25,000.00	General Funds, GFC	3 years	Stalled as no communities have been identified to participate	Medium
22.	Improve public awareness of wildfire techniques and awareness of wildfire dangers.	Jefferson County/All Municipalities	BOC/City Councils/ EMA	Wildfire	D2, D3	1, 2, 3	Non-Structural	\$25,000.00	General Funds	2 years and Continual	Ongoing	High
23.	Adopt Building Codes	Jefferson County, Avera, Bartow, Stapleton	BOC/City Councils/	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 4, 6	Structural/ Non-Structural	Staff Time	General Fund	3 years	New	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
24.	Adopt Zoning Regulations	Jefferson County, Avera, Bartow, Stapleton, Wadley	BOC/City Councils/	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 4, 6	Structural/ Non-Structural	Staff Time	General Fund	3 years	Ongoing	High
25.	Equip all county and city recreation parks with adequate early severe weather warning and lightning detection devices.	Jefferson County/All Municipalities	EMA/Fire Depts.	Severe Weather, Lightning	E1, E2, E3	1, 2, 6	Structural	150,000	General Funds, FEMA	2 years	Ongoing	High
26.	Inspects public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed	Jefferson County/All Municipalities	Public Works/ Fire Depts.	Severe Weather, Winter Storms	E1, E2, E3	1, 2, 6	Structural	Staff Time	General Funds, FEMA	3 years	Ongoing	Medium
27.	Enforce building codes for all new buildings and critical facilities.	Jefferson County/All Municipalities	EMA/Fire Depts.	Flood, Severe Weather, Winter Storm	A5, A6, E1, E2	1, 2, 6	Structural/ Non-Structural	Staff Time	General Funds, FEMA	Continual	Ongoing	High
28.	Install lightning rods in high value critical facilities.	Jefferson County/All Municipalities	BOC/City Councils/	Severe Weather, Lightning	E1, E2, E3	1, 2, 6	Structural	100,000	General Funds, FEMA	2 years	New	High
29.	Review current Emergency Response Plan and update when needed.	Jefferson County EMA	BOC/City Councils/ EMA	All hazards	H6, H8	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years and Continual	Ongoing	High
30.	Review current evacuation plans paying particular attention to vulnerable populations and update as needed.	Jefferson County EMA	BOC/City Councils/ EMA	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	H5, H8	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years	Ongoing	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
31.	Develop a public awareness program about the installation of lightning grounding systems on critical infrastructure, residential and business properties.	Jefferson County EMA	BOC/City Councils/ Recreation Dept.	Severe Weather, Lightning	E4	1, 2, 3	Non-Structural	Staff Time	General Funds	2 years	Stalled due to lack of staff	High
32.	Install generators where needed.	Jefferson County/All Municipalities	EMA/ Fire Code Enforcement and Building Inspection	All hazards	H3	1, 2, 3, 6	Structural/ Non-Structural	\$400,000	General Funds, FEMA	1 year and continual	Ongoing As funding becomes available	High
33.	Seek funding to ensure all current and future emergency shelters have back-up generators.	Jefferson County/All Municipalities	Code Enforcement and Building Inspection	All hazards	H7	1, 2, 3, 6	Structural/ Non-Structural	\$500,000	General Funds, FEMA	3 years	Ongoing As funding becomes available	High
34.	Educate the public on shelter locations and evacuation routes	Jefferson County/All Municipalities	EMA/ Code Enforcement and Building Inspection	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	H8, H9	3	Non-Structural	Staff Time	General Funds	1 year and continual	Ongoing	High
35.	Develop public education and awareness programs regarding severe weather events to include home safety measures, purchase of weather radio and personal safety measures before, during and after an event.	Jefferson County/All Municipalities	EMA	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	H8, H9	3	Non-Structural	\$10,000	General Funds, FEMA	2year and continual	Ongoing	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
36.	Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after.	Jefferson County/All Municipalities	EMA/BOE	Winter Storm	F1	3	Non-Structural	\$25,000	General Funds	2 year and continual	Ongoing	High
37.	Review current codes to comply with and enforce the State building code with criteria for design snow load for buildings and structures.	Jefferson County/All Municipalities	BOC/ City Councils/ EMA	Winter Storm	F2	1, 2, 3,	Non-Structural	Staff Time	General Funds	2 years	Ongoing	low
38.	Create a data base to record hazard event information.	Jefferson County/All Municipalities	EMA	All hazards	H10	1, 2, 3,	Non-Structural	Staff Time	General Funds	2 years	Stalled due to lack of staff	Medium
39.	Conduct dam breach analysis to identify assets and population at risk in the event of a failure.	Jefferson County, Wadley	EMA	Dam Failure	B1, B2	1, 2,	Non-Structural	250,000	General Funds, DNR	3 years	Stalled due to funding	Medium
40.	Draft ordinance prohibiting development in dam breach zone.	Jefferson County/All Municipalities	BOC/ City Councils/	Dam Failure	B2	1, 2, 4	Non-Structural	Staff Time	General Funds	2 years	In progress	Low
41.	Install dam failure alert systems.	Jefferson County, Wadley	BOC/ City Councils/ EMA	Dam Failure	H4	1, 2, 6	Structural	\$100,000	General Funds, DNR	4 years	Ongoing As funding becomes available	Medium

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
42.	Inventory existing road equipment and purchase needed equipment to maintain roads before, during and after a hazard event.	Jefferson County/All Municipalities	BOC/ City Councils/ EMA	Flood, Severe Weather, Winter Storm	H2	1, 2	Non-Structural	1,500,000	General Funds, FEMA	Continual	Ongoing As funding becomes available	Medium
43.	Develop coordinated management strategies for deicing, snow plowing, and clearing roads of fallen trees and debris	Jefferson County/All Municipalities	BOC/ City Councils/ Planning and Zoning	Flood, Severe Weather, Winter Storm	H2	1, 2	Non-Structural	Staff Time	General Funds	2 years	Stalled due to staff time	High
44.	Promote the construction of safe rooms in shelter areas and in public buildings.	Jefferson County/All Municipalities	BOC/ City Councils/ Road Dept.	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	H3	1, 2, 6	Structural	\$500,000	General Funds, FEMA	4 years	Ongoing As funding becomes available	Medium
45.	Update 911 equipment as needed.	Jefferson County/ EMA	BOC/ City Councils/ Road Dept./EMA	All hazards	H1, H3	1, 2, 6	Structural	\$2,000,000	General Funds, FEMA	Continual	Ongoing As funding becomes available	High
46.	Request that all new education facilities be designed to serve as public shelters for emergency purposes.	Jefferson County	BOC/ EMA	All hazards	H7	1, 2, 6	Non-Structural	Staff Time	General Funds	Continual	Ongoing. No new schools have been designed	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
47.	Promote and participate in the following American Red Cross Programs • Disaster Resistant Neighborhoods Program • Business and Industry Preparedness Seminar • Community Disaster Education Preparedness presentations	Jefferson County/All Municipalities/EMA	EMA/ Sheriff	All hazards	H4, H8, H9	1, 2, 3	Non-Structural	25,000	General Funds, FEMA	Continual	Ongoing	Medium
48.	Continue update of EMA website with information pertaining to Emergency Preparedness.	Jefferson County EMA	EMA/	All hazards	H4, H5, H6, H7, H8, H9.	1, 2, 3	Non-Structural	Staff Time	General Funds	Continual	Ongoing updated as needed	High
49.	Work with local cable and radio providers to enhance and broadcast public education on Emergency Preparedness.	Jefferson County EMA	BOC/ City Councils/ BOE	All hazards	H8,H9	1, 2, 3	Non-Structural	Staff Time	General Funds	1 year and Continual	Ongoing	High
50.	Implement GIS technology on fire and emergency management vehicles so data can be readily available in the field so more accurate, timely assessments for future mitigation planning activities.	Jefferson County/All Municipalities	BOC/ City Councils/	Flood, Wildfire, Dam Failure, Severe Weather, Winter Storm	H9, H10	1, 2, 6	Non-Structural	50,000	General Funds, FEMA	1 year and Continual	Ongoing As funding becomes available	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
51.	Apply for funds for one portable generators for lift stations and wells	Wrens	BOC/ Road Dept.	All hazards	H3	1, 2, 3, 6	Structural/ Non-Structural	140,000	General Funds, FEMA	6 months	Ongoing As funding becomes available	High
52.	Continue update of EMA website and Facebook page with information pertaining to Emergency Preparedness.	Jefferson County EMA	EMA	All hazards	H4, H5, H6, H7, H8, H9.	1, 2 ,3	Non-Structural	Staff Time	General Funds	Continual	Ongoing	High
53.	Apply for funds for generators critical facilities such as city hall, police station, fire station, wells	Wadley	BOC/ City Councils/	All hazards	H3	1, 2, 3, 6	Structural/ Non-Structural	275,000	General Funds, FEMA	Continual	Ongoing As funding becomes available	High
54.	Apply for funds for generator at Hospital	Jefferson County	BOC/ City Councils/	All hazards	H3	1, 2, 3, 6	Structural/ Non-Structural	140,000	General Funds, FEMA	Continual	Ongoing As funding becomes available	High
55.	Apply for three stationary generators for tow lift stations and the Leisure Senior Center for use as a shelter.	Jefferson County EMA	EMA/BOC	All hazards	H3	1, 2, 3, 6	Structural/ Non-Structural	300,000	General Funds, FEMA	Continual	Ongoing As funding becomes available	High
56.	Conduct a survey to determine structural capability of critical facilities to function after a seismic event. Retrofit as needed.	Jefferson County/All Municipalities/ EMA	BOC/ City Councils/	Earthquake	G1	3,6	Structural	Staff Time	General Funds	2 years	New	High
57.	Distribute flyers and pamphlets to citizens and businesses on earthquake preparedness.	Jefferson County/All Municipalities/ EMA	BOC/ City Councils/	Earthquake	G1, G2	1, 2,3	Non-Structural	Staff Time	General Funds	1 year	New	High

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Action #	Mitigation Action and Description	Jurisdiction	Implement Agency	Hazards Addressed	Objective Supported	Goal	Structural / Non-Structural	Estimated Project Cost	Possible Funding Source(s)	Timeframe	Status	Priority
58.	Conducts earthquake scenarios to estimate potential loss of life and injuries, the types of potential damage, and existing vulnerabilities.	Jefferson County/All Municipalities/EMA	BOC/ City Councils/	Earthquake	G1, G2	1, 2,3,6	Non-Structural	Staff Time	General Funds	1 year	New	High
59.	Contract with the Regional Commission to create a Flood Mitigation Assistance Plan.	Jefferson County	RC, BOC, EMA	Flood	A6	1, 2, 4, 5	Non-Structural	Unknown	General Funds	2 years	Stalled due to funding	Low

- A. **New Buildings and Infrastructure:** All objectives and action steps are applicable to new buildings and infrastructure.
- B. **Existing Buildings and Infrastructure:** All objectives and action steps are applicable to existing buildings and infrastructure except adopt building codes. Enforcing building codes on existing buildings is not always feasible. Buildings maybe retrofitted but cannot always be brought up to stricter regulations.
- C. **Special Multi-Jurisdictional Strategy and Considerations:** During a natural hazard it is imperative that all emergency personal can communicate with each other throughout the entire planning area. The County and its jurisdictions have numerous dead spots throughout the area due to topography and lack of adequate communication equipment. The County and its emergency personnel are dependent on the private sector for towers to use for signals. If these towers are ever removed the County will be without any adequate means to transmit signals. The County and all jurisdictions are aware of the need to develop communication capabilities that will serve their County.

Another concern is the lack of available data for the county and individual jurisdictions on hazard events. A database needs to be created and maintained that provides information on flooding events that occur. This database should include information such as location (road names, neighborhoods, GPS coordinates, etc.), damages reported, power outages, road closures, county and city personal that are dispatched to the area, etc.

D. **Completed and Deleted Action Steps from Original Plan:**
Flood

- Determine the elevation of critical facilities in known flood areas and seek funding to relocate if necessary. Completed.
- Update Floodplain Maps. FEMA updated all maps in 2010.
- Review and adopt flood plain ordinances as needed. Completed for all jurisdictions except Avera who has no floodplains
- Review set back requirements from top of banks of creeks and from top of banks of major rivers. Completed set back requirements are consistent with the DNR guidelines.
- Review existing comprehensive, development and land use plans to address flood prone areas. This was completed during the 2018-2028 Comprehensive Plan Update.
- Install measuring devices in creeks, ponds, etc. to provide a warning when water levels become dangerously high. All have monitors.
- Identify property owners who are located in areas continually subject to flooding and relocate or mitigate. There are no repetitive flood properties.
- Cap wells not in use and increase wellhead waterproofing. Deleted deals with private property.
- Ensure well head elevations are above known flooding levels. Handled by Health Dept.
- Run HAZUS scenarios once the software is updated and compatible to RC ArcGIS 10.2 and updated estimated losses. Completed

Drought

- Identify and inventory all vulnerable agricultural properties to include livestock and develops a protective action plan.
- Study the range of federal support programs available to assist Jefferson County's agriculture community.
- Water Use Ordinances was removed from the plan. All water departments have adopted GA EPD guidelines.
- Seek funding for wells that have gone dry and been removed. Funding does not exist for this activity as a grant only a loan and must be applied for by private citizens.

Wildfire

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED

Severe Weather

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED
- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations. Building Codes are in compliance.
- Provides NOAA weather radios to elderly and handicap populations. Promoting Code Red.
- To the greatest extent possible, identify all owners of inadequately installed manufactured homes offer a financial incentive to retrofit them with an appropriate level of anchoring and support.” Removed as no funding exist for this activity.
- Inspect all county and municipal critical facilities for proper grounding. Completed
- Install surge protectors on critical facilities' electronic equipment in essential county and city facilities. Completed.
- Provide boat owners with safety tie down procedures with boat registration. Removed. Information to boating safety will be placed on the EMA website and Facebook page as an alternative.

Winter Weather

- Seek funding for reverse 911 was removed from the plan as technology is obsolete and the county has implemented CODE RED
- Inspect power lines to determine if trees need to be trimmed or cut down. This is performed by the electric companies. This action step was deleted.
- Purchase a portable sewer transfer pumping unit. Was removed it is more cost efficient to rent one when needed.
- Herman Nelson Warming System AIR HEATER w/TRAILER Was removed it is not cost efficient

- E. Unchanged and/or Continual Action Steps:** The flowing mitigation steps remain in the plan. Based on the STAPLEE Criteria these unchanged action steps were found to be relevant in limiting the damage to people and property from a natural hazard. All action steps have been reformatted to meet the action step criteria established by GEMA and

FEMA after the original plan was approved. The new table format from GEMA Plan Update Guidance Template 2012 has been used to organize action steps. STAPLEE worksheet can be found in Appendix D for each action step.

Flood:

- Continue to assess storm water run-off.
- Seek funding to construct more storm water retention facilities, storm drain improvements and channel improvements to protect existing and new developments.
- Seek funding to increase size of retention basins and run off canals.
- Recommend that run-off and water retention ditches be cleared.
- Adopt ordinances to control building and development in known flood prone areas.
- Promote the preservation of areas in and around watercourses.
- Add greenspace to known flood prone areas.
- Investigate methods to reduce non-point source pollution.
- Seek funding for communication towers and voice repeater systems. (Moved to all hazards.)

Drought

- Evaluate existing water systems and upgrade as needed.
 - Wadley made water system improvements for \$550,000
 - Louisville completed a \$1.7 million upgrade the water treatment plant, added a new well and rehabbed the water tank at the High School.
- Increase public awareness of watering restrictions.
 - All cities post water restrictions.
- Educate citizens on water conservation.
- Promote increased surface water usage for irrigation.
- Promote usage of surface artesian flow for irrigation.
- Educate citizens on water conservation issues.

Wildfire

- Seek funding to install more fire hydrants.
 - Wrens installed 19 new hydrants for 47,500.
 - Louisville installed 5 new hydrants for \$12,500.
 - Wadley repaired 3 hydrants for \$2,025.
- Review previous firefighter training and implements a schedule for the ongoing training of all firefighters to include wildland fire training.
 - All paid firefighters have had 240 hours of annual training.
 - All volunteer firefighters have completed annual fire training requirements.
- Seek funding for needed firefighting equipment.
 - Avera purchased 10 sets of turnout gear for \$32,000
 - Wadley - Number and cost of turnout gear - Pants 10, Coats 10, Helmets 11, Hoods 25, Boots 11 pair, Gloves 20 pair, Shirts 17, Belts/Buckles 13, Suspenders 4, Face Shields 10, Hi Viz Vests 2, Flashlights/Baton 29, Parka 1, Tags 17, Patches 100, Escape Knives 17, Recoil Rope 1, Total Gear Cost \$34,042.13

- Louisville purchased 10 sets of gear cost \$17,000
 - Jefferson County purchased three sets of turnout gear for 4500.00
- Upgraded water lines to meet FEMA recommendations for firefighting and install fire hydrants.
- Seek funding for more fire tankers (2000 to 3000 gallons) for local fire departments.
- Louisville purchased 2 used brush trucks - Cost \$ 26,000 and a new truck with equipment for \$325,000
- Seek funding for communication towers and voice repeater systems. (moved to all hazards)
- Increase public awareness of wildfire dangers by publishing articles in the local newspaper and providing bulletins to local churches and the schools.
- Continue hazardous fuel reduction by prescribed burning, mechanical or chemical treatment carried out and promoted by GFC guidelines.
- Continue GFC service of construction of firebreaks around forests and structures.
- Maintain fuel breaks along abandoned road beds.
- Recommend a defensible space (30-ft minimum setbacks) between buildings and strictly follow GFC guidelines for control burns and permits.
- Educate public during periods of drought; ask them to hold off on outside burning.
- Increase public awareness of wildfire dangers around the home and community, such as lighted matches, cigarettes, trash, and the process for obtaining burn permits by publishing articles in the local newspaper and providing bulletins to local schools.
- Participate in the Firewise Community Initiative.
- Continue GFC service of construction of firebreaks around forests and structures.
- Maintain fire breaks along abandoned road beds.

Severe Weather

- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations.
- Inspect public buildings and critical facilities and retrofit to reinforce windows, doors, and roofs as needed.
- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Review current evacuation plans paying particular attention to vulnerable populations and update as needed (moved to all hazards).
- Review and current Emergency Response Plan and update when needed (moved to all hazards).
- Install generators where needed (moved to all hazards).
- Install generators on all new critical facilities (moved to all hazards).
- Seek funding to ensure all current and future emergency shelters have back-up generators (moved to all hazards).
- Educate the public on shelter locations and evacuation routes (moved to all hazards).

- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Request that all new education facilities be designed to serve as public shelters for emergency purposes (moved to all hazards).
- Develop public education and awareness programs regarding severe weather events to include home safety measures, purchase of weather radio and personal safety measures before, during and after severe event weather.
 - The EMA has set up a Facebook with educational information
- Promote and participate in the following American Red Cross Programs
 - i. Disaster Resistant Neighborhoods Program (educating communities)
 - ii. Business and Industry Preparedness Seminar (educating businesses on business continuity planning)
 - iii. Community Disaster Education Preparedness presentations (educating adults, children and families)

Winter Weather

- Implement a winter storm education program to include winterization of home and/or business and what to do before, during and after the winter storm event.
- Seek funding for communication towers and voice repeater systems (moved to all hazards).
- Road maintenance equipment.
- Inventory and assess generator needs at critical facilities and install generators where needed.
- Install generators where needed (moved to all hazards)
 - Avera installed a generator for \$10,000
 - Wadley purchased 4 generators with FEMA grant for \$188,720.00
 - Louisville installed two Generators for WPCP for 150,000 and four 4 Generators installed 2018 City Water treatment Plant, High School pump station, and two sewer lifts stations. Cost \$ 191,622.09.
 - Bartow wired Sewer lift Stations wired for emergency power---\$13,000.00 and installed a generator for 1,500.00

CHAPTER IV. PLAN INTEGRATION AND MAINTENANCE

The table below provides a brief description of each section in this chapter and a summary of the changes that have been made.

Chapter I. Section	Updates to Section
I. Implementation Action Plan	Revised to follow New GEMA planning template
II. Evaluation, Monitoring, Updating Note whether the original method and schedule worked	Revised to follow New GEMA planning template
III. Plan update and maintenance	Regulated update and maintenance schedule and public involvement

SECTION I. Implementation Action Plan

A. Administrative Actions: Jefferson County Emergency Management Agency was responsible for overseeing the original planning process and the plan update. Facilitation of the planning process was conducted by the Central Savannah River Area Regional Commission. The Jefferson County Board of Commissioners has authorized the submission of this plan to both GEMA and FEMA for their respective approvals. The Jefferson County Board of Commissioners and the City Councils of Avera, Bartow, Louisville, Stapleton, Wadley and Wrens have formally adopted this plan after approval from GEMA and FEMA.

B. Authority and Responsibility: Upkeep and maintenance of the plan shall be the responsibility of the EMA Director, as determined during the planning process. It shall be the responsibility of the EMA Director to ensure that this plan is utilized as a guide for initiating the identified mitigation measures within the community. The Jefferson County Board of Commissioners and the Mayors of all incorporated jurisdictions will be responsible for assigning appropriate staff members to implement the action steps identified in this plan for their jurisdiction. The EMA Director, or his designee, shall be authorized to call the committee to review and update this plan periodically (at least annually) throughout the useful life of the plan, not to exceed five years.

During the plan update process, the EMA Director and committee members shall identify projects that have been successfully undertaken in initiating mitigation measures within the community. These projects should be noted within the planning document to indicate their completion. Additionally, the committee called together by the EMA Director shall discuss and identify any additional mitigation projects that are necessary in the community.

C. Prioritization: The mitigation goals, objectives and related action items were initially compiled from the input of the committee, as well as from others in the community. The committee prioritized the mitigation actions based on what would be perceived as most beneficial to the community, and the action steps have been listed in this plan as the committee prioritized them. Several criteria were established to assist committee members in the prioritization of these suggested mitigation actions. Criteria included perceived cost benefit or cost effectiveness, availability of potential funding sources, overall feasibility,

measurable milestones, multiple objectives, and both public and political support for the proposed actions.

1. **Methodology for prioritization:** To assist with the prioritization of mitigation actions, the STAPLEE worksheet and criteria recommended by FEMA was used. STAPLEE is a tool used to assess the costs and benefits and overall feasibility of mitigation actions. STAPLEE stands for the following:
 - i. **Social:** Will the action be acceptable to the community? Could it have an unfair effect on a particular segment of the population?
 - ii. **Technical:** Is the action technically feasible? Are there secondary impacts? Does it offer a long-term solution?
 - iii. **Administrative:** Are there adequate staffing, funding and maintenance capabilities to implement the project?
 - iv. **Political:** Will there be adequate political and public support for the project?
 - v. **Legal:** Does your jurisdiction have the legal authority to implement the action?
 - vi. **Economic:** Is the action cost-beneficial? Is there funding available: Will the action contribute to the local economy?
 - vii. **Environmental:** Will there be negative environmental consequences from the action? Does it comply with environmental regulations? Is it consistent with community environmental goals?

The committee was asked to review the STAPLEE score sheet and list of mitigation actions and assign a High, Medium or Low score to each item to help determine the item's priority. Each action item was discussed, and a consensus reached by the group on the importance of each item.

2. **Use of cost benefit refer to Worksheet #4:** Through the STAPLEE prioritization process, several projects emerged as being a greater priority than others. Some of the projects involved expending considerable amounts of funds to initiate the required actions. Other projects allowed the community to pursue completion of the project using potential grant funding. Still others required no significant financial commitment by the community.

The determination of the cost benefit of a project was based upon the anticipated cost in relation to the perceived benefit of the action taken. A proposed action with a high price tag, but minimal benefit to the community, was considered to have a low-cost benefit. Conversely, if minimal expenditures were required and the entire community would benefit, this would receive a favorable cost benefit rating. All proposed mitigation actions were evaluated to determine the favorability of the benefit in relation to the cost associated with completing the project. Determining the economic feasibility of mitigating hazards can provide decision makers with an understanding of the potential benefits and costs of an activity, as well as a basis upon which to compare alternative projects.

3. **Use of other calculations:** Estimation of potential damages and costs in the event of a natural hazard achieves two ends: (1) it enables the identification of critical

economic targets for mitigation measures and (2) to enhance the ability to prioritize post-disaster response in aiding the community to recover.

4. **Use of other review structure:** All goals were discussed in detail to determine what was considered a priority for the EMA personnel.

D. Incorporation of Local PDM Plan into other plans/planning measures: The jurisdictions completed the update to their Joint Comprehensive plan in 2023. The 2019 PDM plan was reviewed to determine if any of the mitigation activities need to be added to the above-mentioned document. Jefferson County along with all six jurisdictions work jointly to produce these planning documents.

The Joint Comprehensive Plan is due for an update in 2028. The RC facilitates the planning process for both documents and updates both plans. Jefferson County takes the lead and all jurisdictions must participate. This Plan will be reviewed by Jefferson County along with all six jurisdictions. The requirements of this Hazard Mitigation Plan will be taken into consideration and will be incorporated into Comprehensive Plans, Five-Year Short-Term Work Program, Local Emergency Operations Plans, and all other such Plans as appropriate. This hazard plan will be reviewed and incorporated into the Joint Comprehensive plan update as needed. In addition, relevant sections of the 2019 plan were included in the revision of the Local Emergency Operations Plan in 2018. This hazard plan update will also be reviewed in the next update of the LEOP.

Once this plan is approved, it will be used by the consultants and planning committees responsible for the update process for the Joint Comprehensive Plan, Short-Term Work Programs, and all other plans that could incorporate the requirements of this plan.

To facilitate inclusion of this Plan, the Jefferson County Commission and all cities will provide a copy of this Plan to the persons and/or committees responsible for writing and updating plans.

SECTION II. EVALUATION, MONITORING AND UPDATING

The original method for evaluation of the plan was unsuccessful. While the plan was discussed at EMA meetings, little attention was given to the monitoring and evaluation of the plan. Changes have been made to ensure a more successful and meaningful use of this plan.

A. Method: The Plan is intended to be a ‘living’ document that informs stakeholders about hazard mitigation projects and plans undertaken by the county and their jurisdictions. In accordance with the requirements set forth in the Disaster Mitigation Act of 2000, Jefferson County is required to review the PDM Plan annually and revise the plan every five years. The revision process will be consistent with the FEMA planning requirements as stipulated in the 44 CFR 201.6.

B. Criteria to be used to monitor and evaluate the plan annually or after any natural disaster event.

- a. Each hazard will be reviewed. Any new information pertaining to new and/or previous events will be added to the plan.
- b. Any new critical facilities will be added to the plan.
- c. Critical facilities information will be updated as needed.
- d. All mitigation goals, objectives and action steps will be reviewed for relevance and completion status. All mitigation goals, objectives and action steps that have been completed or are no longer relevant will be documented.
- e. New mitigation activities will be added if necessary.
- f. Public participation will be monitored and documented.

C. Responsibility: At the direction of the EMA Director, the committee shall be reconvened for the revision process which will include a schedule, timeline, and a list of the agencies or organizations participating in the plan revision. Jefferson County and all incorporated jurisdictions have designated the following participants of the committee to guide plan maintenance and update activities to ensure that the information in the plan is current. The update committee will also be responsible for disseminating information to stakeholders within their respective jurisdictions.

Jurisdiction	Hazard Mitigation Update Committee	Review
	Point-of-Contact	Schedule
Jefferson County	Emergency Management Director	Annually
Avera	City Official	Annually
Bartow	City Official	Annually
Louisville	City Administrator	Annually
Stapleton	City Official	Annually
Wadley	City Official	Annually
Wrens	City Administrator	Annually

D. Timeframe: The committee has set the first Thursday of every October for the annual review of the plan update and within two months after any natural disaster event. A public notice will be submitted to the legal organ of each jurisdiction and the notice will be published at all government and community buildings.

SECTION III. PLAN UPDATE AND MAINTENANCE

A. Public involvement: Jefferson County is committed to having active public participation during reviews and updates of the PDM Plan. Public participation will follow the guidelines set forth in 44 CFR 201.6. Future public involvement of the community will be more stringent. The original method was not as successful as anticipated in ensuring community involvement. Two weeks before the annual April review meeting, a notice will be published in the legal organ of Jefferson County. Flyers will be placed at all government and community gathering places to ensure that citizens of the county are made aware of the annual review process. The new EMA website will also provide ongoing information about the plan and its implementation.

- B. Timeframe** -- At the direction of the EMA Director, the committee will convene to accomplish the revisions the first Thursday of every October. The EMA Director will ensure the revised plan is presented to the Jefferson County Board of Commissioners and all jurisdictions for formal adoption. In addition, all holders of the County plan will be notified of affected changes. No later than the conclusion of the five-year period following initial approval of the update plan, the EMA Director shall submit the update PDM Plan to the Georgia Emergency Management Agency and the Federal Emergency Management Agency for their review and coordination.

Chapter V. Conclusion

SECTION IV. Summary

Through the update process of this plan, Jefferson County has developed a more thorough hazard history, an inventory of critical facilities, and an updated contact list for emergency contacts at critical facilities. Natural hazards have been identified countywide. Goals, objectives and mitigation actions have been compiled and prioritized that would reduce the risk of lives and property as a result of the identified hazards. The committee has been able to work together effectively and efficiently to produce this document and establish a greater awareness of our risks and our mitigation strategies.

As a result of the update PDM planning process, Jefferson County officials have obtained more complete and accurate information and knowledge regarding the County's disaster history, the presence of natural hazards, and the likelihood of each of these hazards occurring within the County, and the potential impacts and challenges these hazards present to the community.

All meetings were open to the public and the first and last meetings were advertised in *The Jefferson Reporter*, providing Jefferson County citizens with the opportunity to comment on and offer suggestions concerning disaster mitigation actions within the community.

The committee found that it is difficult to predict the geographic threat, and therefore the resulting impact of some natural disasters as compared to others. Tornados and related severe weather strike randomly, usually affecting a small, localized area. On the other hand, natural disasters such as winter ice storms and drought can blanket the entire county, affecting all businesses, public facilities, and residents.

Recognizing this challenge, the committee identified both general and specific measures to aid in the mitigation of several natural hazards most likely to impact Jefferson County. These measures include, but are not limited to, the protection of critical facilities and infrastructure, progressive governmental policies, and the proactive use of codes and regulations. It is worth noting that local government policies can often be the single most important and cost-efficient component of PDM.

The mission of the Jefferson County Pre-Disaster Hazard Mitigation Planning Committee is to *"Make the citizens, businesses, communities and local governments of Jefferson County less vulnerable to the effects of natural hazards through the effective administration of hazard mitigation grant programs, hazard risk assessments, wise floodplain management and a coordinated approach to mitigation policy through state, regional and local planning activities."*

The committee feels that this plan, when implemented, will help to make all of Jefferson County a safer place to live and work for all its citizens.

SECTION II – REFERENCES

Numerous sources were utilized to ensure the most complete planning document could be assembled. In an effort to ensure that all data sources consulted are cited, references are listed in the following format: 1) Publications, 2) Web Sites, 3) Other Sources.

Publications:

FEMA Pre-Disaster Mitigation *How-to Guides* #1, 2, 3, 7 (FEMA)
GEMA Supplements to FEMA Pre-Disaster Mitigation How-to Guides (GEMA)
The Jefferson Reporter
The Augusta Chronicle
Summary of Floods in the United States During 1990 and 1991
<http://pubs.er.usgs.gov/publication/wsp2474>
FLOODS IN GEORGIA. FREQUENCY AND MAGNITUDE. By. R. W. Carter.
[Http://pubs.usgs.gov/circ/1951/0100/report.pdf](http://pubs.usgs.gov/circ/1951/0100/report.pdf)

Georgia Archives University System of Georgia
<http://cdm.sos.state.ga.us:2011/cdm/search/searchterm/FLOOD/mode/all/order/subject/ad/desc>

Web Sites:

FEMA www.fema.gov
GEMA www.gema.state.ga.us
Georgia Department of Community Affairs <http://www.dca.state.ga.us/>
Georgia Forestry Commission <http://weather.gfc.state.ga.us>
National Climatic Data Center www.ncdc.noaa.gov
SHELDUS™ | Spatial Hazard Events and Losses Database for the United States
<https://sheldus.asu.edu/SHELDUS/>
National Inventory of Dams <http://crunch.tec.army.mil/nid/webpages/nid.cfm>
cNew Georgia Encyclopedia <http://www.georgiaencyclopedia.org/nge/Home.jsp>
Georgia Archives University System of Georgia
<http://cdm.sos.state.ga.us:2011/cdm/search/searchterm/FLOOD/mode/all/order/subject/ad/desc>
United States Census Bureau <http://www.census.gov/>
USDA, NASS, 2017 CENSUS OF AGRICULTURE
http://www.nass.usda.gov/Census_of_Agriculture/index.asp
<http://www.sercc.com/> The Southeast Regional Climate Center (SERCC)
<http://www.tornadohistoryproject.com/tornado/Georgia> Tornado History Project

Other Sources:

American Red Cross
CSRA Regional Commission
Georgia Department of Natural Resources
Georgia Forestry Commission
Jefferson County, Avera, Bartow, Louisville, Stapleton, Wadley and Wrens
Jefferson County Board of Education
Jefferson County Hospital
Jefferson County Tax Assessor

APPENDICES

Appendix A – Hazard Identification, Risk Assessment and Vulnerability (HRV)

- I. Hazard A - Flood
 - a. Description
 - b. Data – GEMA Critical Facility Inventory Report
 - c. Maps
- II. Hazard B– Dam Failure
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps
- III. Hazard C - Drought
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps
- IV. Hazard D - Wildfire
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps
- V. Hazard E – Severe Weather, Including TORNADOS, Tropical Storms, and Thunder Storms
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps
- VI. Hazard F – Winter Storm
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps
- VII. Hazard F – Earthquake
 - a. Description
 - b. Data– GEMA Critical Facility Inventory Report
 - c. Maps

Appendix B – Growth and Development Trends / Community Information

- I. Local Comp Plan Executive Summary
- II. Statistics/tables from Local Comp Plan
- III. Community Information

Appendix C –Planning documents

- I. Executive Summary Local Emergency Operations
- II. Executive Summary GEMA State Emergency Operations

- III. Hazard Risk Analysis
- IV. Flood Insurance Study
- V. Community Wildfire Protection Plan
- VI. Timber Impact Assessment GFC
- VII. Executive Summary CSRA Regional Commission Regional Plan

Appendix D – Worksheets used in planning process

- I. Completed GEMA/local worksheets
- II. Blank GEMA/local worksheets
- III. Other misc. worksheets or planning process documents

Appendix E – Copies of Required Planning Documentation

- I. Public notice
- II. Meeting Agendas / Meeting Minutes
- III. Sign-in sheets
- IV. Local proclamations (copy of all resolution)
- V. GEMA/FEMA correspondence

APPENDIX A

**HAZARD IDENTIFICATION,
RISK ASSESSMENT
AND
VULNERABILITY**

FLOOD

Flood plains are relatively flat lands that border streams and rivers that are normally dry, but are covered with water during floods. The severity of a flood is usually measured in terms of depth of flooding. Flooding occurs when the volume of water exceeds the ability of a water body (stream, river, or lake) to contain it within its normal banks. Floodplains serve three major purposes: Natural water storage and conveyance, water quality maintenance, and groundwater recharge. These three purposes are greatly inhibited when floodplains are misused or abused through improper and unsuitable land development. For example, if floodplains are filled in order to construct a building, then valuable water storage areas and recharge areas are lost. This causes unnecessary flooding in previously dry areas and can damage buildings or other structures.

The susceptibility of a stream to flooding is dependent upon several different variables. Among these are topography, ground saturation, rainfall intensity and duration, soil types, drainage, drainage patterns of streams, and vegetative cover. A large amount of rainfall over a short time period can result in flash flood conditions. A small amount of rain can also result in floods in locations where the soil is saturated from a previous wet period or if the rain is concentrated in an area of impermeable surfaces such as large parking lots, paved roadways, etc. Topography and ground cover are contributing factors for floods in that water runoff is greater in areas with steep slopes and little or no vegetation.

While severe flooding within Jefferson County is a relatively infrequent event. The county has 54 streams/rivers, 39 reservoirs and three lakes which makes the potential for flooding significant. There have been eight flooding events recorded in the last 89 years. These events resulted in school closings, roads washing out and \$2.1 million in property damages. The flood of 1990 also caused a dam failure. The Jefferson County Hazard Frequency table calculates a 9.47% chance of an annual flooding event. Hazard frequency tables can be found in Appendix D for all jurisdictions. Based on tax data, parcel and flood maps all or a portion of 263 known structures/properties valued at approximately \$10.2 million and a population of 397 located in known floodplains.

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
1st Baptist Church Evac Center	Jefferson County	0	3500000	2024		Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, Important, Special Consideration	5	0
Carver Elementary	Jefferson County	0	12750000	2024	510000	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	292	0
Choices Academy	Jefferson County	0	15250000	2024		Education, Education, K - 12, K - 12		250	
Hardeman Building (Swann)	Jefferson County	0	250000	2024	17000	Medical, Medical, EMS, EMS	Historic Consideration, Important, Special Consideration	1	0
JC Building Department	Jefferson County	0	51090	2024	17500	Government, Government, Water/Sewer, Water/Sewer	Important	3	
JC Radio Tower	Jefferson County	0	27885	2024	8000	Government, Government, Water/Sewer, Water/Sewer	Essential		
Jefferson County Library	Jefferson County	0	66085	2024	848000	Education, Education, Library, Library	Important	10	0

Jefferson County Chamber of Commerce/Murphy House	Jefferson County	0	361433	2024	122700	Law Enforcement, Law Enforcement, Jails, Jails	Historic Consideration, Important	8	0
Jefferson County Commissioners Office/Long House	Jefferson County	0	339300	2024	110300	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential	30	0
Jefferson County Courthouse	Jefferson County	0	5147708	2024	125000	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Historic Consideration	25	
Jefferson County Leisure Center	Jefferson County	0	586170	2024	86000	Government, Government, Non-Profit, Non-Profit	Essential, Special Consideration, Vulnerable Population	75	0
Jefferson County Magistrate	Jefferson County	0	24001242	2024	8400	Law Enforcement, Law Enforcement, Court House, Court House	Essential	20	0
Jefferson County Middle School	Jefferson County	0				Education, K - 12		500	
Jefferson Hospital	Jefferson County	0	97000000	2024		Medical, Medical, Hospital, Hospital	Essential, Lifeline, Vulnerable Population	200	150

Louisville Academy Elementary	Jefferson County	0	15250000	2024	610000	NGO, NGO, Water/Sewer, Water/Sewer	Economic Assets, Essential, Vulnerable Population	568	0
Louisville EMS/Morgue	Jefferson County	0				Emergency Services, EMS		30	10
National Guard Equipment Shed 1	Jefferson County	0	292900	2024		Emergency Services, Emergency Services, EMA, EMA	Essential		
National Guard Equipment Shed 2	Jefferson County	0	338500	2024		Emergency Services, Emergency Services, EMA, EMA	Essential		
National Guard Garage (Road Dept)	Jefferson County	0	461800	2024	209000	Emergency Services, Emergency Services, EMA, EMA	Essential		
National Guard Shop	Jefferson County	0	470400	2024	470400	Emergency Services, Emergency Services, EMA, EMA	Essential		
Old County Jail/IT/Purchasing	Jefferson County	0	500000	2024	28000	Law Enforcement, Law Enforcement, Jails, Jails	Essential, Historic Consideration	1	0

Physicians Health Group Wrens	Jefferson County	0	1015350	2024	500000	Education, Education, Private, Private	Essential, Important	20	
Tax Commissioners Office	Jefferson County	0	825500	2024	323000	Government, Government, Government Offices, Government Offices	Essential	20	
Wrens Elementary	Jefferson County	0	20500000	2024	820000	NGO, NGO, Water/Sewer, Water/Sewer		637	0
Wrens Middle School (vacant)	Jefferson County	0	17000000	2024	680000	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	0	0
25		25	\$ 215,985,363.00		\$ 5,493,300.00			2695	160
Hillcrest Station	Jefferson County	1	45700	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
JC Fire TowerShop/Supply Building	Jefferson County	1	241236	2024	9800	Government, Government, Water/Sewer, Water/Sewer	Essential	4	
JC Recreation Dept	Jefferson County	1	1300621	2024	29600	Government, Government, Water/Sewer, Water/Sewer	Important	4	

Jefferson Co. Correction Facility	Jefferson County	1	5261231	2024	833800	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	200	200
Jefferson Co. Law Enforcement Center	Jefferson County	1	8041785	2024	1139700	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	225	225
Jefferson County Armory Transit EMA	Jefferson County	1	2380171	2024	724500	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential	10	4
Jefferson County Bus Shop	Jefferson County	1	750000	2024	140000	Medical, Medical, Hospital, Hospital	Important	5	0
Jefferson County Health Dept	Jefferson County	1	841815	2024	191700	Education, Education, Private, Private	Essential	20	
Jefferson County High School	Jefferson County	1	55000000	2024	2200000	Medical, Medical, Hospital, Hospital	Economic Assets, Essential, Vulnerable Population	937	0
Jefferson County Landfill (New)	Jefferson County	1	1062166	2024	363200	NGO, NGO, Water/Sewer, Water/Sewer	Hazardous Materials, Important	6	
Jefferson County Office Park	Jefferson County	1	23500000	2024	940000	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	45	0

JEFFERSON CO-US 1 (AVERA RD) (SL)	Jefferson County	1	1500000	2024		Government, Government, Water/Sewer, Water/Sewer	Important		
Lions Club Evac. Center	Jefferson County	1	12000	2024		Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, Historic Consideration	8	
Matthews Station	Jefferson County	1	47500	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Oconee Fall Line Technical College	Jefferson County	1	1930505	2024	7500	Education, Education, VoTech, VoTech	Economic Assets, Important, Vulnerable Population	75	75
Ogeechee Service Center	Jefferson County	1	900000	2024		Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	50	0
16		16	\$ 102,814,730.00		\$ 6,579,800.00			1589	504

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
Avera City Hall	Avera city	1	312500	2024	200000	Government, Government, Private, Private	Essential	1	0
Avera Fire Station	Avera city	1	100000	2024	200000	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential	0	0
Avera Water Tank	Avera city	1	325000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline	0	0
3		3	\$ 737,500.00		\$ 400,000.00			1	0

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
Bartow Wastewater Lift Station #4	Bartow town	1	60500	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
			60500		0			0	0
1									
Bartow City Hall	Bartow town	0	209300	2024	53500	Government, Government, Private, Private	Economic Assets, Essential, Important, Lifeline	3	1
Bartow Community Center & Auditorium	Bartow town	0	1342200	2024	250000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets	1	1
Bartow Fire Dept & Communications Bldg	Bartow town	0	17100	2024	60000	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline, Special Consideration	0	0
Bartow Fire Dept and Emergency Shelter	Bartow town	0	330630	2024	38500	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Economic Assets, Essential, Important, Lifeline	1	1
Bartow Museum	Bartow town	0	826847	2024		Government, Government, Water/Sewer, Water/Sewer	Historic Consideration	1	0

Bartow wastewater Lift Station #1	Bartow town	0	70300	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Wastewater Lift Station #2	Bartow town	0	71400	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Wastewater Lift Station #3	Bartow town	0	69000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Wastewater Lift Station #5	Bartow town	0	90200	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Wastewater Sewage Effluent Pump Station	Bartow town	0	63700	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Wastewater Sewage Holding Pond	Bartow town	0	46400	2024		Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0

Bartow Wastewater Sewage Treatment Pond	Bartow town	0	50400	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Water Tower	Bartow town	0	393000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Water Well	Bartow town	0	111800	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow Water Well #2	Bartow town	0	119700	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
15		15	\$ 3,811,977.00		\$ 402,000.00			6	3

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
Louisvill City Hall	Louisville city	0	550000	2024	350000	Government, Government, Private, Private	Essential	10	4
Louisville Fire Station	Louisville city	0	750000	2024	850000	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential	4	
Pumping Station (2nd Street)	Louisville city	0	0	2024		Emergency Services, Emergency Services, Water/Sewer, Water/Sewer	Essential		
Louisville WPCP	Louisville city	0	15000000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Hazardous Materials, Lifeline	2	
City of Louisville Water Tank	Louisville city	0	500000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Important		
Louisville Water Works	Louisville city	0	4425000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Important, Lifeline		

[illegible]

Louisville City WaterTower	Louisville city	1	950000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Important, Special Consideration		
Booster pump station	Louisville city	1	175000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Louisville Lift Station at HS	Louisville city	1	150000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Louisville Tech Lift Station	Louisville city	1	125000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Louisville City Airport	Louisville city	1	543665	2024		NGO, NGO, Transportation, Transportation	Important, Transportation		
Louisville Water Tower	Louisville city	1	712500	2024		Government, Government, Water/Sewer, Water/Sewer			
6		6	\$ 2,656,165.00						

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
Stapleton City Hall & Emergency Shelter	Stapleton city	0	508109	2024	74000	Government, Government, Private, Private	Essential	2	
Stapleton Fire house & Emergency Shelter	Stapleton city	0	509327	2024	700000	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Important, Lifeline		
Stapleton Water Tank #1	Stapleton city	0	771603	2024		Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Stapleton Water Tank #2	Stapleton city	0	795253	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Important, Lifeline		
4		4	\$ 2,584,292.00		\$ 774,000.00			2	

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Daytime Occupancy	Nighttime Occupancy
Glendale Nursing Home	Wadley city	0	1610863	2024	750000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Important, Special Consideration, Vulnerable Population	120	90
Physicans Health Group Wadley	Wadley city	0	405650	2024	250000	Education, Education, Private, Private	Important	10	
Wadley City Hall	Wadley city	0	1500000	2024	250000	Government, Government, Private, Private	Economic Assets, Essential	5	0
Wadley Community Complex	Wadley city	0	800000	2024		Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Historic Consideration, Important		
Wadley Elevated Water Tank	Wadley city	0	650000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wadley Fire Station	Wadley city	0	300000	2024	500000	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential		

Wadley Gym	Wadley city	0	400000	2024		Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Historic Consideration, Important		
Wadley Lift Station #1	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley Lift Station #2	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley Lift Station #3	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley Lift Station #4	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley Lift Station #5	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer			
Wadley Lift Station #6	Wadley city	0	20690	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		

Wadley Police Department	Wadley city	0	900000	2024	200000	Law Enforcement, Law Enforcement, Police, Police	Essential	6	2
Wadley Public Library	Wadley city	0	510000	2024	538200	Education, Education, Library, Library	Economic Assets, Important	5	5
Wadley Water Tower #2	Wadley city	0	500000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline	0	
Wadley Well House	Wadley city	0	600000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
17		17	\$ 8,300,653.00		\$ 2,488,200.00			146	97

Name	Jurisdiction	Hazard Score	Replacement Value	Valuation Year	Content value	Facility type	Risk	Day Occupancy	Night Occupancy
Bushy Creek Lift Station	Wrens city	0	400000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
City of Wrens Airport	Wrens city	0	504388	2024		Emergency Services, Emergency Services, EMA, EMA	Essential		
City of Wrens Wastewater Treatment Plant	Wrens city	0	180307	2024		Government, Government, Water/Sewer, Water/Sewer	Essential		
Family Y/ City of Wrens Recreation	Wrens city	0	2080755	2024		Education, Education, K - 12, K - 12	Vulnerable Population		
Gold Cross and Food Bank Development Center	Wrens city	0	96907	2024		Emergency Services, Emergency Services, EMS, EMS	Economic Assets		
Water Booster Station	Wrens city	0	500000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrens City Hall	Wrens city	0	1125000	2024	150000	Government, Government, Private, Private	Economic Assets, Essential	10	

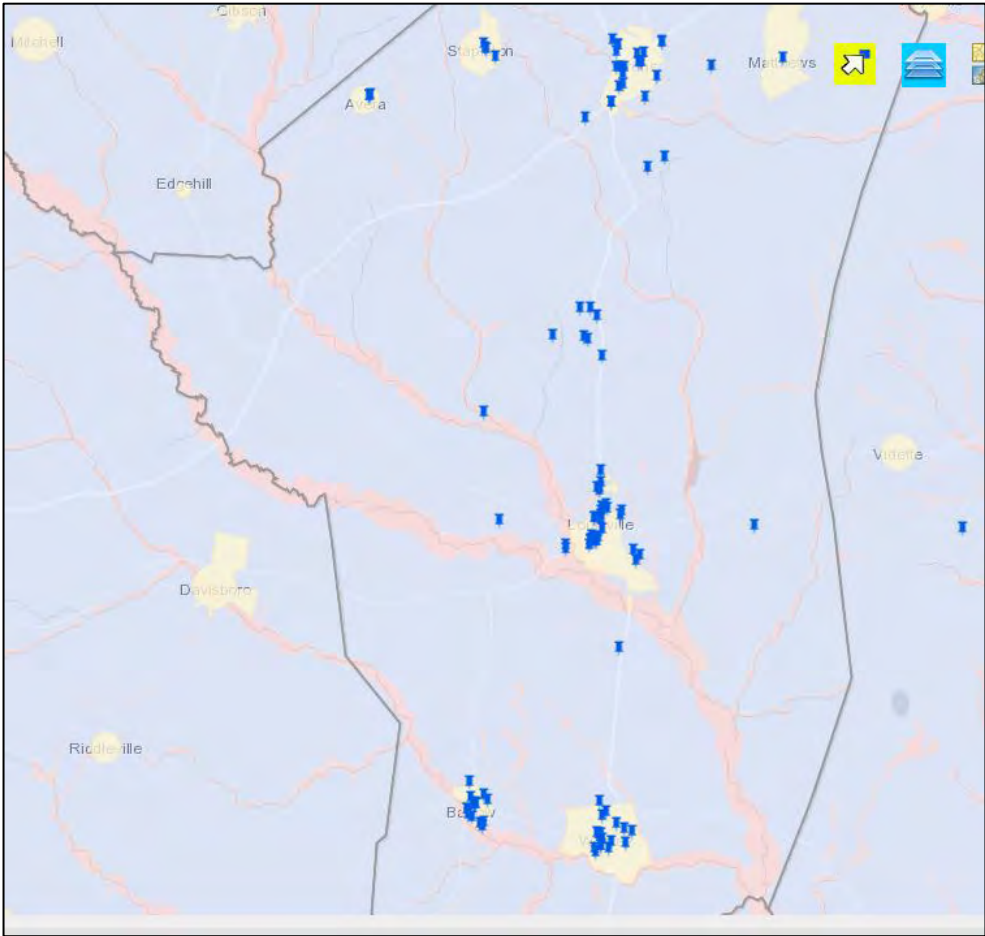
Wrens Community Center	Wrens city	0	500000	2024	50000	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Economic Assets	20	
Wrens Medical Center	Wrens city	0	875000	2024	200000	Government, Government, Water/Sewer, Water/Sewer	Important, Vulnerable Population	20	
Wrens Old Library Building	Wrens city	0	625000	2024	549200	Education, Education, Library, Library	Economic Assets, Historic Consideration, Important		
Wrens Water Pumping Station	Wrens city	0	300000	2024	50000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Wrens Water Pumping Station	Wrens city	0	75000	2024	25000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Wrens Water Tank	Wrens city	0	625000	2024		Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Wrens Water Tank	Wrens city	0	625000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		

Wrens Water Tank	Wrens city	0	625000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
15		15	\$ 9,137,357.00		\$ 1,024,200.00			50	
Border Regulator Station	Wrens city	1	100000	2024		Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, High Potential Loss, Lifeline		
Calcine Meter Set	Wrens city	1	225000	2024		Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, Lifeline		
Highway 88 Lift Station	Wrens city	1	350000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
IMERYS Meter Set	Wrens city	1	300000	2024		Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Hazardous Materials		

KA-MIN #1	Wrens city	1	250000	2024		Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, High Potential Loss, Important, Lifeline		
Ka-Min #2	Wrens city	1	250000	2024		Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Hazardous Materials, Lifeline		
King Mill Well (Well E)	Wrens city	1	750000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Southern Tap #1	Wrens city	1	750000	2024	2024	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, Lifeline		
Southern Tap #2	Wrens city	1	750000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Hazardous Materials, Lifeline		
Stephens St Lift Station	Wrens city	1	350000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		

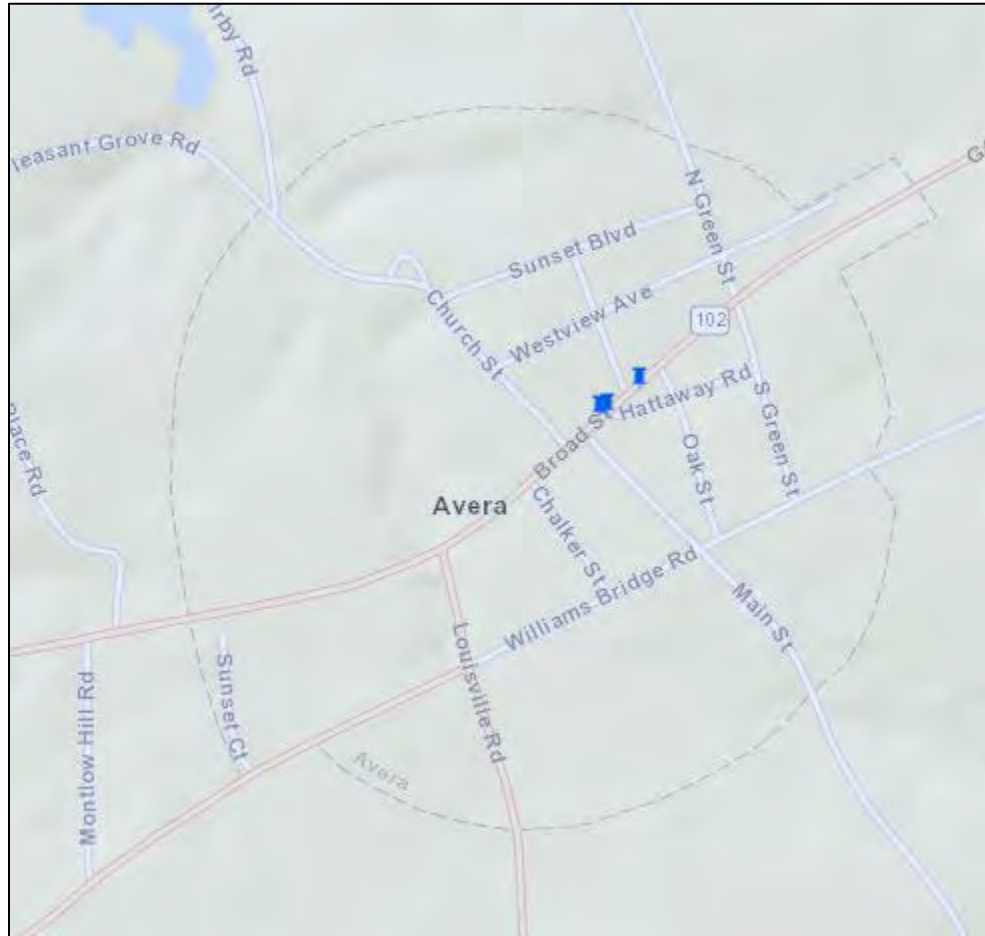
Waynesboro Highway Lift Station	Wrens city	1	400000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrens Water Pumping Station	Wrens city	1	125000	2024	25000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Wrens Water Tank	Wrens city	1	687500	2024		Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
13		13	\$ 5,287,500.00		\$ 27,024.00				
West Walker St Lift Station	Wrens city	3	300000	2024		Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrens Sewage Treatment Plant	Wrens city	3	3250000	2024	125000	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Hazardous Materials		
2		2	\$ 3,550,000.00						

Jefferson County Flood Plains Georgia Mitigation Information System



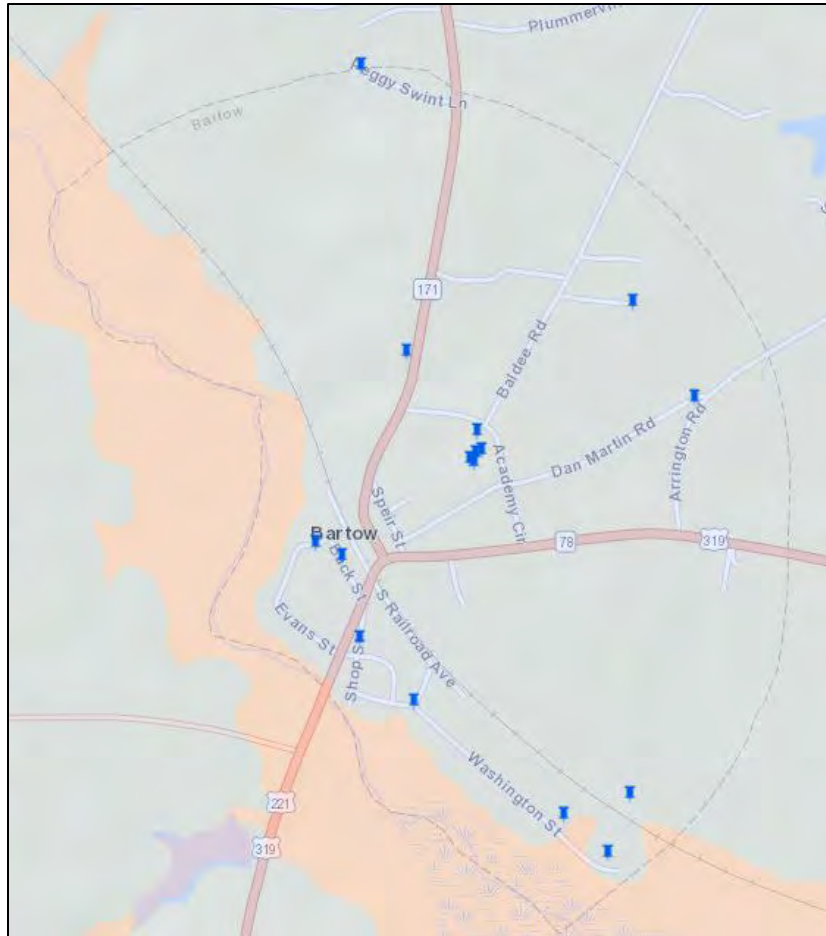
Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Avera Flood Plains Georgia Mitigation Information System



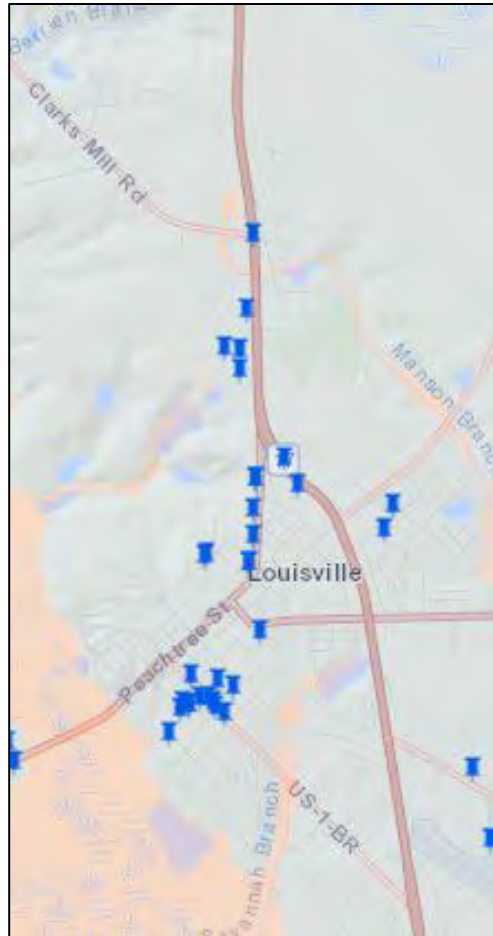
Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Bartow Flood Plains Georgia Mitigation Information System



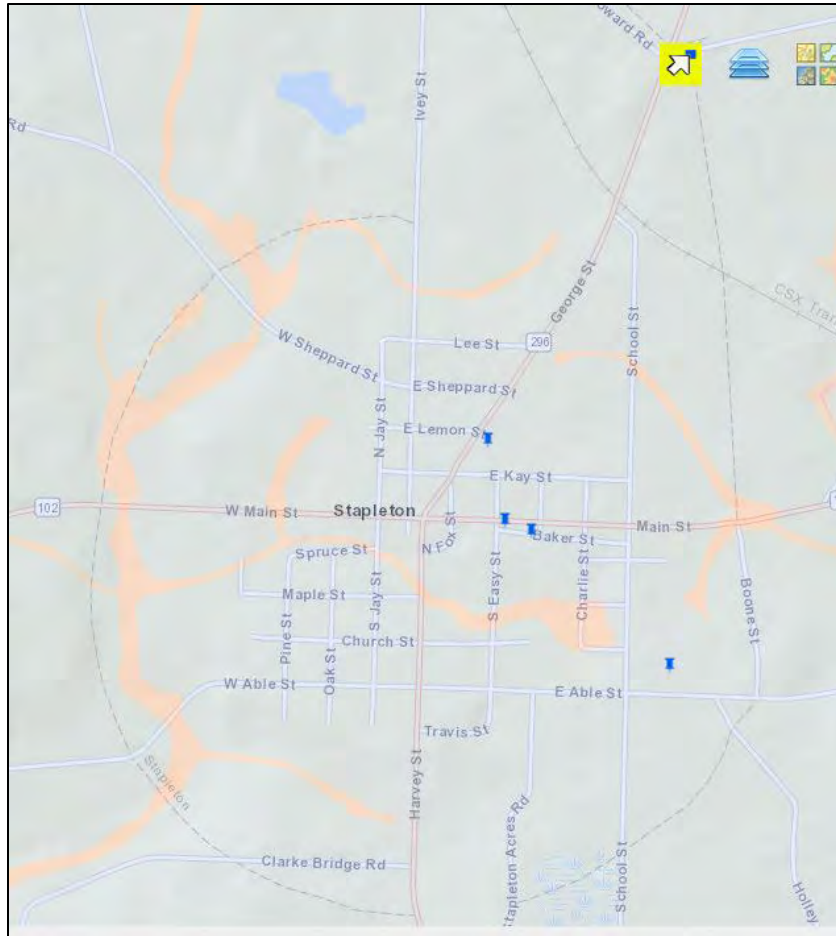
Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Louisville Flood Plains Georgia Mitigation Information System



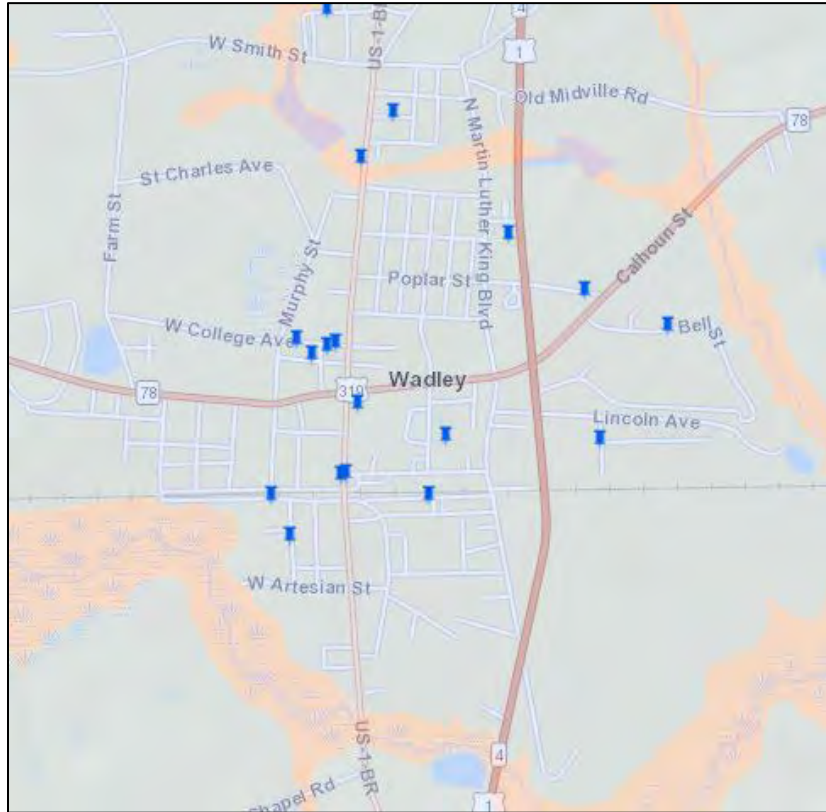
Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Stapleton Flood Plains Georgia Mitigation Information System



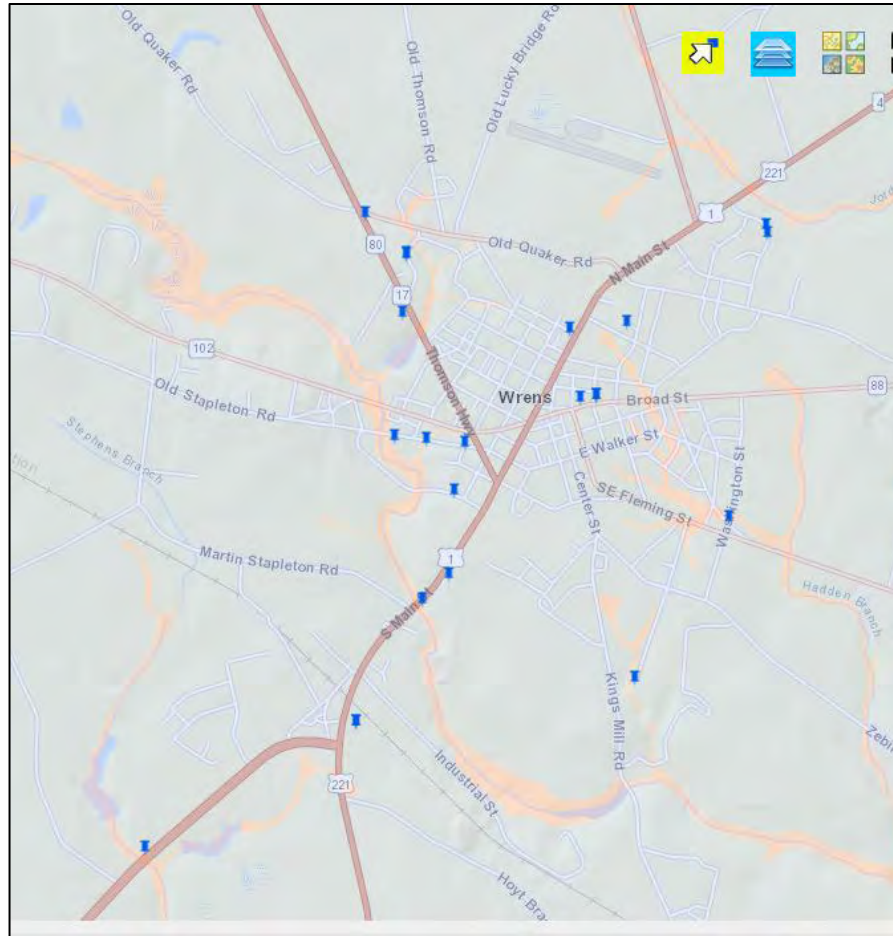
Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Wadley Flood Plains Georgia Mitigation Information System



Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Wrens Flood Plains Georgia Mitigation Information System



Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

Dam Failures

Dam failures and incidents involve unintended release or surges of impounded water. They can destroy property and cause injury and death downstream. While they may involve the total collapse of a dam, that is not always the case. Damaged spillways, overtopping of a dam or other problems may result in a hazardous situation. Dam failures may be caused by structural deficiencies in the dam itself. Dam failures may also come from other factors including but not limited to debris blocking spillways, flooding, earthquakes, improper operation and vandalism. Dam failures are potentially the worst flood events. When a dam fails, a large quantity of water is suddenly released downstream, destroying anything in its path and posing a threat to life and property.

Dams are classified into three categories:

- High Hazard – Dams where failure or disoperation will probably cause loss of human life.
- Significant Hazard – Dams where failure or disoperation will probably not result in loss of life, but can cause economic loss, environmental damage, and disruption of lifeline facilities or other concerns.
- Low Hazard – Dams where failure or disoperation will probably not result in loss of life and cause only low economic and/or environmental loss.

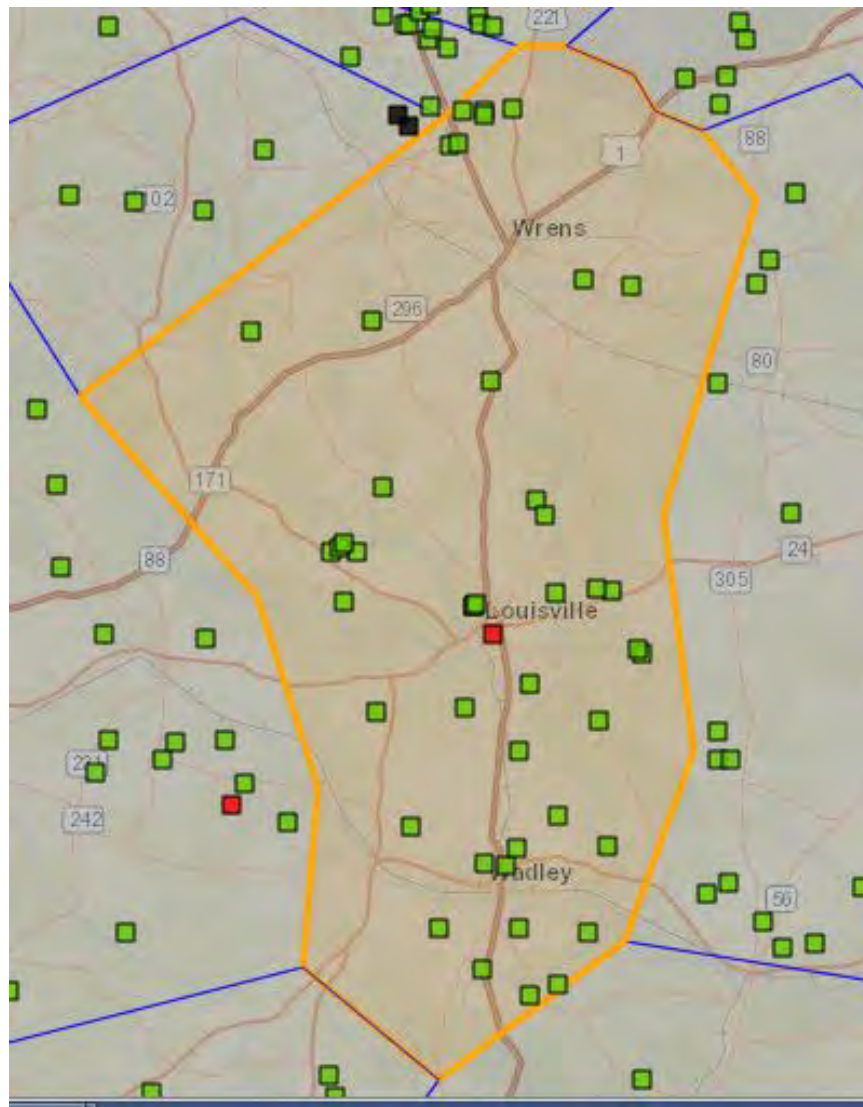
A review of the National Inventory of Dams shows that Jefferson County has 42 dams with 41 classified as low hazard and 1 classified as high hazard. A high hazard classification is based upon the finding that a probable loss of life would occur in the event of a dam failure. If the 1 high hazard dam fails there is the potential for loss of life and property and economic losses. The remaining 41 dams are low hazard where potential losses are limited to minimal property damage. The potential losses due to dam failure flooding are unknown and cannot be estimated at this time. The County has population of 16,930 and 37,363 structures/properties valued at slightly less than \$1.3 billion at risk of potential loss. (See Appendix A Section II and Appendix D).

National Inventory of Dams - Jefferson County, GA						
Dam Name	NID ID	State Regulated Dam	Federally Regulated Dam	Federal Agency Involvement Regulatory	Hazard Potential Classification	EAP Prepared
Georgia Kaolin Reject Pond Dam	GA04666	No	No		Low	Not Required
E.C.C.I West Settling Pond	GA04374	No	No		Low	Not Required
Lake Marian Dam	GA03259	Yes	No		High	Yes
Cunningham Corner Irrigation Pond Dam	GA02665	No	No		Low	Not Required
Kelly's Pond Dam	GA04660	No	No		Low	Not Required
Clarks Millpond Dam	GA04659	No	No		Low	Not Required
Gambrel Irrigation Pond Dam	GA04624	No	No		Low	Not Required
Smith Farms Irrigation Pond Dam	GA03034	No	No		Low	Not Required
Newberry Irrigation Pond Dam # 2	GA04669	No	No		Low	Not Required
Pilcher Lake Dam	GA00191	No	No		Low	Not Required
Lost Lake Dam	GA02662	No	No		Low	Not Required
Huber Wrens Plant Wastewater Pond Dam	GA04662	No	No		Low	Not Required
Cobb Irrigation Pond Dam	GA03030	No	No		Low	Not Required
Mcneely - Hannah Lake Dam	GA02660	No	No		Low	Not Required
Redfield Farms, INC. New Irrigation Pond Dam	GA04668	No	No		Low	Not Required
Newberry Irrigation Pond Dam # 1	GA03026	No	No		Low	Not Required
Weeks Lake Dam	GA02661	No	No		Low	Not Required
Union Camp Lake Dam (Upper)	GA03364	No	No		Low	Not Required
Stapleton Millpond Dam	GA00190	No	No		Low	Not Required
Radcliffe Farms Lake Dam # 02	GA04671	No	No		Low	Not Required
Lake Rabun Dam	GA03258	No	No		Low	Not Required
Redfield Farms, INC. Irrigation Pond Dam	GA04665	No	No		Low	Not Required
Pennington Irrigation Lake Dam	GA03032	No	No		Low	Not Required
Pennington Tailings Pond Dam	GA04670	No	No		Low	Not Required
Adams Lake Dam	GA03035	No	No		Low	Not Required
Hancock Pond Dam	GA03033	No	No		Low	Not Required
Rocky Comfort, INC. Irrigation Dam	GA04663	No	No		Low	Not Required

National Inventory of Dams - Jefferson County, GA

Dam Name	NID ID	State Regulated Dam	Federally Regulated Dam	Federal Agency Involvement Regulatory	Hazard Potential Classification	EAP Prepared
Proposed J. M. Huber Holley Impoundment	GA05782	No	No		Low	Not Required
Rachels Millpond Dam	GA03260	No	No		Low	Not Required
Brett Pond Dam	GA03031	No	No		Low	Not Required
Evans Lake Dam	GA00185	No	No		Low	Not Required
Smith Pond Dam	GA04664	No	No		Low	Not Required
Radcliffe Farm Lake Dam # 03	GA04667	No	No		Low	Not Required
Union Camp Lake Dam (Lower)	GA04656	No	No		Low	Not Required
Radcliffe Farms Lake Dam # 01	GA04672	No	No		Low	Not Required
Hadden Pond Dam	GA03024	No	No		Low	Not Required
Wommack Lake Dam	GA02659	No	No		Low	Not Required
Davis Lake Dam (Lower)	GA02663	No	No		Low	Not Required
Henderson Lake Dam	GA00184	No	No		Low	Not Required
Davis Lake Dam (Upper)	GA04657	No	No		Low	Not Required
Mcdonalds Lake Dam	GA04658	No	No		Low	Not Required
Battle Lake Dam	GA03028	No	No		Low	Not Required

Jefferson County Dam Map



Hazard Potential Type

- High
- Significant
- Low
- Undetermined
- Not Available

Drought

Drought is not spatially defined and has the potential to affect the entire planning area equally. Jefferson County has a total area of 339,200 acres of which 151,521 acres dedicated to agricultural. According to the USDA 2022 Census of Agriculture 13,373 head of livestock. Agricultural losses due to drought have been the primary losses. No critical facilities have sustained any damage or functional downtime due to dry weather conditions. The last drought event in Jefferson County ran from August 2016 to January 2017.

There have been 25 drought events in the county in the last 69 years with estimated crop losses at \$6.6 million. According to the USDA Farm Subsidies Database, from 1995-2023, Jefferson County received a total of \$125.95 million in farm subsidy payments of which an \$13 million was for disaster assistance. Historical data is only for the county as a whole. Based on a 20-year cycle hazard history along with available data there is a 91.67% chance of an annual drought event in Jefferson County. In addition to an increased threat of wildfires, drought can affect municipal and industrial water supplies, stream-water quality, water recreation facilities, hydropower generation, as well as agricultural and forest resources.

In summary, for Jefferson County as a whole, there are a total of 7,690 agricultural/forestry properties in Jefferson County valued at more than \$467 million with a population of 622 and includes 13,373 head of livestock that are at the greatest risk due to a drought event. There is a population of 16,930 and approximately 40,626 structures/properties in the county with a value just slightly less than \$1.3 billion which could be affected if wildfires break out as a result of drought conditions.

Jefferson County U. S. Drought Moitor Data

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
1/4/2000	0	100	100	0.63	0	0	201
1/11/2000	0	100	100	0	0	0	200
1/18/2000	0	100	100	0	0	0	200
1/25/2000	0	100	100	0	0	0	200
2/1/2000	0	100	100	0	0	0	200
2/8/2000	0	100	100	0	0	0	200
2/15/2000	0	100	100	0	0	0	200
2/22/2000	0	100	100	0	0	0	200
2/29/2000	0	100	100	0	0	0	200
3/7/2000	0	100	100	0	0	0	200
3/14/2000	0	100	100	0	0	0	200
3/21/2000	0	100	100	0	0	0	200
3/28/2000	0	100	100	0	0	0	200
4/4/2000	0	100	100	0	0	0	200
4/11/2000	0	100	100	0	0	0	200
4/18/2000	0	100	100	54.99	0	0	255
4/25/2000	0	100	100	0.06	0	0	200
5/2/2000	0	100	100	0.06	0	0	200
5/9/2000	0	100	100	0.02	0	0	200
5/16/2000	0	100	100	100	0	0	300
5/23/2000	0	100	100	100	0	0	300
5/30/2000	0	100	100	100	100	0	400
6/6/2000	0	100	100	100	100	0	400
6/13/2000	0	100	100	100	100	100	500
6/20/2000	0	100	100	100	100	98.57	499
6/27/2000	0	100	100	100	100	100	500
7/4/2000	0	100	100	100	100	100	500
7/11/2000	0	100	100	100	100	100	500
7/18/2000	0	100	100	100	100	43.71	444
7/25/2000	0	100	100	100	100	38.18	438
8/1/2000	0	100	100	100	100	19.3	419
8/8/2000	0	100	100	100	100	0	400
8/15/2000	0	100	100	100	100	0	400
8/22/2000	0	100	100	100	100	0	400
8/29/2000	0	100	100	100	100	0	400
9/5/2000	0	100	100	100	90.8	0	391
9/12/2000	0	100	100	100	90.79	0	391
9/19/2000	0	100	100	100	90.8	0	391
9/26/2000	0	100	100	29.48	0	0	229
10/3/2000	0	100	100	30.18	0	0	230
10/10/2000	0	100	100	30.18	0	0	230
10/17/2000	0	100	100	97.2	0	0	297

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
10/24/2000	0	100	100	100	0	0	300
10/31/2000	0	100	100	100	0	0	300
11/7/2000	0	100	100	100	0	0	300
11/14/2000	0	100	100	100	0	0	300
11/21/2000	0	100	100	100	0	0	300
11/28/2000	0	100	100	99.99	0	0	300
12/5/2000	0	100	100	100	0	0	300
12/12/2000	0	100	100	100	0	0	300
12/19/2000	0	100	100	0	0	0	200
12/26/2000	0	100	100	0	0	0	200
1/2/2001	0	100	100	0	0	0	200
1/9/2001	0	100	100	0	0	0	200
1/16/2001	0	100	100	0	0	0	200
1/23/2001	0	100	100	0	0	0	200
1/30/2001	0	100	100	0	0	0	200
2/6/2001	0	100	100	0	0	0	200
2/13/2001	0	100	100	0	0	0	200
2/20/2001	0	100	100	0	0	0	200
2/27/2001	0	100	100	0	0	0	200
3/6/2001	0	100	100	0	0	0	200
3/13/2001	0	100	100	0	0	0	200
3/20/2001	0	100	100	0	0	0	200
3/27/2001	0	100	100	0	0	0	200
4/3/2001	0	100	100	0	0	0	200
4/10/2001	0	100	100	0	0	0	200
4/17/2001	0	100	100	0	0	0	200
4/24/2001	0	100	100	0	0	0	200
5/1/2001	0	100	100	0	0	0	200
5/8/2001	0	100	100	0	0	0	200
5/15/2001	0	100	100	100	0	0	300
5/22/2001	0	100	100	100	0	0	300
5/29/2001	0	100	100	100	0	0	300
6/5/2001	0	100	100	100	0	0	300
6/12/2001	0	100	100	100	0	0	300
6/19/2001	0	100	0	0	0	0	100
6/26/2001	0	100	0	0	0	0	100
7/3/2001	0	100	0	0	0	0	100
7/10/2001	16.69	83.31	0	0	0	0	83
7/17/2001	16.69	83.31	0	0	0	0	83
7/24/2001	9.51	90.49	0	0	0	0	90
7/31/2001	13.61	86.39	0	0	0	0	86
8/7/2001	51.45	48.55	0	0	0	0	49
8/14/2001	86.03	13.97	0	0	0	0	14

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
8/21/2001	93.57	6.43	0	0	0	0	6
8/28/2001	95.28	4.72	0	0	0	0	5
9/4/2001	94.48	5.52	0	0	0	0	6
9/11/2001	94.48	5.52	0	0	0	0	6
9/18/2001	0	100	0	0	0	0	100
9/25/2001	0	100	0	0	0	0	100
10/2/2001	0	100	54.2	0	0	0	154
10/9/2001	0	100	56.92	0	0	0	157
10/16/2001	0	100	58.5	0	0	0	159
10/23/2001	0	100	100	0	0	0	200
10/30/2001	0	100	100	100	0	0	300
11/6/2001	0	100	100	100	0	0	300
11/13/2001	0	100	100	100	0	0	300
11/20/2001	0	100	100	100	0	0	300
11/27/2001	0	100	100	100	0	0	300
12/4/2001	0	100	100	100	0	0	300
12/11/2001	0	100	100	100	0	0	300
12/18/2001	0	100	100	100	0	0	300
12/25/2001	0	100	100	100	0	0	300
1/1/2002	0	100	100	100	26.23	0	326
1/8/2002	0	100	100	100	8.4	0	308
1/15/2002	0	100	100	100	0	0	300
1/22/2002	0	100	100	100	0	0	300
1/29/2002	0	100	100	100	0	0	300
2/5/2002	0	100	100	100	100	0	400
2/12/2002	0	100	100	100	100	0	400
2/19/2002	0	100	100	100	100	0	400
2/26/2002	0	100	100	100	100	0	400
3/5/2002	0	100	100	100	100	0	400
3/12/2002	0	100	100	100	100	0	400
3/19/2002	0	100	100	100	100	0	400
3/26/2002	0	100	100	100	100	0	400
4/2/2002	0	100	100	100	42.26	0	342
4/9/2002	0	100	100	100	47.94	0	348
4/16/2002	0	100	100	100	0	0	300
4/23/2002	0	100	100	100	0	0	300
4/30/2002	0	100	100	100	89.14	0	389
5/7/2002	0	100	100	100	100	0	400
5/14/2002	0	100	100	100	100	0	400
5/21/2002	0	100	100	100	100	0	400
5/28/2002	0	100	100	100	97.9	0	398
6/4/2002	0	100	100	100	92.78	0	393
6/11/2002	0	100	100	100	87.88	0	388

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
6/18/2002	0	100	100	100	100	0	400
6/25/2002	0	100	100	100	100	0	400
7/2/2002	0	100	100	100	100	0	400
7/9/2002	0	100	100	100	100	0	400
7/16/2002	0	100	100	100	100	0	400
7/23/2002	0	100	100	100	100	0	400
7/30/2002	0	100	100	100	100	0	400
8/6/2002	0	100	100	100	100	0	400
8/13/2002	0	100	100	100	100	100	500
8/20/2002	0	100	100	100	100	100	500
8/27/2002	0	100	100	100	100	100	500
9/3/2002	0	100	100	100	100	89.68	490
9/10/2002	0	100	100	100	100	46.75	447
9/17/2002	0	100	100	100	87.25	0	387
9/24/2002	0	100	100	100	0	0	300
10/1/2002	0	100	100	100	0	0	300
10/8/2002	0	100	100	100	0	0	300
10/15/2002	0	100	100	100	0	0	300
10/22/2002	0	100	100	100	0	0	300
10/29/2002	0	100	100	100	0	0	300
11/5/2002	0	100	100	100	0	0	300
11/12/2002	0	100	100	0	0	0	200
11/19/2002	0	100	100	0	0	0	200
11/26/2002	0	100	100	0	0	0	200
12/3/2002	0	100	100	0	0	0	200
12/10/2002	0	100	100	0	0	0	200
12/17/2002	0	100	0	0	0	0	100
12/24/2002	0	100	0	0	0	0	100
12/31/2002	14.38	85.62	0	0	0	0	86
1/7/2003	3.78	96.22	0	0	0	0	96
1/14/2003	8.22	91.78	0	0	0	0	92
1/21/2003	3.56	96.44	0	0	0	0	96
1/28/2003	4.56	95.44	0	0	0	0	95
2/4/2003	0	100	0	0	0	0	100
2/11/2003	0	100	0	0	0	0	100
2/18/2003	0	100	0	0	0	0	100
2/25/2003	0	100	0	0	0	0	100
3/4/2003	0	100	0	0	0	0	100
3/11/2003	0	100	0	0	0	0	100
3/18/2003	0	100	0	0	0	0	100
3/25/2003	100	0	0	0	0	0	0
4/1/2003	100	0	0	0	0	0	0
4/8/2003	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
4/15/2003	100	0	0	0	0	0	0
4/22/2003	100	0	0	0	0	0	0
4/29/2003	100	0	0	0	0	0	0
5/6/2003	100	0	0	0	0	0	0
5/13/2003	100	0	0	0	0	0	0
5/20/2003	100	0	0	0	0	0	0
5/27/2003	100	0	0	0	0	0	0
6/3/2003	100	0	0	0	0	0	0
6/10/2003	100	0	0	0	0	0	0
6/17/2003	100	0	0	0	0	0	0
6/24/2003	100	0	0	0	0	0	0
7/1/2003	100	0	0	0	0	0	0
7/8/2003	100	0	0	0	0	0	0
7/15/2003	100	0	0	0	0	0	0
7/22/2003	100	0	0	0	0	0	0
7/29/2003	100	0	0	0	0	0	0
8/5/2003	100	0	0	0	0	0	0
8/12/2003	100	0	0	0	0	0	0
8/19/2003	100	0	0	0	0	0	0
8/26/2003	100	0	0	0	0	0	0
9/2/2003	100	0	0	0	0	0	0
9/9/2003	100	0	0	0	0	0	0
9/16/2003	100	0	0	0	0	0	0
9/23/2003	100	0	0	0	0	0	0
9/30/2003	100	0	0	0	0	0	0
10/7/2003	100	0	0	0	0	0	0
10/14/2003	100	0	0	0	0	0	0
10/21/2003	100	0	0	0	0	0	0
10/28/2003	100	0	0	0	0	0	0
11/4/2003	100	0	0	0	0	0	0
11/11/2003	100	0	0	0	0	0	0
11/18/2003	100	0	0	0	0	0	0
11/25/2003	100	0	0	0	0	0	0
12/2/2003	100	0	0	0	0	0	0
12/9/2003	100	0	0	0	0	0	0
12/16/2003	100	0	0	0	0	0	0
12/23/2003	100	0	0	0	0	0	0
12/30/2003	100	0	0	0	0	0	0
1/6/2004	100	0	0	0	0	0	0
1/13/2004	100	0	0	0	0	0	0
1/20/2004	100	0	0	0	0	0	0
1/27/2004	100	0	0	0	0	0	0
2/3/2004	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
2/10/2004	100	0	0	0	0	0	0
2/17/2004	100	0	0	0	0	0	0
2/24/2004	100	0	0	0	0	0	0
3/2/2004	100	0	0	0	0	0	0
3/9/2004	100	0	0	0	0	0	0
3/16/2004	100	0	0	0	0	0	0
3/23/2004	0	100	0	0	0	0	100
3/30/2004	0	100	0	0	0	0	100
4/6/2004	0	100	0	0	0	0	100
4/13/2004	0	100	0	0	0	0	100
4/20/2004	0	100	52.01	0	0	0	152
4/27/2004	0	100	100	0	0	0	200
5/4/2004	0	100	100	0	0	0	200
5/11/2004	0	100	100	0	0	0	200
5/18/2004	0	100	100	0	0	0	200
5/25/2004	0	100	100	100	0	0	300
6/1/2004	0	100	100	100	0	0	300
6/8/2004	0	100	100	100	0	0	300
6/15/2004	0	100	100	100	0	0	300
6/22/2004	0	100	100	0.2	0	0	200
6/29/2004	0	100	0.09	0	0	0	100
7/6/2004	0	100	0	0	0	0	100
7/13/2004	0	100	0	0	0	0	100
7/20/2004	0	100	0	0	0	0	100
7/27/2004	0	100	0	0	0	0	100
8/3/2004	0	100	0	0	0	0	100
8/10/2004	0	100	0	0	0	0	100
8/17/2004	13.13	86.87	0	0	0	0	87
8/24/2004	1.1	98.9	0	0	0	0	99
8/31/2004	6.47	93.53	0	0	0	0	94
9/7/2004	100	0	0	0	0	0	0
9/14/2004	100	0	0	0	0	0	0
9/21/2004	100	0	0	0	0	0	0
9/28/2004	100	0	0	0	0	0	0
10/5/2004	100	0	0	0	0	0	0
10/12/2004	100	0	0	0	0	0	0
10/19/2004	100	0	0	0	0	0	0
10/26/2004	100	0	0	0	0	0	0
11/2/2004	100	0	0	0	0	0	0
11/9/2004	100	0	0	0	0	0	0
11/16/2004	100	0	0	0	0	0	0
11/23/2004	100	0	0	0	0	0	0
11/30/2004	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
12/7/2004	100	0	0	0	0	0	0
12/14/2004	100	0	0	0	0	0	0
12/21/2004	100	0	0	0	0	0	0
12/28/2004	100	0	0	0	0	0	0
1/4/2005	100	0	0	0	0	0	0
1/11/2005	100	0	0	0	0	0	0
1/18/2005	100	0	0	0	0	0	0
1/25/2005	100	0	0	0	0	0	0
2/1/2005	100	0	0	0	0	0	0
2/8/2005	100	0	0	0	0	0	0
2/15/2005	100	0	0	0	0	0	0
2/22/2005	100	0	0	0	0	0	0
3/1/2005	100	0	0	0	0	0	0
3/8/2005	100	0	0	0	0	0	0
3/15/2005	100	0	0	0	0	0	0
3/22/2005	100	0	0	0	0	0	0
3/29/2005	100	0	0	0	0	0	0
4/5/2005	100	0	0	0	0	0	0
4/12/2005	100	0	0	0	0	0	0
4/19/2005	100	0	0	0	0	0	0
4/26/2005	100	0	0	0	0	0	0
5/3/2005	100	0	0	0	0	0	0
5/10/2005	100	0	0	0	0	0	0
5/17/2005	100	0	0	0	0	0	0
5/24/2005	100	0	0	0	0	0	0
5/31/2005	100	0	0	0	0	0	0
6/7/2005	100	0	0	0	0	0	0
6/14/2005	100	0	0	0	0	0	0
6/21/2005	100	0	0	0	0	0	0
6/28/2005	100	0	0	0	0	0	0
7/5/2005	100	0	0	0	0	0	0
7/12/2005	100	0	0	0	0	0	0
7/19/2005	100	0	0	0	0	0	0
7/26/2005	100	0	0	0	0	0	0
8/2/2005	100	0	0	0	0	0	0
8/9/2005	100	0	0	0	0	0	0
8/16/2005	100	0	0	0	0	0	0
8/23/2005	100	0	0	0	0	0	0
8/30/2005	100	0	0	0	0	0	0
9/6/2005	100	0	0	0	0	0	0
9/13/2005	100	0	0	0	0	0	0
9/20/2005	100	0	0	0	0	0	0
9/27/2005	34.75	65.25	0	0	0	0	65

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
10/4/2005	100	0	0	0	0	0	0
10/11/2005	100	0	0	0	0	0	0
10/18/2005	100	0	0	0	0	0	0
10/25/2005	100	0	0	0	0	0	0
11/1/2005	100	0	0	0	0	0	0
11/8/2005	100	0	0	0	0	0	0
11/15/2005	100	0	0	0	0	0	0
11/22/2005	100	0	0	0	0	0	0
11/29/2005	100	0	0	0	0	0	0
12/6/2005	100	0	0	0	0	0	0
12/13/2005	100	0	0	0	0	0	0
12/20/2005	100	0	0	0	0	0	0
12/27/2005	100	0	0	0	0	0	0
1/3/2006	100	0	0	0	0	0	0
1/10/2006	100	0	0	0	0	0	0
1/17/2006	100	0	0	0	0	0	0
1/24/2006	100	0	0	0	0	0	0
1/31/2006	100	0	0	0	0	0	0
2/7/2006	100	0	0	0	0	0	0
2/14/2006	100	0	0	0	0	0	0
2/21/2006	100	0	0	0	0	0	0
2/28/2006	100	0	0	0	0	0	0
3/7/2006	100	0	0	0	0	0	0
3/14/2006	100	0	0	0	0	0	0
3/21/2006	100	0	0	0	0	0	0
3/28/2006	100	0	0	0	0	0	0
4/4/2006	0	100	0	0	0	0	100
4/11/2006	0	100	0	0	0	0	100
4/18/2006	0	100	0	0	0	0	100
4/25/2006	0	100	0	0	0	0	100
5/2/2006	0	100	0	0	0	0	100
5/9/2006	0	100	0	0	0	0	100
5/16/2006	0	100	0	0	0	0	100
5/23/2006	0	100	0	0	0	0	100
5/30/2006	0	100	0	0	0	0	100
6/6/2006	0	100	44.79	0	0	0	145
6/13/2006	0	100	100	0	0	0	200
6/20/2006	0	100	35.72	0	0	0	136
6/27/2006	0	100	35.72	0	0	0	136
7/4/2006	0	100	37.13	0	0	0	137
7/11/2006	0	100	21.03	0	0	0	121
7/18/2006	0	100	21.03	0	0	0	121
7/25/2006	0	100	100	0	0	0	200

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
8/1/2006	0	100	100	0	0	0	200
8/8/2006	0	100	100	0	0	0	200
8/15/2006	0	100	100	0	0	0	200
8/22/2006	0	100	100	3.34	0	0	203
8/29/2006	0	100	100	0	0	0	200
9/5/2006	0	100	100	0	0	0	200
9/12/2006	0	100	100	0	0	0	200
9/19/2006	0	100	55.93	0	0	0	156
9/26/2006	0	100	55.93	0	0	0	156
10/3/2006	0	100	100	0	0	0	200
10/10/2006	0	100	100	0	0	0	200
10/17/2006	0	100	100	0	0	0	200
10/24/2006	0	100	100	0	0	0	200
10/31/2006	0	100	100	0	0	0	200
11/7/2006	0	100	100	0	0	0	200
11/14/2006	0	100	100	0	0	0	200
11/21/2006	0	100	0	0	0	0	100
11/28/2006	100	0	0	0	0	0	0
12/5/2006	100	0	0	0	0	0	0
12/12/2006	0	100	0	0	0	0	100
12/19/2006	0	100	0	0	0	0	100
12/26/2006	0	100	0	0	0	0	100
1/2/2007	0	100	0	0	0	0	100
1/9/2007	0	100	0	0	0	0	100
1/16/2007	100	0	0	0	0	0	0
1/23/2007	100	0	0	0	0	0	0
1/30/2007	100	0	0	0	0	0	0
2/6/2007	100	0	0	0	0	0	0
2/13/2007	100	0	0	0	0	0	0
2/20/2007	8.84	91.16	0	0	0	0	91
2/27/2007	0	100	0	0	0	0	100
3/6/2007	100	0	0	0	0	0	0
3/13/2007	100	0	0	0	0	0	0
3/20/2007	0	100	0	0	0	0	100
3/27/2007	0	100	0	0	0	0	100
4/3/2007	0	100	0	0	0	0	100
4/10/2007	0	100	0	0	0	0	100
4/17/2007	0	100	0	0	0	0	100
4/24/2007	0	100	100	0	0	0	200
5/1/2007	0	100	100	0	0	0	200
5/8/2007	0	100	100	0	0	0	200
5/15/2007	0	100	100	0	0	0	200
5/22/2007	0	100	100	73.4	0	0	273

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
5/29/2007	0	100	100	73.4	0	0	273
6/5/2007	0	100	74.45	0	0	0	174
6/12/2007	0	100	74.45	0	0	0	174
6/19/2007	0	100	74.45	0	0	0	174
6/26/2007	0	100	74.45	0	0	0	174
7/3/2007	0	100	30.43	0	0	0	130
7/10/2007	0	100	30.43	0	0	0	130
7/17/2007	0	100	30.43	0	0	0	130
7/24/2007	0	100	30.43	0	0	0	130
7/31/2007	0	100	30.43	0	0	0	130
8/7/2007	0	100	100	0	0	0	200
8/14/2007	0	100	100	0	0	0	200
8/21/2007	0	100	100	100	0	0	300
8/28/2007	0	100	100	100	0	0	300
9/4/2007	0	100	92.96	5.14	0	0	198
9/11/2007	0	100	92.96	10.29	0	0	203
9/18/2007	16.62	83.38	20.19	0	0	0	104
9/25/2007	16.62	83.38	20.19	0	0	0	104
10/2/2007	16.62	83.38	20.19	0	0	0	104
10/9/2007	9.22	90.78	44.74	1.55	0	0	137
10/16/2007	0	100	85.59	28.85	0	0	214
10/23/2007	0	100	85.59	28.85	0	0	214
10/30/2007	0	100	85.59	28.85	0	0	214
11/6/2007	0	100	85.59	28.85	0	0	214
11/13/2007	0	100	100	74	9.27	0	283
11/20/2007	0	100	100	74	9.27	0	283
11/27/2007	0	100	100	74	9.27	0	283
12/4/2007	0	100	100	94.46	41.32	0	336
12/11/2007	0	100	100	100	85.45	23.32	409
12/18/2007	0	100	100	100	85.45	23.32	409
12/25/2007	0	100	100	100	85.45	23.32	409
1/1/2008	0	100	100	91.42	2.29	0	294
1/8/2008	0	100	100	91.42	2.29	0	294
1/15/2008	0	100	100	91.42	2.29	0	294
1/22/2008	0	100	100	49.62	0	0	250
1/29/2008	0	100	100	49.62	0	0	250
2/5/2008	0	100	100	49.62	0	0	250
2/12/2008	0	100	100	49.62	0	0	250
2/19/2008	0	100	100	49.62	0	0	250
2/26/2008	0	100	85.59	0.98	0	0	187
3/4/2008	0	100	85.59	0.98	0	0	187
3/11/2008	0.29	99.71	0.8	0	0	0	101
3/18/2008	0.29	99.71	0.8	0	0	0	101

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
3/25/2008	0.29	99.71	0.8	0	0	0	101
4/1/2008	0.29	99.71	0.8	0	0	0	101
4/8/2008	0.29	99.71	0.8	0	0	0	101
4/15/2008	0.29	99.71	0.8	0	0	0	101
4/22/2008	0.29	99.71	0.8	0	0	0	101
4/29/2008	0.29	99.71	0.8	0	0	0	101
5/6/2008	0.29	99.71	0.8	0	0	0	101
5/13/2008	0.29	99.71	0.8	0	0	0	101
5/20/2008	0	100	0.8	0	0	0	101
5/27/2008	0	100	0.8	0	0	0	101
6/3/2008	0	100	10.64	0	0	0	111
6/10/2008	0	100	10.64	0	0	0	111
6/17/2008	0	100	100	0	0	0	200
6/24/2008	0	100	100	0	0	0	200
7/1/2008	0	100	100	68.06	0	0	268
7/8/2008	0	100	100	68.06	0	0	268
7/15/2008	0	100	100	68.06	0	0	268
7/22/2008	0	100	100	100	0	0	300
7/29/2008	0	100	100	100	0	0	300
8/5/2008	0	100	100	100	0	0	300
8/12/2008	0	100	100	100	0	0	300
8/19/2008	0	100	100	100	0	0	300
8/26/2008	0	100	100	100	0	0	300
9/2/2008	0	100	100	100	0	0	300
9/9/2008	0	100	100	100	0	0	300
9/16/2008	0	100	100	100	0	0	300
9/23/2008	0	100	100	100	0	0	300
9/30/2008	0	100	100	100	89.55	0	390
10/7/2008	0	100	100	100	89.55	0	390
10/14/2008	0	100	100	100	90.27	0	390
10/21/2008	0	100	100	100	90.27	0	390
10/28/2008	0	100	100	100	15.84	0	316
11/4/2008	0	100	100	100	15.84	0	316
11/11/2008	0	100	100	100	15.84	0	316
11/18/2008	0	100	100	100	0	0	300
11/25/2008	0	100	100	100	0	0	300
12/2/2008	0	100	100	18.19	0	0	218
12/9/2008	0	100	22.27	0	0	0	122
12/16/2008	100	0	0	0	0	0	0
12/23/2008	100	0	0	0	0	0	0
12/30/2008	100	0	0	0	0	0	0
1/6/2009	100	0	0	0	0	0	0
1/13/2009	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
1/20/2009	100	0	0	0	0	0	0
1/27/2009	100	0	0	0	0	0	0
2/3/2009	100	0	0	0	0	0	0
2/10/2009	0	100	0	0	0	0	100
2/17/2009	0	100	0	0	0	0	100
2/24/2009	0	100	100	0	0	0	200
3/3/2009	0	100	100	0	0	0	200
3/10/2009	0	100	100	0	0	0	200
3/17/2009	0	100	100	0	0	0	200
3/24/2009	0	100	100	0	0	0	200
3/31/2009	0	100	47.56	0	0	0	148
4/7/2009	100	0	0	0	0	0	0
4/14/2009	100	0	0	0	0	0	0
4/21/2009	100	0	0	0	0	0	0
4/28/2009	100	0	0	0	0	0	0
5/5/2009	100	0	0	0	0	0	0
5/12/2009	100	0	0	0	0	0	0
5/19/2009	100	0	0	0	0	0	0
5/26/2009	100	0	0	0	0	0	0
6/2/2009	100	0	0	0	0	0	0
6/9/2009	100	0	0	0	0	0	0
6/16/2009	100	0	0	0	0	0	0
6/23/2009	100	0	0	0	0	0	0
6/30/2009	100	0	0	0	0	0	0
7/7/2009	0	100	0	0	0	0	100
7/14/2009	25.74	74.26	0	0	0	0	74
7/21/2009	25.74	74.26	0	0	0	0	74
7/28/2009	25.74	74.26	0	0	0	0	74
8/4/2009	25.74	74.26	0	0	0	0	74
8/11/2009	25.74	74.26	0	0	0	0	74
8/18/2009	25.74	74.26	0	0	0	0	74
8/25/2009	25.74	74.26	0	0	0	0	74
9/1/2009	25.74	74.26	0	0	0	0	74
9/8/2009	25.65	74.35	0	0	0	0	74
9/15/2009	97.47	2.53	0	0	0	0	3
9/22/2009	100	0	0	0	0	0	0
9/29/2009	100	0	0	0	0	0	0
10/6/2009	100	0	0	0	0	0	0
10/13/2009	100	0	0	0	0	0	0
10/20/2009	100	0	0	0	0	0	0
10/27/2009	100	0	0	0	0	0	0
11/3/2009	100	0	0	0	0	0	0
11/10/2009	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
11/17/2009	100	0	0	0	0	0	0
11/24/2009	100	0	0	0	0	0	0
12/1/2009	100	0	0	0	0	0	0
12/8/2009	100	0	0	0	0	0	0
12/15/2009	100	0	0	0	0	0	0
12/22/2009	100	0	0	0	0	0	0
12/29/2009	100	0	0	0	0	0	0
1/5/2010	100	0	0	0	0	0	0
1/12/2010	100	0	0	0	0	0	0
1/19/2010	100	0	0	0	0	0	0
1/26/2010	100	0	0	0	0	0	0
2/2/2010	100	0	0	0	0	0	0
2/9/2010	100	0	0	0	0	0	0
2/16/2010	100	0	0	0	0	0	0
2/23/2010	100	0	0	0	0	0	0
3/2/2010	100	0	0	0	0	0	0
3/9/2010	100	0	0	0	0	0	0
3/16/2010	100	0	0	0	0	0	0
3/23/2010	100	0	0	0	0	0	0
3/30/2010	100	0	0	0	0	0	0
4/6/2010	100	0	0	0	0	0	0
4/13/2010	100	0	0	0	0	0	0
4/20/2010	100	0	0	0	0	0	0
4/27/2010	100	0	0	0	0	0	0
5/4/2010	100	0	0	0	0	0	0
5/11/2010	100	0	0	0	0	0	0
5/18/2010	100	0	0	0	0	0	0
5/25/2010	100	0	0	0	0	0	0
6/1/2010	100	0	0	0	0	0	0
6/8/2010	100	0	0	0	0	0	0
6/15/2010	100	0	0	0	0	0	0
6/22/2010	100	0	0	0	0	0	0
6/29/2010	100	0	0	0	0	0	0
7/6/2010	100	0	0	0	0	0	0
7/13/2010	100	0	0	0	0	0	0
7/20/2010	91.92	8.08	0	0	0	0	8
7/27/2010	71.36	28.64	0	0	0	0	29
8/3/2010	100	0	0	0	0	0	0
8/10/2010	100	0	0	0	0	0	0
8/17/2010	99.99	0.01	0	0	0	0	0
8/24/2010	100	0	0	0	0	0	0
8/31/2010	100	0	0	0	0	0	0
9/7/2010	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
9/14/2010	0	100	0	0	0	0	100
9/21/2010	0	100	0	0	0	0	100
9/28/2010	0	100	0	0	0	0	100
10/5/2010	0	100	0	0	0	0	100
10/12/2010	0	100	0	0	0	0	100
10/19/2010	0	100	0	0	0	0	100
10/26/2010	0	100	0	0	0	0	100
11/2/2010	0	100	0	0	0	0	100
11/9/2010	0	100	0	0	0	0	100
11/16/2010	0	100	0	0	0	0	100
11/23/2010	0	100	100	0	0	0	200
11/30/2010	0	100	100	0	0	0	200
12/7/2010	0	100	100	0	0	0	200
12/14/2010	0	100	100	0	0	0	200
12/21/2010	0	100	100	0	0	0	200
12/28/2010	0	100	100	0	0	0	200
1/4/2011	0	100	100	0	0	0	200
1/11/2011	0	100	100	0	0	0	200
1/18/2011	0	100	100	0	0	0	200
1/25/2011	0	100	100	0	0	0	200
2/1/2011	0	100	100	0	0	0	200
2/8/2011	0	100	15.12	0	0	0	115
2/15/2011	0	100	15.12	0	0	0	115
2/22/2011	0	100	15.12	0	0	0	115
3/1/2011	0	100	15.12	0	0	0	115
3/8/2011	0	100	15.12	0	0	0	115
3/15/2011	0	100	32.43	0	0	0	132
3/22/2011	0	100	100	0	0	0	200
3/29/2011	0	100	100	0	0	0	200
4/5/2011	0	100	100	0	0	0	200
4/12/2011	0	100	100	0	0	0	200
4/19/2011	0	100	100	0	0	0	200
4/26/2011	0	100	100	0	0	0	200
5/3/2011	0	100	100	0	0	0	200
5/10/2011	0	100	100	0	0	0	200
5/17/2011	0	100	100	98.91	0	0	299
5/24/2011	0	100	100	98.91	0	0	299
5/31/2011	0	100	100	100	1.11	0	301
6/7/2011	0	100	100	100	1.02	0	301
6/14/2011	0	100	100	100	0.92	0	301
6/21/2011	0	100	100	100	100	0.08	400
6/28/2011	0	100	100	100	100	0.08	400
7/5/2011	0	100	100	100	100	0.08	400

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
7/12/2011	0	100	100	100	100	0.08	400
7/19/2011	0	100	100	100	100	0	400
7/26/2011	0	100	100	100	100	0	400
8/2/2011	0	100	100	100	100	0	400
8/9/2011	0	100	100	100	5.97	0	306
8/16/2011	0	100	100	100	5.97	0	306
8/23/2011	0	100	100	100	5.97	0	306
8/30/2011	0	100	100	100	100	0	400
9/6/2011	0	100	100	100	100	0	400
9/13/2011	0	100	100	100	100	0	400
9/20/2011	0	100	100	100	100	0	400
9/27/2011	0	100	100	100	100	0	400
10/4/2011	0	100	100	100	100	0	400
10/11/2011	0	100	100	100	100	0	400
10/18/2011	0	100	100	100	45	0	345
10/25/2011	0	100	100	100	43.71	0	344
11/1/2011	0	100	100	100	43.71	0	344
11/8/2011	0	100	100	100	43.71	0	344
11/15/2011	0	100	100	100	34.61	0	335
11/22/2011	0	100	100	100	34.61	0	335
11/29/2011	0	100	100	100	34.61	0	335
12/6/2011	0	100	100	100	34.61	0	335
12/13/2011	0	100	100	100	34.61	0	335
12/20/2011	0	100	100	100	100	0	400
12/27/2011	0	100	100	100	100	0	400
1/3/2012	0	100	100	100	100	0	400
1/10/2012	0	100	100	100	100	0	400
1/17/2012	0	100	100	100	100	0	400
1/24/2012	0	100	100	100	100	0	400
1/31/2012	0	100	100	100	100	0	400
2/7/2012	0	100	100	100	100	0	400
2/14/2012	0	100	100	100	100	0.01	400
2/21/2012	0	100	100	100	100	0	400
2/28/2012	0	100	100	100	100	0	400
3/6/2012	0	100	100	100	100	0	400
3/13/2012	0	100	100	100	100	0	400
3/20/2012	0	100	100	100	100	0	400
3/27/2012	0	100	100	100	100	0	400
4/3/2012	0	100	100	100	100	0	400
4/10/2012	0	100	100	100	100	83.8	484
4/17/2012	0	100	100	100	100	83.8	484
4/24/2012	0	100	100	100	100	83.8	484
5/1/2012	0	100	100	100	100	92.61	493

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
5/8/2012	0	100	100	100	100	92.61	493
5/15/2012	0	100	100	100	100	100	500
5/22/2012	0	100	100	100	100	100	500
5/29/2012	0	100	100	100	100	100	500
6/5/2012	0	100	100	100	100	54.12	454
6/12/2012	0	100	100	100	74.25	47.4	422
6/19/2012	0	100	100	100	74.25	53.83	428
6/26/2012	0	100	100	100	74.25	53.83	428
7/3/2012	0	100	100	100	74.25	53.83	428
7/10/2012	0	100	100	100	74.25	53.83	428
7/17/2012	0	100	100	100	74.25	53.83	428
7/24/2012	0	100	100	100	74.25	53.83	428
7/31/2012	0	100	100	100	74.25	53.83	428
8/7/2012	0	100	100	100	74.25	53.83	428
8/14/2012	0	100	100	99.66	74.25	22.9	397
8/21/2012	0	100	100	99.66	74.25	22.9	397
8/28/2012	0	100	100	84.26	66.86	19.69	371
9/4/2012	0	100	100	83.72	44.4	19.69	348
9/11/2012	0	100	100	83.72	44.4	19.69	348
9/18/2012	0	100	100	83.72	44.4	19.69	348
9/25/2012	0	100	100	83.72	44.84	19.69	348
10/2/2012	0	100	100	83.72	44.84	22.04	351
10/9/2012	0	100	100	83.72	44.84	22.04	351
10/16/2012	0	100	100	83.72	44.84	22.04	351
10/23/2012	0	100	100	83.72	44.84	22.04	351
10/30/2012	0	100	100	83.72	44.84	22.04	351
11/6/2012	0	100	100	82.85	44.84	22.04	350
11/13/2012	0	100	100	99.15	46.36	22.04	368
11/20/2012	0	100	100	100	48.71	22.04	371
11/27/2012	0	100	100	100	48.71	22.04	371
12/4/2012	0	100	100	100	71.68	22.04	394
12/11/2012	0	100	100	100	72.05	22.04	394
12/18/2012	0	100	100	100	72.05	22.04	394
12/25/2012	0	100	100	100	72.05	22.04	394
1/1/2013	0	100	100	100	72.05	22.04	394
1/8/2013	0	100	100	100	72.05	22.04	394
1/15/2013	0	100	100	100	73.6	22.04	396
1/22/2013	0	100	100	100	73.6	22.04	396
1/29/2013	0	100	100	100	86.63	22.04	409
2/5/2013	0	100	100	100	86.63	22.04	409
2/12/2013	0	100	100	100	72.48	0	372
2/19/2013	0	100	100	100	72.48	0	372
2/26/2013	0	100	100	72.78	0	0	273

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
3/5/2013	0	100	83.41	57.63	0	0	241
3/12/2013	0	100	83.41	57.63	0	0	241
3/19/2013	0	100	77.53	1.55	0	0	179
3/26/2013	21.39	78.61	2.08	0	0	0	81
4/2/2013	21.39	78.61	2.08	0	0	0	81
4/9/2013	98.14	1.86	0	0	0	0	2
4/16/2013	98.14	1.86	0	0	0	0	2
4/23/2013	98.37	1.63	0	0	0	0	2
4/30/2013	100	0	0	0	0	0	0
5/7/2013	100	0	0	0	0	0	0
5/14/2013	100	0	0	0	0	0	0
5/21/2013	100	0	0	0	0	0	0
5/28/2013	100	0	0	0	0	0	0
6/4/2013	100	0	0	0	0	0	0
6/11/2013	100	0	0	0	0	0	0
6/18/2013	100	0	0	0	0	0	0
6/25/2013	100	0	0	0	0	0	0
7/2/2013	100	0	0	0	0	0	0
7/9/2013	100	0	0	0	0	0	0
7/16/2013	100	0	0	0	0	0	0
7/23/2013	100	0	0	0	0	0	0
7/30/2013	100	0	0	0	0	0	0
8/6/2013	100	0	0	0	0	0	0
8/13/2013	100	0	0	0	0	0	0
8/20/2013	100	0	0	0	0	0	0
8/27/2013	100	0	0	0	0	0	0
9/3/2013	100	0	0	0	0	0	0
9/10/2013	100	0	0	0	0	0	0
9/17/2013	100	0	0	0	0	0	0
9/24/2013	100	0	0	0	0	0	0
10/1/2013	100	0	0	0	0	0	0
10/8/2013	100	0	0	0	0	0	0
10/15/2013	100	0	0	0	0	0	0
10/22/2013	41.13	58.87	0	0	0	0	59
10/29/2013	34.79	65.21	0	0	0	0	65
11/5/2013	34.79	65.21	0	0	0	0	65
11/12/2013	35.99	64.01	0	0	0	0	64
11/19/2013	0	100	0	0	0	0	100
11/26/2013	0	100	0	0	0	0	100
12/3/2013	0	100	0	0	0	0	100
12/10/2013	0.19	99.81	0	0	0	0	100
12/17/2013	0.19	99.81	0	0	0	0	100
12/24/2013	0.19	99.81	0	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
12/31/2013	100	0	0	0	0	0	0
1/7/2014	100	0	0	0	0	0	0
1/14/2014	100	0	0	0	0	0	0
1/21/2014	100	0	0	0	0	0	0
1/28/2014	100	0	0	0	0	0	0
2/4/2014	100	0	0	0	0	0	0
2/11/2014	100	0	0	0	0	0	0
2/18/2014	100	0	0	0	0	0	0
2/25/2014	100	0	0	0	0	0	0
3/4/2014	100	0	0	0	0	0	0
3/11/2014	100	0	0	0	0	0	0
3/18/2014	100	0	0	0	0	0	0
3/25/2014	100	0	0	0	0	0	0
4/1/2014	100	0	0	0	0	0	0
4/8/2014	100	0	0	0	0	0	0
4/15/2014	100	0	0	0	0	0	0
4/22/2014	100	0	0	0	0	0	0
4/29/2014	100	0	0	0	0	0	0
5/6/2014	100	0	0	0	0	0	0
5/13/2014	100	0	0	0	0	0	0
5/20/2014	100	0	0	0	0	0	0
5/27/2014	100	0	0	0	0	0	0
6/3/2014	100	0	0	0	0	0	0
6/10/2014	100	0	0	0	0	0	0
6/17/2014	100	0	0	0	0	0	0
6/24/2014	92.74	7.26	0	0	0	0	7
7/1/2014	93.07	6.93	0	0	0	0	7
7/8/2014	93.07	6.93	0	0	0	0	7
7/15/2014	76.18	23.82	0	0	0	0	24
7/22/2014	100	0	0	0	0	0	0
7/29/2014	100	0	0	0	0	0	0
8/5/2014	100	0	0	0	0	0	0
8/12/2014	100	0	0	0	0	0	0
8/19/2014	100	0	0	0	0	0	0
8/26/2014	100	0	0	0	0	0	0
9/2/2014	28.77	71.23	0	0	0	0	71
9/9/2014	28.77	71.23	0	0	0	0	71
9/16/2014	28.77	71.23	0	0	0	0	71
9/23/2014	28.77	71.23	0	0	0	0	71
9/30/2014	28.77	71.23	0	0	0	0	71
10/7/2014	30.18	69.82	0	0	0	0	70
10/14/2014	30.87	69.13	0	0	0	0	69
10/21/2014	0	100	0	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
10/28/2014	0	100	0	0	0	0	100
11/4/2014	0	100	96.05	0	0	0	196
11/11/2014	0	100	96.05	0	0	0	196
11/18/2014	0	100	96.05	0	0	0	196
11/25/2014	0	100	58.52	0	0	0	159
12/2/2014	0	100	95.36	0	0	0	195
12/9/2014	0	100	99.34	0	0	0	199
12/16/2014	0	100	100	0	0	0	200
12/23/2014	0	100	100	0	0	0	200
12/30/2014	0	100	0	0	0	0	100
1/6/2015	0.95	99.05	0	0	0	0	99
1/13/2015	13.24	86.76	0	0	0	0	87
1/20/2015	13.24	86.76	0	0	0	0	87
1/27/2015	13.24	86.76	0	0	0	0	87
2/3/2015	13.24	86.76	0	0	0	0	87
2/10/2015	13.24	86.76	0	0	0	0	87
2/17/2015	13.24	86.76	0	0	0	0	87
2/24/2015	13.24	86.76	0	0	0	0	87
3/3/2015	100	0	0	0	0	0	0
3/10/2015	100	0	0	0	0	0	0
3/17/2015	100	0	0	0	0	0	0
3/24/2015	100	0	0	0	0	0	0
3/31/2015	100	0	0	0	0	0	0
4/7/2015	100	0	0	0	0	0	0
4/14/2015	100	0	0	0	0	0	0
4/21/2015	100	0	0	0	0	0	0
4/28/2015	100	0	0	0	0	0	0
5/5/2015	100	0	0	0	0	0	0
5/12/2015	100	0	0	0	0	0	0
5/19/2015	100	0	0	0	0	0	0
5/26/2015	100	0	0	0	0	0	0
6/2/2015	100	0	0	0	0	0	0
6/9/2015	100	0	0	0	0	0	0
6/16/2015	100	0	0	0	0	0	0
6/23/2015	34.05	65.95	0	0	0	0	66
6/30/2015	34.05	65.95	0	0	0	0	66
7/7/2015	34.05	65.95	0	0	0	0	66
7/14/2015	34.04	65.96	0	0	0	0	66
7/21/2015	33.94	66.06	0	0	0	0	66
7/28/2015	0	100	4.53	0	0	0	105
8/4/2015	0	100	94.53	0	0	0	195
8/11/2015	0	100	94.53	0	0	0	195
8/18/2015	0	100	94.53	0	0	0	195

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
8/25/2015	0	100	94.53	0	0	0	195
9/1/2015	6.45	93.55	69.93	0	0	0	163
9/8/2015	6.45	93.55	69.93	0	0	0	163
9/15/2015	31.43	68.57	27.93	0	0	0	97
9/22/2015	63.62	36.38	3.86	0	0	0	40
9/29/2015	85.09	14.91	0.34	0	0	0	15
10/6/2015	95.59	4.41	0	0	0	0	4
10/13/2015	95.6	4.4	0	0	0	0	4
10/20/2015	95.6	4.4	0	0	0	0	4
10/27/2015	95.6	4.4	0	0	0	0	4
11/3/2015	100	0	0	0	0	0	0
11/10/2015	100	0	0	0	0	0	0
11/17/2015	100	0	0	0	0	0	0
11/24/2015	100	0	0	0	0	0	0
12/1/2015	100	0	0	0	0	0	0
12/8/2015	100	0	0	0	0	0	0
12/15/2015	100	0	0	0	0	0	0
12/22/2015	100	0	0	0	0	0	0
12/29/2015	100	0	0	0	0	0	0
1/5/2016	100	0	0	0	0	0	0
1/12/2016	100	0	0	0	0	0	0
1/19/2016	100	0	0	0	0	0	0
1/26/2016	100	0	0	0	0	0	0
2/2/2016	100	0	0	0	0	0	0
2/9/2016	100	0	0	0	0	0	0
2/16/2016	100	0	0	0	0	0	0
2/23/2016	100	0	0	0	0	0	0
3/1/2016	100	0	0	0	0	0	0
3/8/2016	100	0	0	0	0	0	0
3/15/2016	100	0	0	0	0	0	0
3/22/2016	99.98	0.02	0	0	0	0	0
3/29/2016	81.07	18.93	0	0	0	0	19
4/5/2016	100	0	0	0	0	0	0
4/12/2016	100	0	0	0	0	0	0
4/19/2016	100	0	0	0	0	0	0
4/26/2016	100	0	0	0	0	0	0
5/3/2016	8.85	91.15	0	0	0	0	91
5/10/2016	8.85	91.15	0	0	0	0	91
5/17/2016	8.85	91.15	0	0	0	0	91
5/24/2016	32.21	67.79	0	0	0	0	68
5/31/2016	52.68	47.32	0	0	0	0	47
6/7/2016	100	0	0	0	0	0	0
6/14/2016	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
6/21/2016	100	0	0	0	0	0	0
6/28/2016	100	0	0	0	0	0	0
7/5/2016	100	0	0	0	0	0	0
7/12/2016	100	0	0	0	0	0	0
7/19/2016	54.26	45.74	0	0	0	0	46
7/26/2016	54.26	45.74	0	0	0	0	46
8/2/2016	54.26	45.74	0	0	0	0	46
8/9/2016	54.26	45.74	0	0	0	0	46
8/16/2016	11.48	88.52	0.05	0	0	0	89
8/23/2016	0	100	1.29	0	0	0	101
8/30/2016	0	100	1.29	0	0	0	101
9/6/2016	98.59	1.41	0	0	0	0	1
9/13/2016	98.59	1.41	0	0	0	0	1
9/20/2016	98.59	1.41	0	0	0	0	1
9/27/2016	15.23	84.77	0	0	0	0	85
10/4/2016	15.41	84.59	0	0	0	0	85
10/11/2016	12.22	87.78	1.02	0	0	0	89
10/18/2016	12.02	87.98	47.32	0	0	0	135
10/25/2016	12.02	87.98	47.32	0	0	0	135
11/1/2016	12.02	87.98	47.32	0	0	0	135
11/8/2016	0	100	54.12	0	0	0	154
11/15/2016	0	100	54.12	0.3	0	0	154
11/22/2016	0	100	100	25.01	0.01	0	225
11/29/2016	0	100	100	99.08	22.78	0	322
12/6/2016	0	100	100	100	40.65	0	341
12/13/2016	0	100	100	100	40.65	0	341
12/20/2016	0	100	100	100	40.65	0	341
12/27/2016	0	100	100	100	40.65	0	341
1/3/2017	0	100	100	0	0	0	200
1/10/2017	0	100	0	0	0	0	100
1/17/2017	0	100	0	0	0	0	100
1/24/2017	100	0	0	0	0	0	0
1/31/2017	100	0	0	0	0	0	0
2/7/2017	100	0	0	0	0	0	0
2/14/2017	100	0	0	0	0	0	0
2/21/2017	100	0	0	0	0	0	0
2/28/2017	100	0	0	0	0	0	0
3/7/2017	100	0	0	0	0	0	0
3/14/2017	100	0	0	0	0	0	0
3/21/2017	37.78	62.22	0	0	0	0	62
3/28/2017	25.14	74.86	0	0	0	0	75
4/4/2017	25.14	74.86	0	0	0	0	75
4/11/2017	25.14	74.86	0	0	0	0	75

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
4/18/2017	0	100	41.61	0	0	0	142
4/25/2017	0	100	41.62	0	0	0	142
5/2/2017	0	100	41.62	0	0	0	142
5/9/2017	0	100	41.62	0	0	0	142
5/16/2017	0	100	41.62	0	0	0	142
5/23/2017	0	100	41.61	0	0	0	142
5/30/2017	0	100	41.61	0	0	0	142
6/6/2017	0	100	27.63	0	0	0	128
6/13/2017	0	100	14.45	0	0	0	114
6/20/2017	0	100	14.45	0	0	0	114
6/27/2017	0	100	0	0	0	0	100
7/4/2017	100	0	0	0	0	0	0
7/11/2017	100	0	0	0	0	0	0
7/18/2017	100	0	0	0	0	0	0
7/25/2017	100	0	0	0	0	0	0
8/1/2017	100	0	0	0	0	0	0
8/8/2017	100	0	0	0	0	0	0
8/15/2017	100	0	0	0	0	0	0
8/22/2017	100	0	0	0	0	0	0
8/29/2017	100	0	0	0	0	0	0
9/5/2017	100	0	0	0	0	0	0
9/12/2017	100	0	0	0	0	0	0
9/19/2017	100	0	0	0	0	0	0
9/26/2017	100	0	0	0	0	0	0
10/3/2017	100	0	0	0	0	0	0
10/10/2017	100	0	0	0	0	0	0
10/17/2017	8.5	91.5	0	0	0	0	92
10/24/2017	8.98	91.02	0	0	0	0	91
10/31/2017	8.98	91.02	0	0	0	0	91
11/7/2017	8.98	91.02	0	0	0	0	91
11/14/2017	0	100	70.41	0	0	0	170
11/21/2017	0	100	70.41	0	0	0	170
11/28/2017	0	100	100	0	0	0	200
12/5/2017	0	100	100	0	0	0	200
12/12/2017	0	100	69.33	0	0	0	169
12/19/2017	0	100	69.33	0	0	0	169
12/26/2017	0	100	64.69	0	0	0	165
1/2/2018	0	100	64.69	0	0	0	165
1/9/2018	0	100	64.69	0	0	0	165
1/16/2018	0	100	60.31	0	0	0	160
1/23/2018	0	100	60.31	0	0	0	160
1/30/2018	0	100	0	0	0	0	100
2/6/2018	0	100	0	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
2/13/2018	0	100	0	0	0	0	100
2/20/2018	0	100	0	0	0	0	100
2/27/2018	0	100	0	0	0	0	100
3/6/2018	0	100	69.14	0	0	0	169
3/13/2018	0	100	100	0	0	0	200
3/20/2018	0	100	77.06	0	0	0	177
3/27/2018	0	100	77.05	0	0	0	177
4/3/2018	0	100	77.05	0	0	0	177
4/10/2018	0	100	100	0	0	0	200
4/17/2018	0	100	100	0	0	0	200
4/24/2018	0	100	100	0	0	0	200
5/1/2018	0	100	92.93	0	0	0	193
5/8/2018	0	100	92.93	0	0	0	193
5/15/2018	0	100	92.93	0	0	0	193
5/22/2018	6.51	93.49	0	0	0	0	93
5/29/2018	100	0	0	0	0	0	0
6/5/2018	100	0	0	0	0	0	0
6/12/2018	100	0	0	0	0	0	0
6/19/2018	100	0	0	0	0	0	0
6/26/2018	100	0	0	0	0	0	0
7/3/2018	100	0	0	0	0	0	0
7/10/2018	100	0	0	0	0	0	0
7/17/2018	100	0	0	0	0	0	0
7/24/2018	100	0	0	0	0	0	0
7/31/2018	100	0	0	0	0	0	0
8/7/2018	100	0	0	0	0	0	0
8/14/2018	100	0	0	0	0	0	0
8/21/2018	100	0	0	0	0	0	0
8/28/2018	100	0	0	0	0	0	0
9/4/2018	33.33	66.67	0	0	0	0	67
9/11/2018	33.33	66.67	0	0	0	0	67
9/18/2018	33.33	66.67	0.05	0	0	0	67
9/25/2018	20.36	79.64	34.8	0	0	0	114
10/2/2018	19.03	80.97	37.54	0	0	0	119
10/9/2018	19.03	80.97	37.54	0	0	0	119
10/16/2018	55.09	44.91	0	0	0	0	45
10/23/2018	55.09	44.91	0	0	0	0	45
10/30/2018	100	0	0	0	0	0	0
11/6/2018	100	0	0	0	0	0	0
11/13/2018	100	0	0	0	0	0	0
11/20/2018	100	0	0	0	0	0	0
11/27/2018	100	0	0	0	0	0	0
12/4/2018	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
12/11/2018	100	0	0	0	0	0	0
12/18/2018	100	0	0	0	0	0	0
12/25/2018	100	0	0	0	0	0	0
1/1/2019	100	0	0	0	0	0	0
1/8/2019	100	0	0	0	0	0	0
1/15/2019	100	0	0	0	0	0	0
1/22/2019	100	0	0	0	0	0	0
1/29/2019	100	0	0	0	0	0	0
2/5/2019	100	0	0	0	0	0	0
2/12/2019	100	0	0	0	0	0	0
2/19/2019	100	0	0	0	0	0	0
2/26/2019	100	0	0	0	0	0	0
3/5/2019	100	0	0	0	0	0	0
3/12/2019	0	100	0	0	0	0	100
3/19/2019	0	100	0	0	0	0	100
3/26/2019	0	100	0	0	0	0	100
4/2/2019	0	100	29.79	0	0	0	130
4/9/2019	0	100	14.07	0	0	0	114
4/16/2019	0	100	14.08	0	0	0	114
4/23/2019	0	100	14.08	0	0	0	114
4/30/2019	0	100	17.02	0	0	0	117
5/7/2019	0	100	17.02	0	0	0	117
5/14/2019	0	100	15.77	0	0	0	116
5/21/2019	0	100	15.77	0	0	0	116
5/28/2019	0	100	15.77	0	0	0	116
6/4/2019	0	100	66.3	0	0	0	166
6/11/2019	0	100	1.75	0	0	0	102
6/18/2019	97.89	2.11	0	0	0	0	2
6/25/2019	100	0	0	0	0	0	0
7/2/2019	100	0	0	0	0	0	0
7/9/2019	100	0	0	0	0	0	0
7/16/2019	100	0	0	0	0	0	0
7/23/2019	100	0	0	0	0	0	0
7/30/2019	100	0	0	0	0	0	0
8/6/2019	99.57	0.43	0	0	0	0	0
8/13/2019	17.71	82.29	0	0	0	0	82
8/20/2019	97.07	2.93	0	0	0	0	3
8/27/2019	100	0	0	0	0	0	0
9/3/2019	91.1	8.9	0	0	0	0	9
9/10/2019	91.1	8.9	0	0	0	0	9
9/17/2019	90.37	9.63	0	0	0	0	10
9/24/2019	0	100	0.01	0	0	0	100
10/1/2019	0	100	0.01	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
10/8/2019	0	100	100	0	0	0	200
10/15/2019	0	100	100	4.48	0	0	204
10/22/2019	0	100	100	0.05	0	0	200
10/29/2019	0	100	100	0.05	0	0	200
11/5/2019	0	100	69.75	0	0	0	170
11/12/2019	29.51	70.49	0	0	0	0	70
11/19/2019	99.99	0.01	0	0	0	0	0
11/26/2019	99.99	0.01	0	0	0	0	0
12/3/2019	100	0	0	0	0	0	0
12/10/2019	100	0	0	0	0	0	0
12/17/2019	100	0	0	0	0	0	0
12/24/2019	100	0	0	0	0	0	0
12/31/2019	100	0	0	0	0	0	0
1/7/2020	100	0	0	0	0	0	0
1/14/2020	100	0	0	0	0	0	0
1/21/2020	100	0	0	0	0	0	0
1/28/2020	100	0	0	0	0	0	0
2/4/2020	100	0	0	0	0	0	0
2/11/2020	100	0	0	0	0	0	0
2/18/2020	100	0	0	0	0	0	0
2/25/2020	100	0	0	0	0	0	0
3/3/2020	100	0	0	0	0	0	0
3/10/2020	100	0	0	0	0	0	0
3/17/2020	100	0	0	0	0	0	0
3/24/2020	100	0	0	0	0	0	0
3/31/2020	100	0	0	0	0	0	0
4/7/2020	100	0	0	0	0	0	0
4/14/2020	100	0	0	0	0	0	0
4/21/2020	100	0	0	0	0	0	0
4/28/2020	100	0	0	0	0	0	0
5/5/2020	100	0	0	0	0	0	0
5/12/2020	100	0	0	0	0	0	0
5/19/2020	100	0	0	0	0	0	0
5/26/2020	100	0	0	0	0	0	0
6/2/2020	100	0	0	0	0	0	0
6/9/2020	100	0	0	0	0	0	0
6/16/2020	100	0	0	0	0	0	0
6/23/2020	100	0	0	0	0	0	0
6/30/2020	100	0	0	0	0	0	0
7/7/2020	100	0	0	0	0	0	0
7/14/2020	100	0	0	0	0	0	0
7/21/2020	35.08	64.92	0	0	0	0	65
7/28/2020	22.92	77.08	0	0	0	0	77

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
8/4/2020	8.45	91.55	0	0	0	0	92
8/11/2020	99.03	0.97	0	0	0	0	1
8/18/2020	100	0	0	0	0	0	0
8/25/2020	100	0	0	0	0	0	0
9/1/2020	100	0	0	0	0	0	0
9/8/2020	100	0	0	0	0	0	0
9/15/2020	100	0	0	0	0	0	0
9/22/2020	100	0	0	0	0	0	0
9/29/2020	100	0	0	0	0	0	0
10/6/2020	100	0	0	0	0	0	0
10/13/2020	100	0	0	0	0	0	0
10/20/2020	100	0	0	0	0	0	0
10/27/2020	96.1	3.9	0	0	0	0	4
11/3/2020	86.39	13.61	0	0	0	0	14
11/10/2020	83.96	16.04	0	0	0	0	16
11/17/2020	84.24	15.76	0	0	0	0	16
11/24/2020	0	100	0	0	0	0	100
12/1/2020	0	100	0	0	0	0	100
12/8/2020	0	100	0	0	0	0	100
12/15/2020	0	100	0	0	0	0	100
12/22/2020	0	100	0	0	0	0	100
12/29/2020	0	100	0	0	0	0	100
1/5/2021	100	0	0	0	0	0	0
1/12/2021	100	0	0	0	0	0	0
1/19/2021	100	0	0	0	0	0	0
1/26/2021	100	0	0	0	0	0	0
2/2/2021	100	0	0	0	0	0	0
2/9/2021	100	0	0	0	0	0	0
2/16/2021	100	0	0	0	0	0	0
2/23/2021	100	0	0	0	0	0	0
3/2/2021	100	0	0	0	0	0	0
3/9/2021	100	0	0	0	0	0	0
3/16/2021	100	0	0	0	0	0	0
3/23/2021	100	0	0	0	0	0	0
3/30/2021	100	0	0	0	0	0	0
4/6/2021	100	0	0	0	0	0	0
4/13/2021	100	0	0	0	0	0	0
4/20/2021	0	100	0	0	0	0	100
4/27/2021	0	100	0	0	0	0	100
5/4/2021	0	100	0	0	0	0	100
5/11/2021	100	0	0	0	0	0	0
5/18/2021	100	0	0	0	0	0	0
5/25/2021	100	0	0	0	0	0	0

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
6/1/2021	90.63	9.37	0	0	0	0	9
6/8/2021	100	0	0	0	0	0	0
6/15/2021	100	0	0	0	0	0	0
6/22/2021	100	0	0	0	0	0	0
6/29/2021	100	0	0	0	0	0	0
7/6/2021	100	0	0	0	0	0	0
7/13/2021	100	0	0	0	0	0	0
7/20/2021	100	0	0	0	0	0	0
7/27/2021	100	0	0	0	0	0	0
8/3/2021	100	0	0	0	0	0	0
8/10/2021	100	0	0	0	0	0	0
8/17/2021	100	0	0	0	0	0	0
8/24/2021	100	0	0	0	0	0	0
8/31/2021	100	0	0	0	0	0	0
9/7/2021	100	0	0	0	0	0	0
9/14/2021	100	0	0	0	0	0	0
9/21/2021	100	0	0	0	0	0	0
9/28/2021	100	0	0	0	0	0	0
10/5/2021	100	0	0	0	0	0	0
10/12/2021	100	0	0	0	0	0	0
10/19/2021	96.85	3.15	0	0	0	0	3
10/26/2021	58.35	41.65	0	0	0	0	42
11/2/2021	58.35	41.65	0	0	0	0	42
11/9/2021	59.51	40.49	0	0	0	0	40
11/16/2021	57.28	42.72	0	0	0	0	43
11/23/2021	0.53	99.47	0	0	0	0	99
11/30/2021	0	100	0	0	0	0	100
12/7/2021	0	100	100	0	0	0	200
12/14/2021	0	100	57.55	0	0	0	158
12/21/2021	34.72	65.28	0	0	0	0	65
12/28/2021	24.79	75.21	0	0	0	0	75
1/4/2022	100	0	0	0	0	0	0
1/11/2022	100	0	0	0	0	0	0
1/18/2022	100	0	0	0	0	0	0
1/25/2022	100	0	0	0	0	0	0
2/1/2022	100	0	0	0	0	0	0
2/8/2022	100	0	0	0	0	0	0
2/15/2022	100	0	0	0	0	0	0
2/22/2022	100	0	0	0	0	0	0
3/1/2022	11.85	88.15	0	0	0	0	88
3/8/2022	0	100	0	0	0	0	100
3/15/2022	0	100	0	0	0	0	100
3/22/2022	0	100	0	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
3/29/2022	0	100	96.3	0	0	0	196
4/5/2022	0	100	96.3	0	0	0	196
4/12/2022	0	100	5.48	0	0	0	105
4/19/2022	0	100	5.48	0	0	0	105
4/26/2022	0	100	5.48	0	0	0	105
5/3/2022	0	100	7.37	0	0	0	107
5/10/2022	0	100	7.37	0	0	0	107
5/17/2022	0	100	7.37	0	0	0	107
5/24/2022	84.69	15.31	0	0	0	0	15
5/31/2022	84.69	15.31	0	0	0	0	15
6/7/2022	84.69	15.31	0	0	0	0	15
6/14/2022	0	100	4.39	0	0	0	104
6/21/2022	0	100	11.45	0	0	0	111
6/28/2022	0	100	60.18	0	0	0	160
7/5/2022	39.26	60.74	0.01	0	0	0	61
7/12/2022	34.98	65.02	0	0	0	0	65
7/19/2022	99.19	0.81	0	0	0	0	1
7/26/2022	100	0	0	0	0	0	0
8/2/2022	100	0	0	0	0	0	0
8/9/2022	95.08	4.92	0	0	0	0	5
8/16/2022	100	0	0	0	0	0	0
8/23/2022	100	0	0	0	0	0	0
8/30/2022	100	0	0	0	0	0	0
9/6/2022	100	0	0	0	0	0	0
9/13/2022	100	0	0	0	0	0	0
9/20/2022	100	0	0	0	0	0	0
9/27/2022	100	0	0	0	0	0	0
10/4/2022	100	0	0	0	0	0	0
10/11/2022	0	100	0	0	0	0	100
10/18/2022	100	0	0	0	0	0	0
10/25/2022	100	0	0	0	0	0	0
11/1/2022	92.94	7.06	0	0	0	0	7
11/8/2022	60.37	39.63	5.27	0	0	0	45
11/15/2022	67.25	32.75	5.27	0	0	0	38
11/22/2022	67.25	32.75	5.27	0	0	0	38
11/29/2022	67.99	32.01	5.27	0	0	0	37
12/6/2022	73.6	26.4	0	0	0	0	26
12/13/2022	73.6	26.4	0	0	0	0	26
12/20/2022	81.05	18.95	0	0	0	0	19
12/27/2022	81.05	18.95	0	0	0	0	19
1/3/2023	81.05	18.95	0	0	0	0	19
1/10/2023	98.56	1.44	0	0	0	0	1
1/17/2023	98.56	1.44	0	0	0	0	1

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
1/24/2023	100	0	0	0	0	0	0
1/31/2023	100	0	0	0	0	0	0
2/7/2023	100	0	0	0	0	0	0
2/14/2023	100	0	0	0	0	0	0
2/21/2023	100	0	0	0	0	0	0
2/28/2023	100	0	0	0	0	0	0
3/7/2023	100	0	0	0	0	0	0
3/14/2023	100	0	0	0	0	0	0
3/21/2023	100	0	0	0	0	0	0
3/28/2023	100	0	0	0	0	0	0
4/4/2023	100	0	0	0	0	0	0
4/11/2023	100	0	0	0	0	0	0
4/18/2023	100	0	0	0	0	0	0
4/25/2023	100	0	0	0	0	0	0
5/2/2023	100	0	0	0	0	0	0
5/9/2023	100	0	0	0	0	0	0
5/16/2023	100	0	0	0	0	0	0
5/23/2023	100	0	0	0	0	0	0
5/30/2023	100	0	0	0	0	0	0
6/6/2023	100	0	0	0	0	0	0
6/13/2023	100	0	0	0	0	0	0
6/20/2023	100	0	0	0	0	0	0
6/27/2023	100	0	0	0	0	0	0
7/4/2023	100	0	0	0	0	0	0
7/11/2023	100	0	0	0	0	0	0
7/18/2023	100	0	0	0	0	0	0
7/25/2023	100	0	0	0	0	0	0
8/1/2023	100	0	0	0	0	0	0
8/8/2023	100	0	0	0	0	0	0
8/15/2023	100	0	0	0	0	0	0
8/22/2023	100	0	0	0	0	0	0
8/29/2023	100	0	0	0	0	0	0
9/5/2023	100	0	0	0	0	0	0
9/12/2023	100	0	0	0	0	0	0
9/19/2023	100	0	0	0	0	0	0
9/26/2023	100	0	0	0	0	0	0
10/3/2023	100	0	0	0	0	0	0
10/10/2023	100	0	0	0	0	0	0
10/17/2023	100	0	0	0	0	0	0
10/24/2023	100	0	0	0	0	0	0
10/31/2023	100	0	0	0	0	0	0
11/7/2023	100	0	0	0	0	0	0
11/14/2023	100	0	0	0	0	0	0

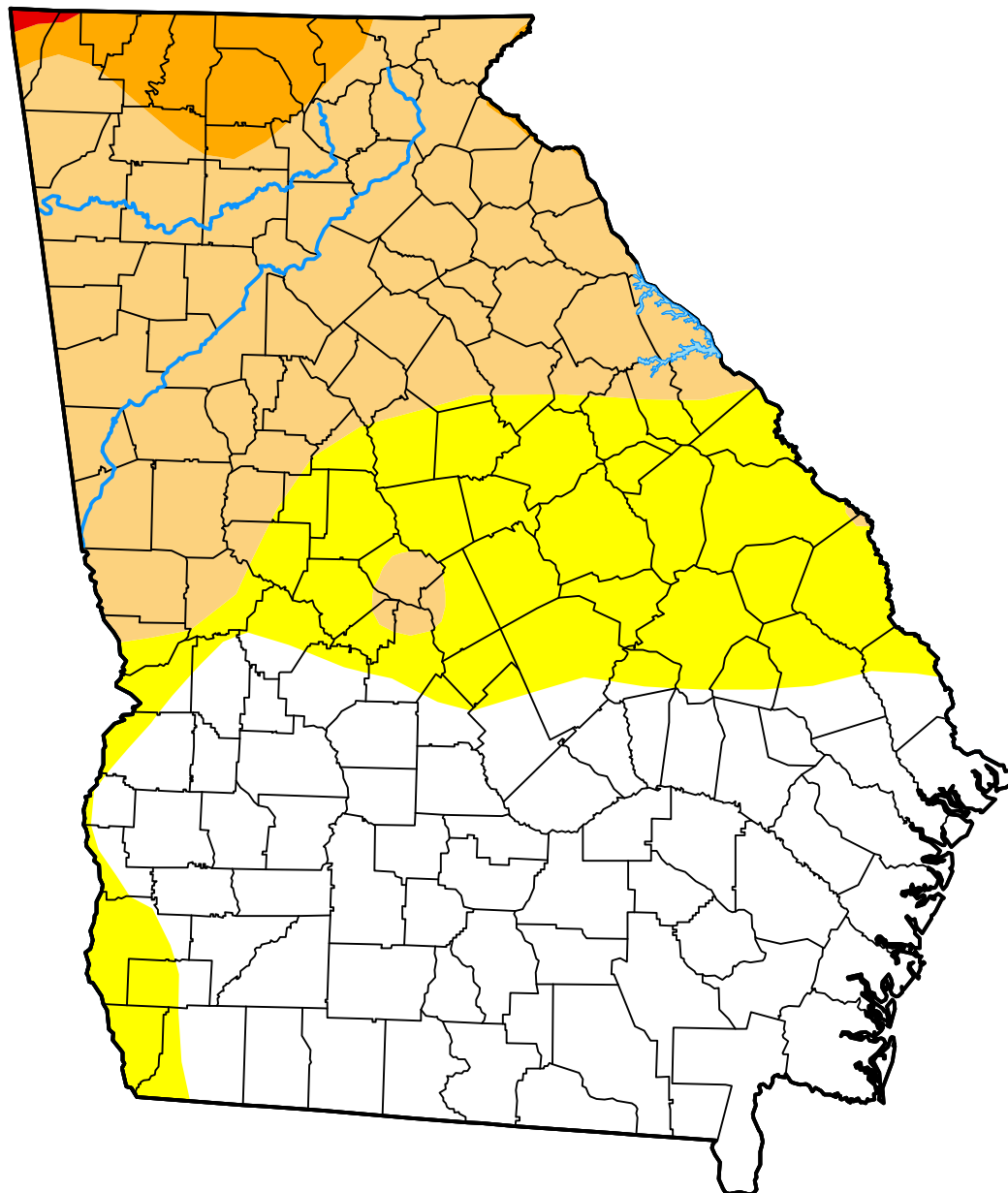
Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
11/21/2023	100	0	0	0	0	0	0
11/28/2023	100	0	0	0	0	0	0
12/5/2023	100	0	0	0	0	0	0
12/12/2023	100	0	0	0	0	0	0
12/19/2023	100	0	0	0	0	0	0
12/26/2023	100	0	0	0	0	0	0
1/2/2024	100	0	0	0	0	0	0
1/9/2024	100	0	0	0	0	0	0
1/16/2024	100	0	0	0	0	0	0
1/23/2024	100	0	0	0	0	0	0
1/30/2024	100	0	0	0	0	0	0
2/6/2024	100	0	0	0	0	0	0
2/13/2024	100	0	0	0	0	0	0
2/20/2024	100	0	0	0	0	0	0
2/27/2024	100	0	0	0	0	0	0
3/5/2024	100	0	0	0	0	0	0
3/12/2024	100	0	0	0	0	0	0
3/19/2024	100	0	0	0	0	0	0
3/26/2024	100	0	0	0	0	0	0
4/2/2024	100	0	0	0	0	0	0
4/9/2024	100	0	0	0	0	0	0
4/16/2024	100	0	0	0	0	0	0
4/23/2024	100	0	0	0	0	0	0
4/30/2024	100	0	0	0	0	0	0
5/7/2024	100	0	0	0	0	0	0
5/14/2024	100	0	0	0	0	0	0
5/21/2024	100	0	0	0	0	0	0
5/28/2024	100	0	0	0	0	0	0
6/4/2024	100	0	0	0	0	0	0
6/11/2024	100	0	0	0	0	0	0
6/18/2024	100	0	0	0	0	0	0
6/25/2024	0	100	0	0	0	0	100
7/2/2024	0	100	70.15	0	0	0	170
7/9/2024	28.9	71.1	45.41	0	0	0	117
7/16/2024	28.9	71.1	46.25	0	0	0	117
7/23/2024	53.75	46.25	0	0	0	0	46
7/30/2024	100	0	0	0	0	0	0
8/6/2024	100	0	0	0	0	0	0
8/13/2024	100	0	0	0	0	0	0
8/20/2024	100	0	0	0	0	0	0
8/27/2024	100	0	0	0	0	0	0
9/3/2024	100	0	0	0	0	0	0
9/10/2024	0	100	0	0	0	0	100

Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4	DSCI
9/17/2024	0	100	0	0	0	0	100
9/24/2024	0	100	0	0	0	0	100
10/1/2024	100	0	0	0	0	0	0
10/8/2024	100	0	0	0	0	0	0
10/15/2024	100	0	0	0	0	0	0
10/22/2024	100	0	0	0	0	0	0
10/29/2024	0	100	0	0	0	0	100
11/5/2024	0	100	0	0	0	0	100
11/12/2024	100	0	0	0	0	0	0
11/19/2024	100	0	0	0	0	0	0

U.S. Drought Monitor

Georgia

September 17, 2024
(Released Thursday, Sep. 19, 2024)
 Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	43.18	56.82	34.07	4.03	0.12	0.00
Last Week <i>09-10-2024</i>	31.27	68.73	40.27	1.71	0.00	0.00
3 Months Ago <i>06-18-2024</i>	65.42	34.58	1.54	0.00	0.00	0.00
Start of Calendar Year <i>01-02-2024</i>	46.66	53.34	28.92	11.91	0.07	0.00
Start of Water Year <i>09-26-2023</i>	78.43	21.57	4.17	0.00	0.00	0.00
One Year Ago <i>09-19-2023</i>	83.52	16.48	1.62	0.00	0.00	0.00

Intensity:

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

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

Author:

Brad Rippey
 U.S. Department of Agriculture



droughtmonitor.unl.edu

Wildfire

Jefferson County has a total area of 339,200 acres of which 14,847 acres (4.4%) dedicated to agricultural and 287,186 acres (84.5%) dedicated to forestry. Given the right weather conditions and variables, wildfire, due to natural causes, creates a potential threat to the lives of residents and property in the planning area. The NCEI has never reported a significant wildfire event in Jefferson County.

The committee reviewed historical data from the Georgia Forestry Commission, which is not found in the NCEI database, to research wildfire events in Jefferson County. The GFC provides wildfire data on man-made and natural wildfire occurrences for the county as a whole and not for individual jurisdictions. This plan will address only natural disasters. According to Georgia Forestry data, from 1957 to 2022, there have been 3,104 fire events burning a total of 17,277 acres for an average extent of 5.56 acres. Of these 3,104 fire events 168 were a result of lightning strikes that burned 1,505 acres. Based on best available data 180 wildfire events as a result of lightning occurred in the unincorporated areas of the county. While data was collected looking at 60 years of data, frequency rate was calculated using a 20-year hazard cycle per guidance from GEMA. Based on a 20-year hazard cycle there is a 276% chance of an annual wildfire due to a lightning strike or statistically the county can expect 4 wildfires as a result of lightning annually.

The GMIS has 15 critical facilities with a hazard score of four (high), 78 with a hazards score of three (moderate), 12 with a hazard score of 2 (low) and four with a hazard score of one (very low probability). The remaining 22 critical facilities have a hazard score of zero. The 109 critical facilities with a wildfire hazard score greater than zero have an estimated potential loss of more than \$307 million. The loss for all critical facilities is \$393,112,262. According to FEMA Worksheet #3a there are 40,626 structures/properties with a population of 16,930 with a value of slightly less than \$1.3 billion worth of assets countywide.

Jefferson County Wildfire by number of Acres										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1957	413.41	0	11	67.1	194.21	130.3	0	0	0	10.8
1958	533.8	10.14	97.12	115.81	56.83	143.84	81.72	0	0	28.34
1959	443.74	0	5	131.61	21.89	179.95	3.79	0	0	101.5
1960	543.54	19.04	0.92	41.78	100.2	236.32	0.67	0	0	144.61
1961	420.3	0	20.77	38.62	59.8	290.24	0.81	1.89	0	8.17
1962	412.22	16.59	12.05	0	78.88	268.38	36.32	0	0	0
1963	201.7	0	13.48	0	67.97	107.82	0	12.43	0	0
1964	218.27	0	39.95	0	95.85	57.64	24.83	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	747.03	0	1.24	0	159.08	117.98	461.23	7.5	0	0
1967	315.77	0	12.33	0	60.8	161.7	48.16	32.78	0	0
1968	262.85	7.91	11.26	0	27.02	126.85	82.25	7.56	0	0
1969	259.42	1.38	28.18	0	62.5	126.13	16.24	24.99	0	0
1970	139.94	28.19	12.45	9.27	15.67	70.51	1.47	2.38	0	0
1971	102.15	0	0.94	0	13.31	59.94	25.69	2.27	0	0
1972	140.04	4.66	2.92	0	41.36	56.16	32.56	2.38	0	0
1973	237.89	4.76	1.35	0	83.68	131.67	12.87	3.56	0	0
1974	222.75	8.21	13.63	0	48.98	125.09	20.92	5.92	0	0
1975	130.91	33.32	11.87	0	11.83	45.55	22.13	4.51	0.14	1.56
1976	205.18	9.48	21.72	0	9.67	143.9	19.9	0	0.51	0
1977	232.25	63.11	69.93	0	34.14	45.11	2.31	0	11.22	6.43
1978	217.14	2.34	20.38	0	8.18	172.47	2.26	0	0	11.51
1979	161.73	0	1.78	0.07	20.91	129.41	9.56	0	0	0
1980	392.81	3.42	5.27	0.13	39.39	336.93	5.22	0	0	2.45
1981	210.83	5.16	5.09	0	8.04	145.57	15.88	0	2.02	29.07
1982	92.61	0	44.51	0	11.66	17.11	2.71	0	0	16.62
1983	183.74	15.41	35.04	0.93	1.52	123.79	1.35	0	0	5.7
1984	183.64	0	55.92	0	19.51	32.2	0	0	0	76.01
1985	346.92	62.6	4.35	0	69.15	105.26	11.64	64.19	1.12	28.61
1986	161.64	47.07	9.58	0.84	31.27	48.48	0	0	7.88	16.52
1987	158.35	36.48	9.4	0	50.46	36.05	0.26	0.45	0	25.25

Jefferson County Wildfire by number of Acres										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1988	177.73	23.7	0	0	9.32	129.83	2.94	0	5.3	6.64
1989	99.14	0	0	0	39.55	55.3	0	0	0.45	3.84
1990	186.05	37.45	0.12	0	36.95	47.92	0.83	0	5.58	57.2
1991	295.07	0	0.79	0	12.65	114.22	82.22	1.77	0	83.42
1992	182.2	1.74	0	0	0	29.98	143.91	0	0	6.57
1993	372.05	196.21	12.26	0	5.76	147.6	0	0	1.81	8.41
1994	143.15	47.05	36.19	0	13.49	43.24	0.34	0	2.08	0.76
1995	109.18	21.86	0	0	26.32	37.78	0	0	6.13	17.09
1996	173.59	0.79	8.18	0	16.76	69.27	1.89	0	0	76.7
1997	202.84	0.66	20.62	0	32.79	100.43	20.09	0	0	28.25
1998	181.56	33.69	10.3	0	12.58	119.54	4.64	0	0	0.81
1999	241.71	35.06	2.05	0	74.8	105.67	18.94	0	1.5	3.69
1987	158.35	36.48	9.4	0	50.46	36.05	0.26	0.45	0	25.25
1988	177.73	23.7	0	0	9.32	129.83	2.94	0	5.3	6.64
1989	99.14	0	0	0	38.43	55.3	1.12	0	0.45	3.84
1990	186.05	37.45	0.12	0	36.95	47.92	25.28	0	5.58	32.75
1991	295.07	0	0.79	0	12.65	114.22	82.22	1.77	0	83.42
1992	182.2	1.74	0	0	0	29.98	143.91	0	0	6.57
1993	372.05	196.21	12.26	0	5.76	147.6	0.03	0	1.81	8.38
1994	143.15	47.05	36.19	0	12.48	43.24	1.59	0	1.84	0.76
1995	109.18	21.86	0	0	26.32	37.78	0	0	6.13	17.09
1996	173.59	0.79	8.18	0	16.76	69.27	1.89	0	0	76.7
1997	202.84	0.66	20.62	0	32.79	100.43	20.09	0	0	28.25
1998	181.56	33.69	10.3	0	12.58	119.54	4.64	0	0	0.81
1999	326.61	61.1	4.96	0.6	78.48	126.41	47.12	0	0.68	7.26
2000	262.55	24.48	108.05	0	3.31	93.52	0.1	0	0.56	32.53
2001	221.93	64.91	38.52	0	3.77	100.06	0	0	4.7	9.97
2002	333.93	55.29	22.82	11.22	10.18	79.59	5.32	0	0.11	149.4
2003	37.01	3.1	2.41	0	0	29.09	0	0	0	2.41
2004	245.47	19.13	35.05	0	1.4	182.92	0.15	0	3.72	3.1
2005	171.89	0.67	42.59	0	0	86.36	0	9.3	2.36	30.61

Jefferson County Wildfire by number of Acres										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
2006	233.34	4.2	98	1.56	5.88	93.72	0.01	0.22	0.9	28.85
2007	223.88	19.86	42.55	2.91	0	60.81	40.12	0.37	1.67	55.59
2008	234.22	7.66	30.94	0	3.33	178.97	0	0	0.97	12.35
2009	137.13	0.74	9.16	0	0	123.47	0.52	0	0.03	3.21
2010	165.06	9.01	6.26	20.58	0	122.42	0.2	0	1.5	5.09
2011	266.61	34.18	96.63	0.52	0.02	106.03	0	1.9	4.77	22.56
2012	99.05	23.06	2.17	0	0	45.34	0	4.13	0.58	23.77
2013	100.8	0	7.65	0.01	0	69.44	0.79	7.64	2.3	12.97
2014	233.51	2.79	56.59	5.26	0	100.97	1.7	0	0.4	65.8
2015	112.54	0	7.31	0	0	56.54	0	0	0	48.69
2016	87.24	16.57	8.2	0	0	19.06	0	1.99	0.28	41.14
2017	154.84	0.51	0	1.25	0	147.01	0	0	0.61	5.46
2018	126.09	18.6	0.75	0.5	0	81.3	0	0	0	24.94
2019	318.51	127.5	5.63	0	3.3	146.68	0	8.82	0	26.58
2020	33.41	7.3	0.51	3.8	0	13.8	0.25	0.2	0.1	7.45
2021	138.49	0	56.78	0	0	77.91	2.1	0	1.1	0.6
2022	74.4	0	26.66	0.87	0	29.06	0	0	9.03	8.78
	17276.26	1677.77								

Jefferson County Wildfire by Number										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1957	41	0	1	6	8	23	0	0	0	3
1958	44	1	3	12	10	10	5	0	0	3
1959	35	0	1	3	5	18	2	0	0	6
1960	55	1	2	4	12	28	1	0	0	7
1961	60	0	3	8	11	32	1	1	0	4
1962	49	5	3	0	16	24	1	0	0	0
1963	47	0	4	0	18	22	0	3	0	0
1964	40	0	5	0	14	20	1	0	0	0
1965	0	0	0	0	0	0	0	0	0	0
1966	76	0	2	0	17	28	27	2	0	0
1967	54	0	6	0	14	18	15	1	0	0
1968	53	1	5	0	7	30	7	3	0	0
1969	51	2	4	0	14	23	3	5	0	0
1970	39	4	3	1	4	24	1	2	0	0
1971	29	0	1	0	3	18	3	4	0	0
1972	45	2	2	0	10	24	5	2	0	0
1973	53	1	2	0	10	26	12	2	0	0
1974	59	1	5	0	7	32	8	6	0	0
1975	45	1	5	0	5	22	8	1	2	1
1976	61	3	11	0	3	37	5	0	2	0
1977	51	5	10	0	9	21	1	0	1	4
1978	54	2	9	0	6	31	3	0	0	3
1979	43	0	3	1	10	22	7	0	0	0
1980	46	2	4	1	9	27	1	0	0	2
1981	61	1	6	0	5	33	8	0	2	6
1982	24	0	4	0	5	11	1	0	0	3
1983	57	3	29	1	3	17	1	0	0	3
1984	43	0	9	0	9	22	0	0	0	3
1985	58	2	2	0	13	30	2	4	1	4
1986	44	10	5	1	7	12	0	0	2	7
1987	55	8	2	0	13	22	1	1	0	8

Jefferson County Wildfire by Number										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
1988	39	2	0	0	4	25	1	0	3	4
1989	24	0	0	0	6	14	1	0	1	2
1990	51	4	1	0	9	19	2	0	3	13
1991	35	0	1	0	2	22	5	3	0	2
1992	20	1	0	0	0	11	4	0	0	4
1993	62	15	6	0	4	25	1	0	3	8
1994	33	1	2	0	5	18	4	0	1	2
1995	39	5	0	0	6	20	0	0	2	6
1996	44	3	4	0	7	26	1	0	0	3
1997	40	1	4	0	3	23	4	0	0	5
1998	34	4	4	0	6	17	2	0	0	1
1999	69	3	3	1	13	28	15	0	1	5
2000	34	5	6	0	2	12	1	0	1	7
2001	39	2	5	0	5	20	0	0	2	5
2002	56	14	4	1	3	15	3	0	1	15
2003	13	1	1	0	0	9	0	0	0	2
2004	69	2	13	0	1	41	1	0	3	8
2005	72	3	26	0	0	28	0	1	2	12
2006	101	5	23	2	4	47	1	1	6	12
2007	92	7	19	2	0	38	9	1	3	13
2008	74	6	18	0	2	38	0	0	3	7
2009	41	4	6	0	0	26	1	0	1	3
2010	60	4	10	3	0	28	1	0	5	9
2011	112	13	17	2	2	42	0	1	13	22
2012	48	8	5	0	0	20	0	2	3	10
2013	41	0	5	1	0	26	1	2	1	5
2014	71	2	6	2	0	36	1	0	2	22
2015	30	0	3	0	0	16	0	0	0	11
2016	45	2	6	0	0	18	0	4	2	13
2017	28	2	0	1	0	16	0	0	1	8
2018	23	2	2	1	0	12	0	0	0	6

Jefferson County Wildfire by Number										
CY	TOTAL	LIGHT	MACHI	CAMP	SMOKE	DEBRI	ARSON	RAIL	CHILD	MISC
2019	28	3	3	0	1	11	0	4	0	6
2020	16	1	2	1	0	6	1	1	1	3
2021	20	0	2	0	0	12	1	0	1	4
2022	29	0	7	1	0	16	0	0	1	4
	3104	180								

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Avera city	Avera City Hall	3	312500	2024	1000	200000	2024	0	Government, Government,	Essential	1	0
Avera city	Avera Fire Station	3	100000	2024	4250	200000	2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential	0	0
Avera city	Avera Water Tank	3	325000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline	0	0
			\$ 737,500.00			\$ 400,000.00						
Bartow town	Bartow Wastewater Sewage Effluent Pump Station	1	\$ 63,700.00	2024	100	\$ -	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow town	Bartow wastewater Lift Station #1	2	70300	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow town	Bartow Wastewater Lift Station #2	2	71400	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Bartow town	Bartow Wastewater Sewage Holding Pond	2	46400	2024	13509		2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow town	Bartow Wastewater Sewage Treatment Pond	2	50400	2024	10307	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
			\$ 238,500.00		24016							
Bartow town	Bartow City Hall	3	209300	2024	1920	53500	2024	0	Government, Government, Private, Private	Economic Assets, Essential, Important, Lifeline	3	1
Bartow town	Bartow Museum	3	826847	2024	2450		2024	0	Government, Government, Water/Sewer, Water/Sewer	Historic Consideration	1	0
Bartow town	Bartow Wastewater Lift Station #4	3	60500	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow town	Bartow Wastewater Lift Station #5	3	90200	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Bartow town	Bartow Water Well #2	3	119700	2024	275	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
			\$ 1,306,547.00			\$ 53,500.00						
Bartow town	Bartow Community Center & Auditorium	4	1342200	2024	11232	250000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets	1	1
Bartow town	Bartow Fire Dept & Communications Bldg	4	17100	2024	64	60000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline, Special Consideration	0	0
Bartow town	Bartow Fire Dept and Emergency Shelter	4	330630	2024	7500	38500	2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Economic Assets, Essential, Important, Lifeline	1	1
Bartow town	Bartow Wastewater Lift Station #3	4	69000	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
Bartow town	Bartow Water Tower	4	393000	2024	100	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Bartow town	Bartow Water Well	4	111800	2024	275	0	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Important, Lifeline	0	0
			\$ 2,263,730.00			\$ 348,500.00						
Jefferson County	Hillcrest Station	0	45700	2024	5068		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline	0	
Jefferson County	Jefferson County High School	0	55000000	2024	179142	2200000	2024	0	Medical, Medical, Hospital, Hospital	Economic Assets, Essential, Vulnerable Population	937	0
Jefferson County	Jefferson County Leisure Center	0	586170	2024	4924	86000	2024	0	Government, Government, Non-Profit, Non-Profit	Essential, Special Consideration, Vulnerable Population	75	0
Jefferson County	National Guard Equipment Shed 1	0	292900	2024			2024	0	Emergency Services, Emergency Services, EMA, EMA	Essential		
Jefferson County	Oconee Fall Line Technical College	0	1930505	2024	10000	7500	2024	0	Education, Education, VoTech, VoTech	Economic Assets, Important, Vulnerable Population	75	75

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	Tax Commissioner's Office	0	825500	2024		323000	2024	0	Government, Government, Government Offices, Government Offices	Essential	20	
	6		\$ 58,680,775.00			\$ 2,616,500.00					0	
											0	
Jefferson County	JEFFERSON CO-US 1 (AVERARD) (SL)	1	\$ 1,500,000.00	2024	#####	5,233,000.00	2024	0	Government, Government, Water/Sewer, Water/Sewer	Important		
Jefferson County	Jefferson County Middle School	2	2100000	2024			2024	0	Education, Education, K - 12, K - 12	Essential	500	
Jefferson County	Lions Club Evac. Center	2	12000	2024	1000		2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, Historic Consideration	8	
			\$ 2,112,000.00		1,000.00							
Jefferson County	1st Baptist Church Evac Center	3	3500000	2024	45075		2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, Important, Special Consideration	0	0
Jefferson County	Carver Elementary	3	12750000	2024	6600	510000	2024	0	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	0	0



Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	Choices Academy	3	15250000	2024			2024	0	Education, Education, K - 12, K - 12		250	
Jefferson County	Hardeman Building (Swann)	3	250000	2024	8278	17000	2024	0	Medical, Medical, EMS, EMS	Historic Consideration, Important, Special Consideration	1	0
Jefferson County	JC Fire TowerShop/Supply Building	3	241236	2024	4072	9800	2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential	4	
Jefferson County	JC Building Department	3	51090	2024	1000	17500	2024	0	Government, Government, Water/Sewer, Water/Sewer	Important	3	
Jefferson County	JC Radio Tower	3	27885	2024	100	8000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Jefferson County	Jefferson County Library	3	66085	2024	5000	848000	2024	0	Education, Education, Library, Library	Important	10	0
Jefferson County	Jefferson Co. Correction Facility	3	5261231	2024	42446	833800	2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	200	200

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	Jefferson Co. Law Enforcement Center	3	8041785	2024	39892	1139700	2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	225	225
Jefferson County	Jefferson County Armory Transit EMA	3	2380171	2024	14040	724500	2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential	10	4
Jefferson County	Jefferson County Bus Shop	3	750000	2024	4920	140000	2024	0	Medical, Medical, Hospital, Hospital	Important	5	0
Jefferson County	Jefferson County Chamber of Commerce/Murphy House	3	361433	2024	3281	122700	2024	0	Law Enforcement, Law Enforcement, Jails, Jails	Historic Consideration, Important	8	0
Jefferson County	Jefferson County Commissioner's Office/Long House	3	339300	2024	3080	110300	2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential	30	0
Jefferson County	Jefferson County Courthouse	3	5147708	2024	6065	125000	2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Historic Consideration	25	

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	Jefferson County Health Dept	3	841815	2024	6341	191700	2024	0	Education, Education, Private, Private	Essential	20	
Jefferson County	Jefferson County Landfill (New)	3	1062166	2024	15000	363200	2024	0	NGO, NGO, Water/Sewer, Water/Sewer	Hazardous Materials, Important	6	
Jefferson County	Jefferson County Magistrate	3	24001242	2024	22000	8400	2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential	20	0
Jefferson County	Jefferson County Office Park	3	23500000	2024	81642	940000	2024	0	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	45	0
Jefferson County	Jefferson Hospital	3	97000000	2024	76000		2024	0	Medical, Medical, Hospital, Hospital	Essential, Lifeline, Vulnerable Population	200	150
Jefferson County	Louisville Academy Elementary	3	15250000	2024	25047	610000	2024	0	NGO, NGO, Water/Sewer, Water/Sewer	Economic Assets, Essential, Vulnerable Population	568	0
Jefferson County	Louisville EMS/Morgue	3	600000	2024		300000	2024	0	Emergency Services, Emergency Services, EMS, EMS	Essential	30	10
Jefferson County	Matthews Station	3	47500	2024	2052		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	National Guard Equipment Shed 2	3	338500	2024			2024	0	Emergency Services, Emergency Services, EMA, EMA	Essential		
Jefferson County	National Guard Garage (Road Dept)	3	461800	2024		209000	2024	0	Emergency Services, Emergency Services, EMA, EMA	Essential		
Jefferson County	National Guard Shop	3	470400	2024		470400	2024	0	Emergency Services, Emergency Services, EMA, EMA	Essential		
Jefferson County	Ogeechee Service Center	3	900000	2024	10650		2024	0	Law Enforcement, Law Enforcement, Prisons, Prisons	Essential, High Potential Loss, Important, Vulnerable Population	50	0
Jefferson County	Old County Jail/IT/Purchasing	3	500000	2024	7742	28000	2024	0	Law Enforcement, Law Enforcement, Jails, Jails	Essential, Historic Consideration	1	0
Jefferson County	Physicians Health Group Wrens	3	1015350	2024	5802	500000	2024	0	Education, Education, Private, Private	Essential, Important	20	
Jefferson County	Wrens Elementary	3	20500000	2024	78216	820000	2024	0	NGO, NGO, Water/Sewer, Water/Sewer		637	0

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Jefferson County	Wrens Middle School (vacant)	3	17000000	2024	59902	680000	2024	0	NGO, NGO, Water/Sewer, Water/Sewer	Essential, Vulnerable Population	0	0
	31		\$ 257,906,697.00		574243	\$ 9,727,000.00					0	
											0	
Jefferson County	JC Recreation Dept	4	\$ 1,300,621.00	2024	1867	\$ 29,600.00	2024	0	Government, Government, Water/Sewer, Water/Sewer	Important	4	
Louisville city	Grange Rd water Plant	0	5000000	2024				0	Government, Government, Water/Sewer, Water/Sewer			
Louisville city	Highway 24 Lift Station	0	150000	2016	1000			0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Louisville city	Louisville City Airport	0	543665	2024	3200			0	NGO, NGO, Transportation, Transportation	Important, Transportation		
Louisville city	Louisville Tech Lift Station	0	125000	2024	50		2024	1E+05	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Louisville city	Louisville WPCP	0	15000000	2024				0	Government, Government, Water/Sewer, Water/Sewer	Essential, Hazardous Materials, Lifeline	2	

[illegible]

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Louisville city	American Renal Assoc NCA Dialysis Center	3	1261225	2024	7207			0	Medical, Medical, Private, Private	Important, Vulnerable Population	10	
Louisville city	City of Louisville Water Tank	3	500000	2024	100			0	Government, Government, Water/Sewer, Water/Sewer	Essential, Important		
Louisville city	Louisville City Hall	3	550000	2024	7200	350,000.00	2024	0	Government, Government, Private, Private	Essential	10	4
Louisville city	Louisville Fire Station	3	750000	2024	7200	850,000.00	2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential	4	
Louisville city	Louisville Water Works	3	4425000	2024	2400			0	Government, Government, Water/Sewer, Water/Sewer	Essential, Important, Lifeline		
Louisville city	Market House	3	100000	2024	600			0	Government, Government, Water/Sewer, Water/Sewer	Historic Consideration, Special Consideration		
Louisville city	Physicians Health Group Louisville	3	2400000	2024	9560	500,000.00	2024	0	Government, Government, Water/Sewer, Water/Sewer	Important	20	

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Louisville city	Pumping Station (Jewel Lane)	3	200000	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Louisville city	US # 1 Bypass Lift Station	3	150000	2024	100			0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
	9		\$ 10,336,225.00			\$ 1,700,000.00						
Louisville city	OCI Nursing Home	4	\$ 5,000,000.00	2024	45062			0	Education, Education, Library, Library	Vulnerable Population	225	200
Stapleton city	Stapleton City Hall & Emergency Shelter	3	508109	2024	3000	74000	2024	2E+05	Government, Government, Private, Private	Essential	2	
Stapleton city	Stapleton Fire house & Emergency Shelter	3	509327	2024	6000	700000	2024	1E+05	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Important, Lifeline	2	
Stapleton city	Stapleton Water Tank #1	3	771603	2024	100		2024	2E+05	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Stapleton city	Stapleton Water Tank #2	3	795253	2024	100		2024	2E+05	Government, Government, Water/Sewer, Water/Sewer	Essential, Important, Lifeline		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
	4		\$ 2,584,292.00			\$ 774,000.00						
Wadley city	Physicans Health Group Wadley	3	405650	2024	2318	250000	2024	0	Education, Education, Private, Private	Important	10	
Wadley city	Wadley City Hall	3	1500000	2024	3645	250000	2024	0	Government, Government, Private, Private	Economic Assets, Essential	5	0
Wadley city	Wadley Lift Station #1	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley city	Wadley Lift Station #2	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley city	Wadley Lift Station #3	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley city	Wadley Lift Station #4	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Wadley city	Wadley Lift Station #5	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer			
Wadley city	Wadley Lift Station #6	3	20690	2024			2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Wadley city	Wadley Police Department	3	900000	2024		200000	2024	0	Law Enforcement, Law Enforcement, Police, Police	Essential	6	2
Wadley city	Wadley Water Tower #2	3	500000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline	0	
	10		\$ 3,429,790.00			\$ 700,000.00						
Wadley city	Glendale Nursing Home	4	1610863	2024	26500	750000	2026	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Important, Special Consideration, Vulnerable Population	120	90
Wadley city	Wadley Community Complex	4	800000	2024	6000		2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Historic Consideration, Important		
Wadley city	Wadley Elevated Water Tank	4	650000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Wadley city	Wadley Fire Station	4	300000	2024		500000	2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential		
Wadley city	Wadley Gym	4	400000	2024	1200		2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Historic Consideration, Important		
Wadley city	Wadley Public Library	4	510000	2024	3114	538200	2024	0	Education, Education, Library, Library	Economic Assets, Important	5	5
Wadley city	Wadley Well House	4	600000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
	7		4,870,863.00			1,788,200.00						
Wrens city	Calcine Meter Set	0	225000	2024	100		2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, Lifeline		
Wrens city	City of Wrens Airport	0	504388	2024				0	Emergency Services, Emergency Services, EMA, EMA	Essential		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Wrens city	Family Y/ City of Wrens Recreation	0	2080755	2024				0	Education, Education, K - 12, K - 12	Vulnerable Population		
Wrens city	Highway 88 Lift Station	0	350000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrens city	IMERYS Meter Set	0	300000	2024	10		2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Hazardous Materials		
Wrens city	KA-MIN #1	0	250000	2024	10		2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, High Potential Loss, Important, Lifeline		
Wrens city	Ka-Min #2	0	250000	2024	1955		2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Essential, Hazardous Materials, Lifeline		
Wrens city	Southern Tap #2	0	750000	2024	50		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Hazardous Materials, Lifeline		

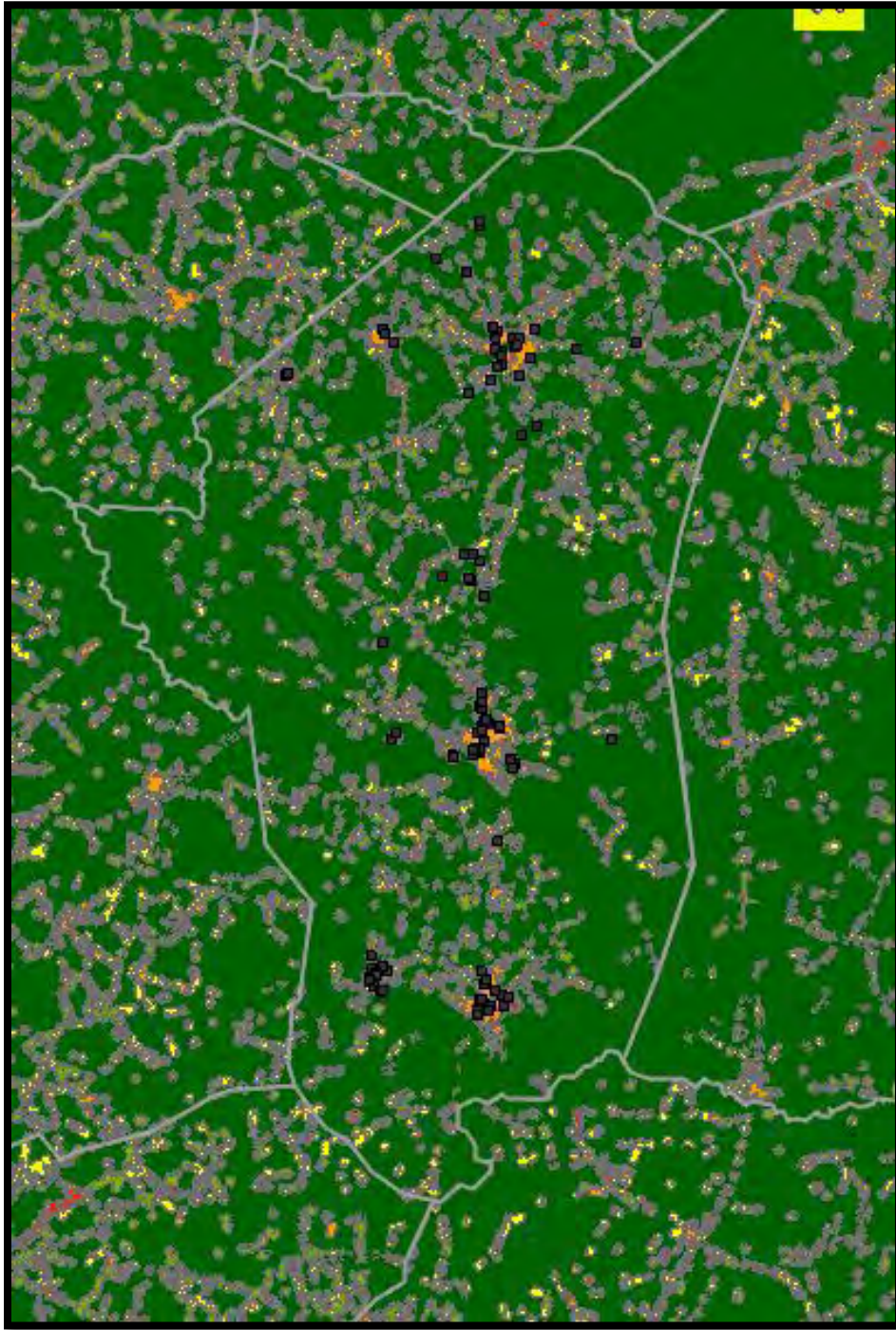
[illegible]

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	onal Use value	Facility type	Risk	Daytime	Nighttime
Wrens city	Border Regulator Station	3	100000	2024	100		2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, High Potential Loss, Lifeline	#REF!	
Wrens city	City of Wrens Wastewater Treatment Plant	3	180307	2024				0	Government, Government, Water/Sewer, Water/Sewer	Essential		
Wrens city	Gold Cross and Food Bank Development Center	3	96907	2024				0	Emergency Services, Emergency Services, EMS, EMS	Economic Assets		
Wrens city	Southern Tap #1	3	750000	2024	50		2024	0	Law Enforcement, Law Enforcement, Court House, Court House	Essential, Hazardous Materials, Lifeline		
Wrens city	Water Booster Station	3	500000	2024	1000		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrens city	Waynesboro Highway Lift Station	3	400000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		

Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Wrenscity	West Walker St Lift Station	3	300000	2024	100		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrenscity	Wrens Community Center	3	500000	2024	3400	50000	2024	0	Emergency Services, Emergency Services, Fire Fighters, Fire Fighters	Economic Assets	20	
Wrenscity	Wrens Medical Center	3	875000	2024	400	200000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Important, Vulnerable Population	20	
Wrenscity	Wrens Old Library Building	3	625000	2024	3000	549200	2024	0	Education, Education, Library, Library	Economic Assets, Historic Consideration, Important		
Wrenscity	Wrens Sewage Treatment Plant	3	3250000	2024	1400	125000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Hazardous Materials		
Wrenscity	Wrens Water Pumping Station	3	75000	2024	800	25000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
Wrenscity	Wrens Water Pumping Station	3	125000	2024	800	25000	2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		

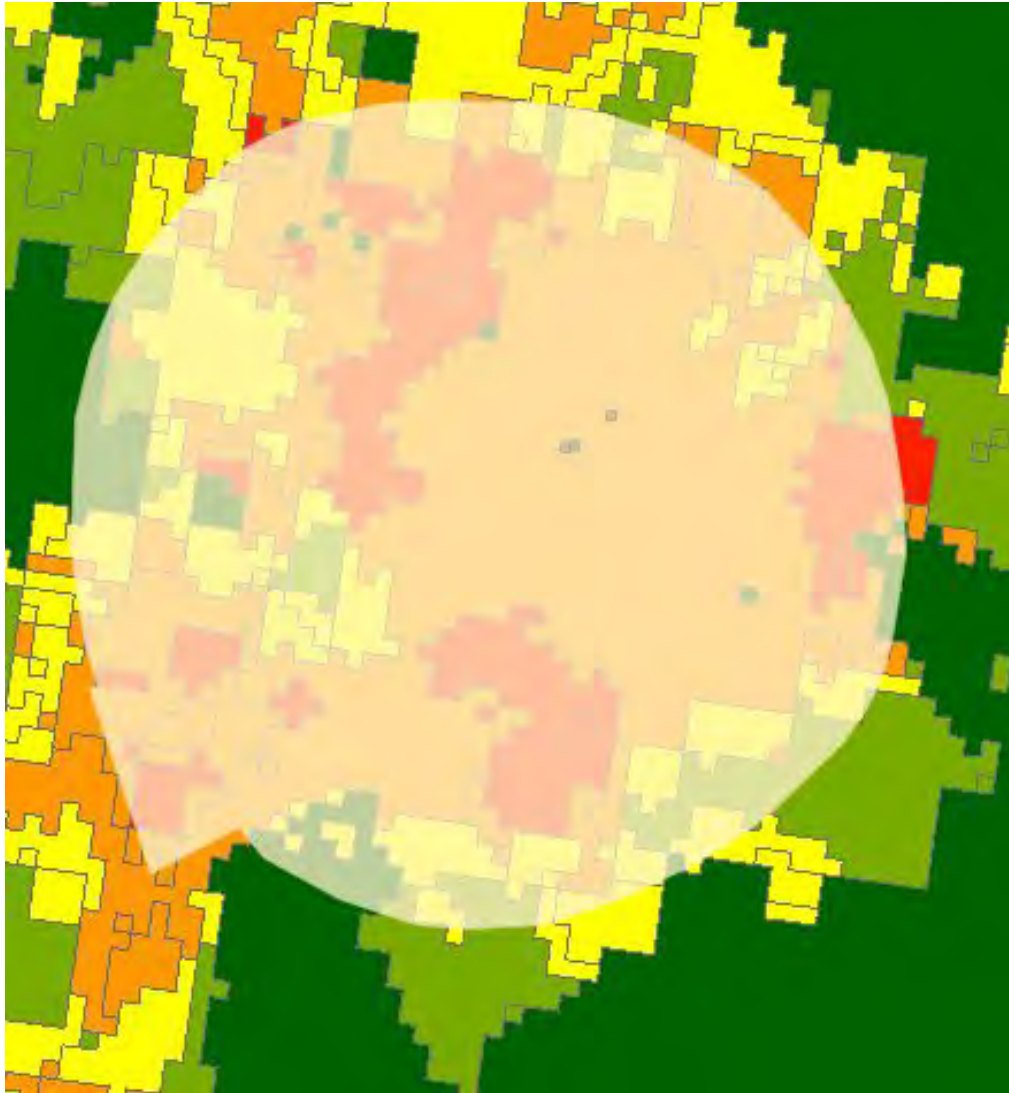
Jurisdiction	Name	Hazard Score	Value	Replacement Value Year	Building size	Content value	Content value year	Functional Use value	Facility type	Risk	Daytime	Nighttime
Wrenscity	Wrens Water Tank	3	625000	2024	150		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrenscity	Wrens Water Tank	3	625000	2024	200		2024	0	Government, Government, Water/Sewer, Water/Sewer	Essential, Lifeline		
Wrenscity	Wrens Water Tank	3	687500	2024	250		2024	0	Government, Government, Water/Sewer, Water/Sewer	Economic Assets, Essential, Lifeline		
	16		\$ 9,714,714.00		11750	\$ 976,224.00						

JEFFERSON COUNTY GMIS WILDFIRE RISK MAP



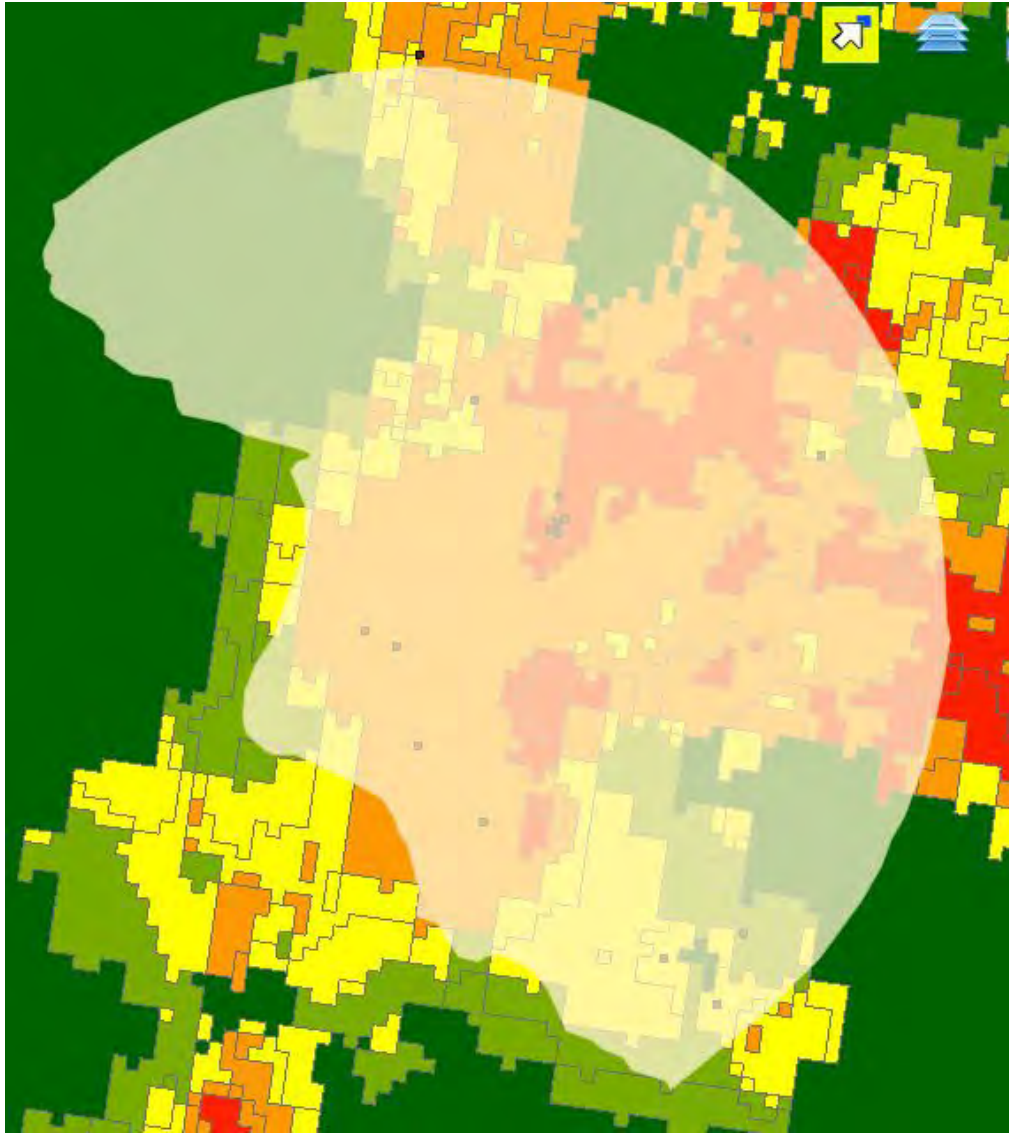
Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

AVERA GMIS WILDFIRE RISK MAP



Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

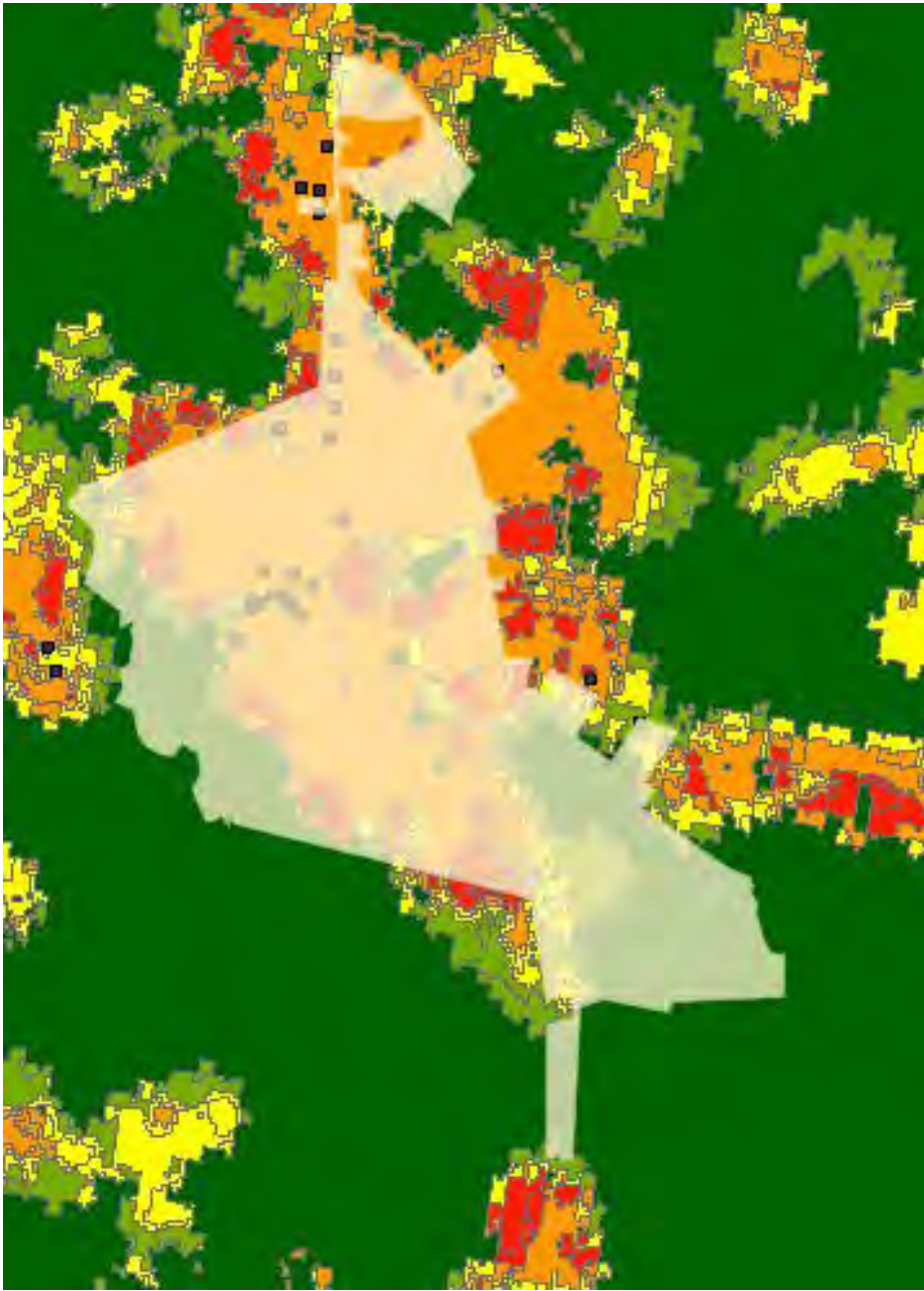
BARTOW GMIS WILDFIRE RISK MAP



Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

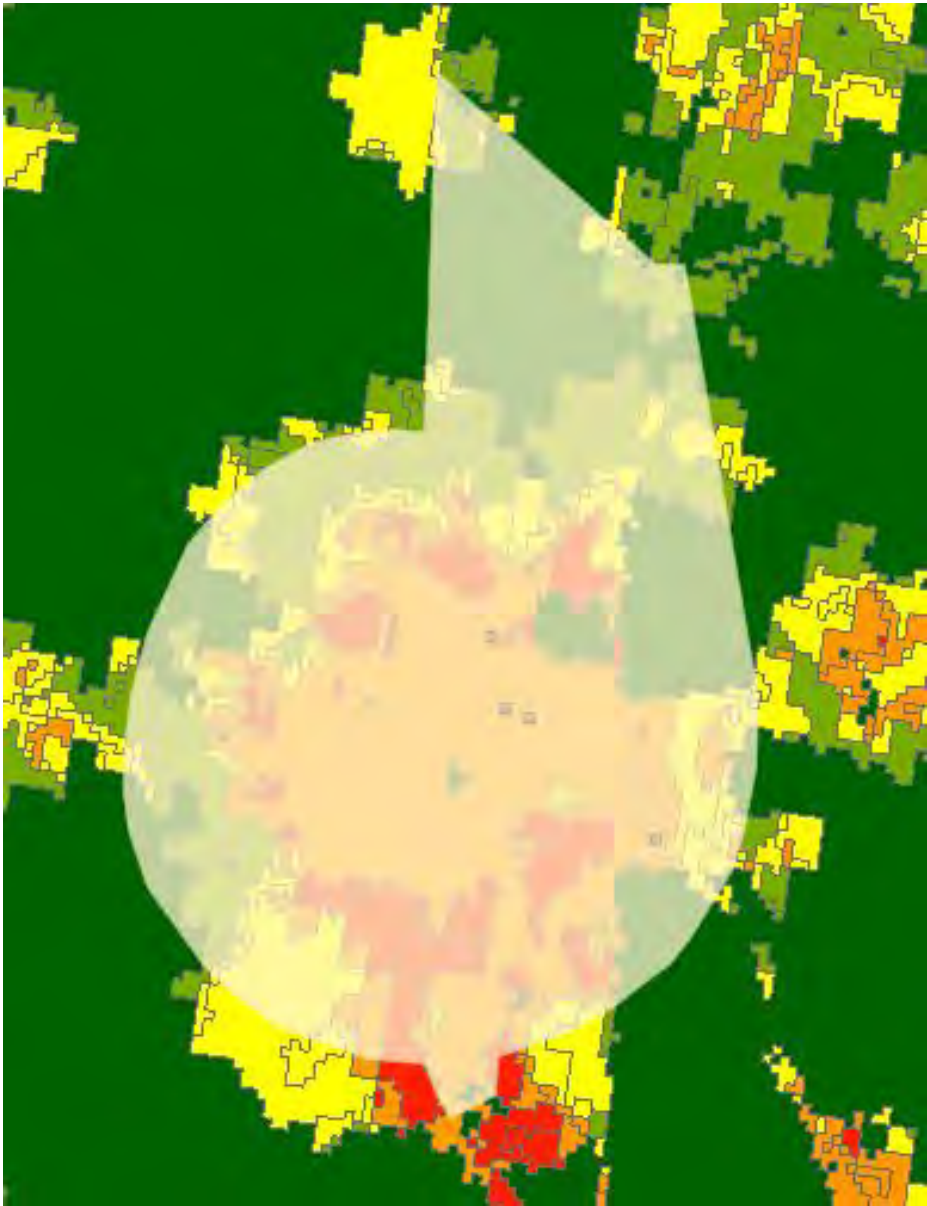
LOUISVILLE GMIS WILDFIRE RISK MAP

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

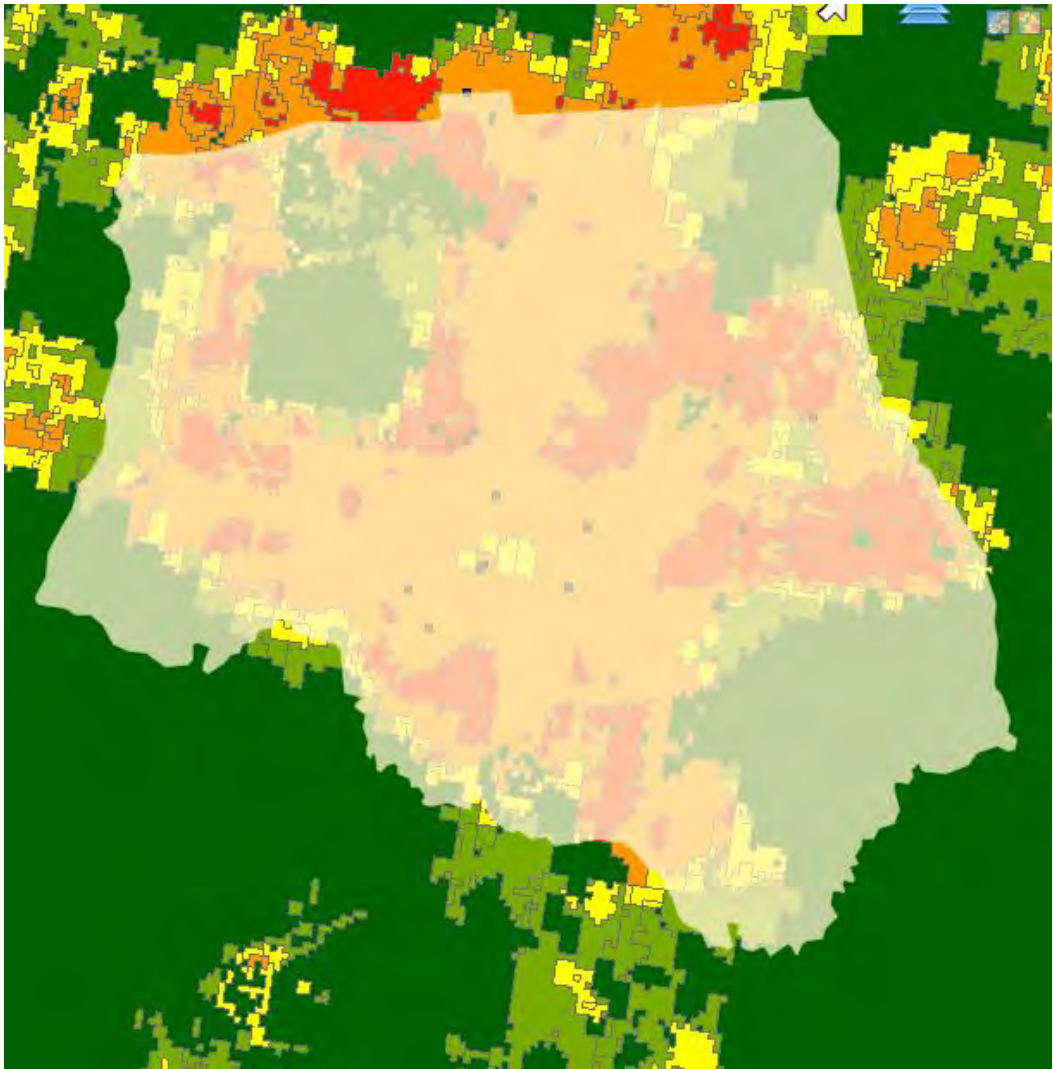


STAPLETON GMIS WILDFIRE RISK MAP

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



WADLEY GMIS WILDFIRE RISK MAP



Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City

WRENS GMIS WILDFIRE RISK MAP

Score	Description
4	High
3	Moderate
2	Low
1	Very Low
0	No Houses
	Agriculture
	Water
	City



Tornadoes

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud. It is spawned by a thunderstorm or the result of a hurricane and is produced when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. Tornadoes are among the most unpredictable and destructive weather phenomena and can strike at any time of the year if essential conditions are present. The damage from a tornado is a result of the high wind velocity and wind-blown debris.

Tornadoes do not touch down as frequently; however, the unpredictability and the potential for excessive damage caused by tornadoes makes it imperative that mitigation measures identified in this plan receive full consideration. Based on 54 years of historical data, there have been 15 reported tornadoes in the planning area. The highest magnitude reported was an EF3. Reported property and crop damages for all 15 events totaled more than \$9.5 Million with 12 injuries. Tornadoes tend to strike in somewhat random fashion, making the task of calculating a recurrence interval extremely difficult. There is a 28 percent chance of a tornado event for the County as a whole every three and half years.

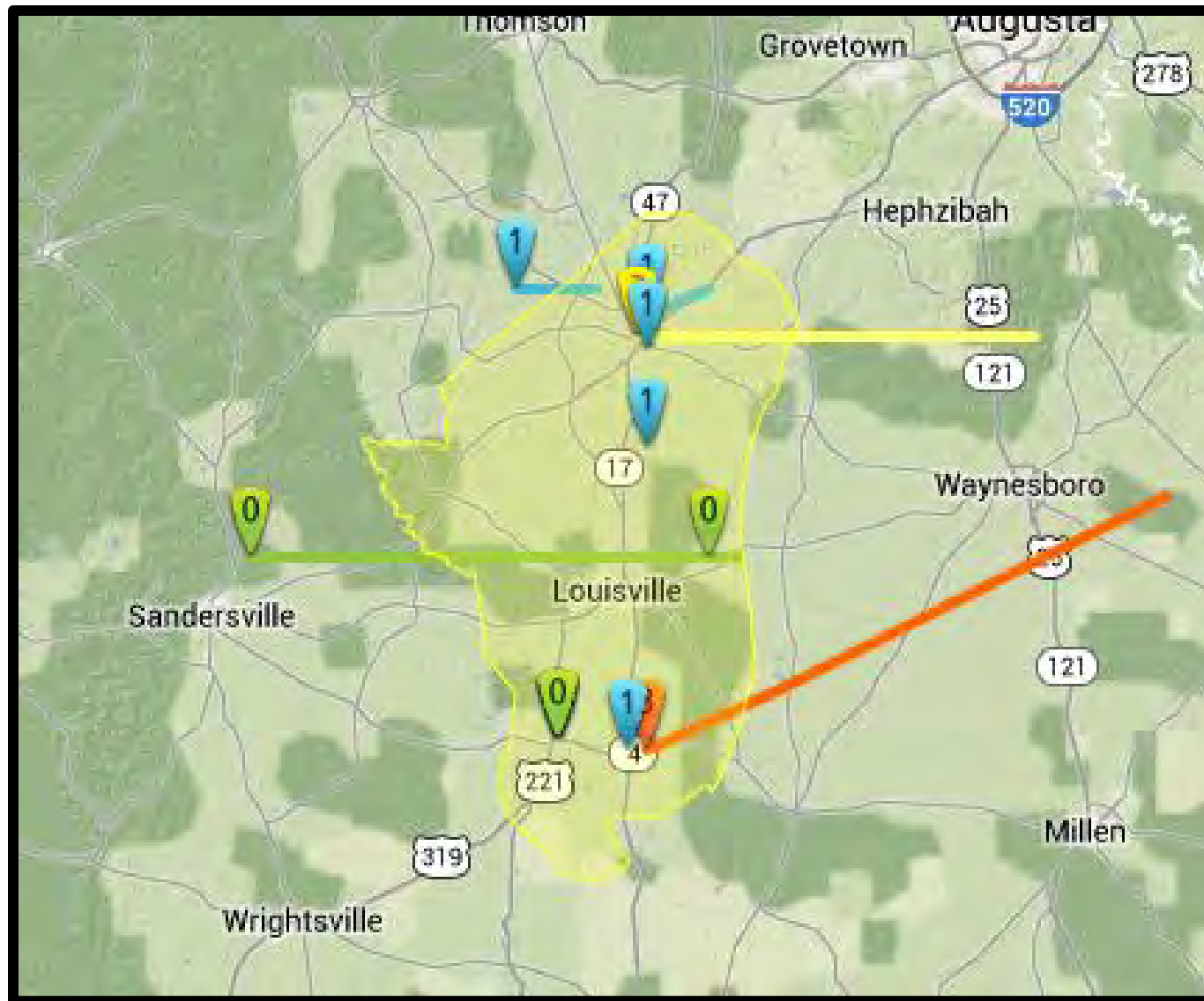
EVENT_ID	BEGIN_LO CATION	BEGIN_DATE	EVENT_TYP E	TOR_F_ SCALE	DEATHS _DIRECT	INJURIES_ DIRECT	DAMAGE_PROPERTY_ NUM	EPISODE_NARRATIVE
9996441		7/22/1970	Tornado	F0	0	0	\$-	
9994549		7/19/1971	Tornado	F1	0	0	\$25,000.00	
9995631		1/13/1972	Tornado	F3	0	2	\$2,500,000.00	
9994567		3/18/1981	Tornado	F1	0	1	\$25,000.00	
9995917		7/25/1981	Tornado	F1	0	0	\$250,000.00	
9994881		12/4/1983	Tornado	F0	0	2	\$30.00	
9993864		10/1/1989	Tornado	F1	0	2	\$25,000.00	
5547389	WRENS	3/7/1996	Tornado	F1	0	5	\$1,000,000.00	A tornado destroyed 2 brick homes and 7 mobile homes. 15 other homes were heavily damaged and 10 others had minor damage. The path and duration of the tornado was estimated. There were intermittent touchdowns.
5560037	BARTOW	6/15/1996	Tornado	F0	0	0	\$10,000.00	A possible tornado touched down briefly on Baldee Road between Bartow and Louisville. It damaged a cattle barn and power poles. A tree was downed and there was debris over the road. The length and width are estimated.
89334	WRENS	3/15/2008	Tornado	EF2	0	0	\$500,000.00	The pattern that began to evolve on March 14th continued and intensified on March 15th. A stationary front remained draped across north Georgia from near Atlanta to Athens. South of this front, the air mass was becoming increasingly warm, moist and unstable. Meanwhile, aloft, a low amplitude, yet vigorous short wave embedded within a fast zonal flow, was tracking rapidly eastward from the mid south into the southeast. Strong shear and high helicity combined with the unstable air mass and the frontal boundary to allow repeated severe thunderstorms to develop and track eastward along the boundary across north Georgia. The activity began early in the day as a complex of thunderstorms moved into the area from Alabama and continued until nearly midnight. As the day progressed, especially during the afternoon, the development of the activity gradually progressed further south and by midnight had reached the south and southeast parts of the state. Numerous severe thunderstorms and tornadic supercells were observed throughout the day. Historical records indicate that this was one of the most significant severe weather days for the Peachtree City Weather Forecast Office with more events and warnings than had been observed since May 2003.

EVENT_ID	BEGIN_LO CATION	BEGIN_DATE	EVENT_TYP E	TOR_F_ SCALE	DEATHS _DIRECT	INJURIES_ DIRECT	DAMAGE_PROPERTY_ NUM	EPISODE_NARRATIVE
102218	GRANGE	5/11/2008	Tornado	EF0	0	0	\$5,000,000.00	<p>A stationary front was draped across north Georgia early on May 10th with an active northwest flow aloft. Meanwhile...a vigorous short wave aloft was approaching the area from the southern plains. The stationary front provided the focus for two rounds of showers and thunderstorms, one early in the morning on the 10th and another in the afternoon. The activity tracked east-southeast with the upper flow aloft, mainly across north Georgia during the early morning and across central Georgia during the afternoon. An isolated strong supercell also tracked across the southern part of central Georgia during the evening. After a lull of convective activity for about four hours, intense multicell thunderstorms tracked into the area from Alabama after midnight and before dawn on the 11th. As these thunderstorms tracked across west central and central Georgia, 15 tornadoes were identified by subsequent surveys making this the most significant tornado outbreak to affect the area since the Katrina-associated tornadoes on August 29, 2005. Millions of dollars of property damage were reported as many homes were destroyed from these tornadoes from the western and southern suburbs of Atlanta southeastward across Macon, Dublin, and other counties in east central and southeast Georgia. Many of these counties were eligible for disaster assistance from the federal government. In addition to the tornadoes and thunderstorm winds that caused extensive damage in dozens of counties across north and central Georgia during the early morning hours of May 11th, strong gradient winds developed on the back side of the strong cold front that moved through the area as low pressure intensified across the mid-Atlantic region. The strong winds combined with wet ground resulted in dozens of trees being blown down in some north Georgia counties. There were also two deaths as a result of downed trees in Barrow and Gwinnett county, all non-thunderstorm-related winds.</p>

EVENT_ID	BEGIN_LO CATION	BEGIN_DATE	EVENT_TYP E	TOR_F_ SCALE	DEATHS _DIRECT	INJURIES_ DIRECT	DAMAGE_PROPERTY_ NUM	EPISODE_NARRATIVE
164625	STAPLETO N	4/10/2009	Tornado	EF1	0	0	\$100,000.00	A vigorous upper closed low was moving from the mid-south and Mississippi valley region into the mid-Atlantic and southeast U.S. A strong cold front accompanied the upper system. A strong low-level jet in advance of these weather systems transported warm, moist Gulf air northward into the region. With strong dynamics, hence shear, combined with an unusually moist, unstable atmosphere, the atmosphere was primed for a major weather outbreak. One round of thunderstorms passed through north Georgia during the early morning hours. A few minor severe weather events accompanied this system in northwest Georgia. Partial clearing followed the morning convection, allowing temperatures to soar into the mid 70s across much of north and central Georgia in advance of the main weather system. Scattered to numerous discrete supercell thunderstorms developed during mid-afternoon in northwest Georgia and progressed east and southeast across the remaining portions of the county warning area during the evening hours. Severe thunderstorms and tornadoes lingered into the early morning hours of the 11th across the southern counties of central Georgia. During the eight hour period from 5 pm EDT on April 10th to 1 am EDT on April 11th, a total of 14 tornadoes were confirmed to have touched down in north and central Georgia causing millions in damages. While some injuries were observed, no deaths were observed.
698287	GRANGE	4/3/2017	Tornado	EF0	0	0	\$25,000.00	A strong short wave and associated surface low swept through the southern and eastern U.S. and combined with moderate instability and strong shear resulted in widespread severe weather, including numerous tornadoes, across north and central Georgia from late morning through the afternoon.

EVENT_ID	BEGIN_LO CATION	BEGIN_DATE	EVENT_TYP E	TOR_F_ SCALE	DEATHS _DIRECT	INJURIES_ DIRECT	DAMAGE_PROPERTY_ NUM	EPISODE_NARRATIVE
893112	ALMIRA	4/13/2020	Tornado	EF0	0	0	\$20,000.00	A powerful Spring storm system resulted in a Severe Weather / Tornado outbreak across much of the Southeast region, including north and central Georgia, beginning on Easter Sunday (April 12th) and lingering into the morning hours of April 13th. From the Storm Prediction Center (Day 1) convective outlook, just about the entire area was under an ENHANCED risk for severe weather with a MODERATE risk extending from the ArkLaMiss into western Georgia. In addition, enhanced rainfall occurred over far north Georgia and in portions of central Georgia, with rainfall amounts ranging from 3 to 8 inches through the event. Significant flooding was in portions of the area with numerous reports of washouts and several reports of rescues.
1074979	MAGNOLIA	1/4/2023	Tornado	EF0	0	0	\$-	A strong developing system over brought moist southerly winds across the north and central Georgia, creating isolated severe thunderstorms and flash flooding on the afternoon and evening of January 3rd. The severe weather threat continued into Wednesday, January 4th, as the storm progressed eastward and brought a cold front across the area, producing isolated damaging wind gusts.
						12	\$9,480,030.00	

<http://www.tornadohistoryproject.com/>



Tropical Storms

Tropical Storms are an organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots). In this area they generally occur because of a hurricane or tropical system that has come inland.

Tropical storms begin as tropical depressions over warm oceanic water, then develop into tropical cyclones. A tropical cyclone's life span can last from a few hours to close to three weeks. Most tropical cyclones last approximately five to ten days. If the winds are under or up to 39 mph, it is a tropical depression. If winds speeds are between 39 to 73 mph, it is considered a tropical storm. Any storm with over 74 mph wind speed is called a hurricane. As a rule, hurricanes occur in the western Atlantic Ocean when warm, humid conditions are prevailing. Hurricanes are usually accompanied by excessive rain, thunder and lightning. When hurricanes make landfall, they typically slow down. Unfortunately, at that time, another danger often appears – tornados. A storm surge, which is an abnormal rise in water levels in a coastal area, usually occurs with tropical storms. Jefferson County is not likely to experience a hurricane or storm surges.

The entire county has the potential to be affected by tropical storms. Based on historical data, there have been 14 tropical storms reported by the NCEI and SHELDUSTM with reported property and crop damage. The county is actively conducting damage assessments for Hurricane Debby and Hurricane Helene, and total damages are yet to be finalized by local officials. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly more than \$1.2 Billion with a population of 16,930.

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5316379	JEFFERSO N (ZONE)	9/14/2002	1100	Tropical Storm	<p>Saturday, September 14, 2002. The remnants of Hanna then moved northeast across central Alabama during the day Saturday and then across north Georgia Saturday evening into Sunday morning. The center of the remnants of Hanna passed near Carrollton, Georgia around 2 AM EDT Sunday morning, then exited the state near Clayton, Georgia Sunday morning, September 15th, around 10 am EDT. While the heaviest rain and wind associated with Hanna did not affect north and central Georgia area, a significant northwest -southeast oriented feeder band associated with Hanna moved across north and central Georgia during the mid and late afternoon Saturday. Wind gusts of 45 to 50 mph and very heavy tropical thunderstorms accompanied the feeder band. Numerous trees and power lines were blown down as the feeder band moved rapidly northeast through the afternoon. Many residents of north Georgia were left without power for at least a few hours. In the Atlanta metropolitan area alone, 48,000 residents were left without power. There were also scattered areas of urban and street flooding as up to 2 inches or more of rain fell in association with the feeder band in a one to two hour period. The heaviest rain fell across the counties north of a line from Atlanta to Athens. Additional rain fell across the region Saturday night and Sunday morning, but was considerably less intense, confined mainly to central Georgia, and was not accompanied with damaging winds. Three day rainfall totals in association with Hanna were in excess of 3 inches across much of northeast, east central, and the southern portions of middle Georgia. Athens reported 3.54 inches on September 14th alone, with a 3-day total of 5.03 inches. The average rainfall amount for north Georgia stations for the month was in excess of 7 inches, and was nearly 5 inches for middle Georgia. These rainfall amounts are approximately 3.5 and 1.5 inches above normal, respectively. Several stations, particularly in north Georgia had in excess of 10 inches of rain during the month, with 12.47 inches at Carrollton, 11.23 inches at Embry, 11.02</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5334529	JEFFERSO N (ZONE)	7/1/2003	0	Tropical Storm	<p>Tropical Depression Bill, which was earlier Tropical Storm Bill, tracked across north and central Georgia during the day bringing heavy rain, flooding, wind damage, and even an isolated tornado to the region. The storm, which formed in the Gulf of Mexico Sunday morning, June 29th, moved inland between New Orleans, Louisiana and Mobile, Alabama on Monday June 30th, then tracked northeast to near Tuscaloosa, Alabama by the morning of July 30th, then turned east-northeast and accelerated. The depression moved between Birmingham, Alabama and Atlanta, Georgia during the afternoon of July 1st, exiting northeast Georgia after midnight on July 2nd. Twenty-four rainfall totals of four to six inches were common on July 1st across much of north and portions of central Georgia, roughly north of a line from Columbus to Athens. Rainfall amounts were generally in the 1 to 2 inch range south of this line. There were numerous reports of flooding, especially in the Atlanta metropolitan area, and a number of roads were rendered impassable and closed. The ground across north and central Georgia was saturated from a number of weeks of above normal rainfall and the tropical storm rainfall just exacerbated the situation. As the center of circulation associated with the tropical depression tracked across north Georgia, a brief F1 tornado spinup occurred in Morgan county southwest of Madison in east central Georgia. There were also other isolated wind damage reports in areas east and southeast of Atlanta from Stockbridge to Madison to Athens.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_T IME	EVENT_TY PE	EPISODE_NARRATIVE
5423956	JEFFERSO N (ZONE)	9/6/2004	1200	Tropical Storm	<p>scale) with sustained winds of 145 mph, reached the east coast of Florida just north of West Palm Beach, Florida early on September 5th. The storm weakened to a Tropical Storm as it continued west-northwest across the Central Florida Peninsula reemerging over the northwest Gulf of Mexico early on September 6th. The storm then took on more of a northwestward movement, making landfall later on the 6th near Saint Marks Florida along the Florida Panhandle Gulf Coast. Continuing north-northwestward from this point, Tropical Storm Frances entered far southwest Georgia near Bainbridge late in the evening on the 6th. The storm continued moving north-northwest through far western Georgia on the 7th to near Atlanta around midnight on the 7th, then to near Chattanooga, Tennessee early on the 8th. By far the most significant problem with Frances for Georgia was strong, sustained winds of 35 to 40 mph with gusts in excess of 50 mph. Most of the high winds were concentrated in a large east-west oriented rain band that moved north across Georgia during the evening of the 6th and the early morning hours of the 7th. It was during this period of time that significant damage occurred across many Central, East Central, and North Central Georgia counties. The strongest winds and most significant damage occurred in the areas east and south of a line from Americus, to Atlanta, to Athens. Many of the counties within this area suffered extensive wind damage. Dozens to hundreds of trees were blown down, also bringing down dozens to hundreds of power lines. Nearly 300,000 people were left without power during the storm, several thousand for several days. Dozens of homes suffered major damage throughout Central and North Central Georgia, with dozens more sustaining minor damage. The most significant damage took place in an area bounded by Macon, Atlanta, Greensboro, Dublin, Americus, and back to Macon. Damages in the millions were observed in several of these counties, including several large pecan orchards which were virtually destroyed. Estimated total damage with Frances \$14.9</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5424489	JEFFERSO N (ZONE)	9/16/2004	0	Tropical Storm	<p>within its life cycle a category five hurricane, developed from a tropical wave which moved off the African coast on August 31st. The system became a tropical depression on September 2nd, and tropical storm on September 3rd, and a hurricane early on September 5th. Later that same day, it became a major hurricane. Ivan moved westward for several days and passed over the southern Windward islands, then moved west-northwest through the southern Caribbean passing just north of Venezuela and the Netherlands Antilles. The hurricane reached category five strength on September 9th as it neared Jamaica. The hurricane weakened to a category four storm as it passed near Jamaica. The storm maintained its category four strength as it turned slightly west of north until the 11th when it briefly strengthened once again to a category five storm. The storm passed near Grand Cayman and the west tip of Cuba from September 11th to the 12th as mostly a category four hurricane. The storm then turned to the northwest and moved through the Yucatan Channel. It briefly regained category five strength one more time as it moved through the Gulf, but weakened to a category three hurricane by the time it struck the U.S. Gulf Coast near Gulf Shores, Alabama around 2 am September 16th. From here, the weakening hurricane moved nearly due north to near Birmingham by the evening of the 16th. By this time it had weakened to a tropical storm. The storm then turned northeast across northwest Georgia during the early morning hours of the 17th as it weakened to a tropical depression. Ivan brought tornadoes, high winds, and significant to record flooding to north and central Georgia. The track of Ivan across central and northeast Alabama also put much of central and eastern Georgia in the favorable quadrant for strong spiral feeder bands and tornadoes. Six tornadoes were confirmed with Ivan causing an estimated \$3.4 million dollars in damages. These tornadoes consisted of two F1 tornadoes, one each in Madison and Wilkes county in northeast Georgia, with one F0 tornado reported in Cherokee, Madison,</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5424081	JEFFERSO N (ZONE)	9/26/2004	0	Tropical Storm	<p>affect Georgia within a three week period, following just 10 days after Hurricane Ivan, which followed just 10 days after Hurricane Frances. Jeanne caused the least damage to north and central Georgia counties of the three tropical systems to affect the state during the month of September. High winds were limited mainly to the southeast portions of middle Georgia and flooding rains were limited to the Atlanta area and south middle Georgia counties. No tornadoes were observed with Jeanne as the favorable tornado-producing spiral feeder bands remained well east over the Carolinas and western Atlantic. Hurricane Jeanne developed on September 13th from a tropical wave over the Leeward Islands. Jeanne moved slowly across the Virgin Islands and Puerto Rico on the 15th, then slowly over the Dominican Republic and Haiti the 16th and 17th. Most of this time, the storm maintained only strong tropical storm strength. Jeanne then took a northward turn on the 18th and moved across the southeastern Bahamas as a tropical storm. From this point, Jeanne meandered through a slow clockwise loop from the 20th through 23rd, when the loop was finally completed. During this time the storm strengthened to a category two hurricane. Jeanne then began a slow westward track on the 23rd and strengthened to a category three hurricane. The storm then made landfall on the 25th, just north of West Palm Beach, Florida, at almost the exact same location as Hurricane Frances had done 20 days prior. Jeanne weakened to a tropical storm as it turned north-northwest across central Florida on the 26th and then weakened into a tropical depression as it moved into southern Georgia early on the 27th. The storm tracked from near Valdosta during the early morning hours of the 27th, reaching Macon around sunset on the 27th, then accelerating into northeast Georgia near Athens by midnight and out of the state early on the 28th. High winds of 35 to 40 mph with some higher gusts were confined mainly to the central and southeast portions of middle Georgia, roughly southeast of a line from Macon to Sandersville. Rainfall</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5468048	JEFFERSO N (ZONE)	6/12/2005	0	Tropical Storm	<p>Tropical Storm Arlene, which formed on June 8th near the northeast coast of Honduras, became a tropical storm on the 9th southwest of Grand Cayman. Arlene moved slowly northward and steadily intensified as it crossed western Cuba. The storm continued northward over the eastern Gulf of Mexico where it reached its peak intensity with a wind speed of 70 mph. The storm made landfall near Pensacola, Florida with 60 mph on the 10th. The storm moved slowly northward through central and western Alabama on the 11th and 12th. Damage to Georgia from the storm was minimal. While rain occurred in many areas, only one flash flooding event was reported in association with Arlene, namely in Towns county on the 12th.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
5477107	JEFFERSO N (ZONE)	10/5/2005	400	Tropical Storm	<p>Tropical storm Tammy developed just east of the central Florida coast on the 5th of October as the result of a complex interaction between an upper-level low and a tropical wave. The storm quickly strengthened from tropical depression status to a tropical storm early on the 5th about 20 miles east of Cape Canaveral, Florida. The storm moved north-northwest parallel to the Florida coast most of the 5th until it turned northwest and made landfall along the northeast Florida coast near Mayport, Florida late on the 5th. Its maximum sustained winds were only 50 mph. Tammy moved west across south Georgia and southwest Alabama on the 6th before becoming absorbed into an extratropical low pressure area over the Florida Panhandle. The main effects of Tammy on north and central Georgia consisted of approximately two days of a steady light to moderate rain. However from late on the 5th through much of the 6th, bands of heavier rain showers affected much of eastern Georgia. Two-day rainfall totals of three to five inches were common across east Georgia, mostly east of a line from Athens to Dublin. Areas immediately west of this line received generally one to two inches of rain, while the western most counties of Georgia against the Alabama border received less than one inch of rain in association with tropical storm Tammy. No tornadoes occurred and no wind damage or flooding was reported in north or central Georgia in association with Tammy. The rain that fell as a result of Tammy followed a period of nearly 40 days during which most of the region had received less than 0.10 inch of rain. Wind associated with this system across north and central Georgia was for the most part 15 mph or less.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
132251	JEFFERSO N (ZONE)	8/21/2008	1200	Tropical Storm	<p>brought to much of Florida as well as being one of the longer lived tropical systems to affect the U.S. Tropical Storm Fay formed from a tropical wave on August 15th along the east coast of Hispaniola. The storm moved west along the south coast of Cuba before reaching a weakness in the subtropical ridge to its north causing it turn north-northwestward into central Cuba by the 17th. Fay continued to track north-northwest through the Florida straits and Florida Keys on the 18th before turning northeast toward the Florida peninsula. The storm made landfall on August 19th in southwest Florida at Cape Romano as a tropical storm with winds of 60 mph. Fay continued to move very slowly northeast across the central Florida peninsula, well maintaining its strength along the way, reaching the northeast coast of Florida on August 21st. At this point, a strengthening subtropical ridge and surface high over the mid-Atlantic region forced Fay to take a sharp westward turn toward the Florida panhandle. The storm tracked west to west-northwest from the 22nd through the 25th into extreme southeast Louisiana before reaching the western end of the subtropical ridge and an approaching frontal system. Thus, Fay once again turned back toward the northeast across central Mississippi and central/northern Alabama before finally becoming absorbed into the mean flow and a frontal system located across the Tennessee Valley. The slow movement of Fay and the proximity to the forecast area allowed for Fay's impacts on the Peachtree City forecast area to last several days. Outer rain bands affected the southern parts of the forecast area as early as the 20th. Outer rain bands continued to affect the southern counties as Fay tracked slowly west through the Florida Panhandle the 21st, 22nd, and 23rd. Some of these produced gusty winds and a few trees were blown down in the far southeastern counties, namely Toombs with three downed trees and Emanuel with two downed trees. While no tornadoes occurred at this point, tornado warnings were issued for several counties in the south central and southeast part</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
204045	JEFFERSO N (ZONE)	11/10/2009	500	Tropical Storm	<p>Hurricane Ida, which formed in the Caribbean and intensified to a category two hurricane on the Saffir-Simpson scale, moved north from the Caribbean across the central Gulf of Mexico and then inland along the U.S. Gulf coast near Mobile, Alabama early on the 10th. The remnants of the hurricane then moved east-northeast across southern Alabama and southern Georgia before moving off the east coast of the U.S. as a strong surface low pressure area. Heavy rainfall, on the order of four to five inches, was common across north Georgia, with one to two inch amounts across central areas. With the ground totally saturated from several prior months of heavy rainfall, widespread creek, stream, and river flooding was observed over a two to three day period. Because the rain intensity was mostly moderate or less and extended over a period of 18-24 hours, flash flooding events were isolated, with most of the flood events being of the creek, stream, and river flood nature. The small wind core of Hurricane Ida and its track across land significantly reduced the wind effects of this system on north and central Georgia. Winds were generally in the 15 to 20 mph range with a few stronger gusts. Only Banks county in northeast Georgia observed any wind damage, where a few trees and power lines were blown down.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
349244	JEFFERSO N (ZONE)	9/4/2011	1100	Tropical Storm	<p>Tropical Storm Lee moved slowly onshore the Louisiana coast on Friday September 2nd and then grudgingly moved northeast through Sunday September 4th before finally becoming caught up in an eastward advancing upper trough and associated frontal system. The remnants of Lee tracked across central Mississippi, central and northern Alabama, and into northern Georgia on the 5th before moving northeast of the area early on September 6th. The remnants brought beneficial modest rainfall amounts to the northwestern half of Georgia, with the heaviest rainfall falling in northwest Georgia, mainly northwest of a Rome to Dalton line. In this corner of the state, rainfall of five to seven inches was common over the two-day period, resulting in minor flooding. During the afternoon of the 5th, daytime heating combined with a pocket of strong shear associated with the remnants of Tropical Storm Lee and spawned numerous strong thunderstorms across north and central Georgia. Many of these exhibited strong low-level rotation prompting numerous tornado warnings during the afternoon and evening hours of the 5th. However, only one of these actually netted a tornado, an EF1 that tracked across much of eastern Cherokee county causing extensive damage to homes and businesses in that area. Damages were likely in excess of \$11 million across eastern Cherokee county. Tornado, thunderstorm wind, and flash flood damages related to Tropical Storm Lee are provided via those individual damage reports.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
721396	JEFFERSO N (ZONE)	9/11/2017	800	Tropical Storm	<p>On the morning of August 30th Tropical Storm Irma developed rapidly over the eastern Atlantic Ocean, just west of the Cape Verde Islands. Tropical Irma quickly strengthened as it moved west, reaching hurricane strength by the morning of August 31st. Hurricane Irma continued to move steadily westward across the Atlantic Ocean, intensifying to category 4 storm on the Saffir-Simpson scale as it approached the northern Leeward Islands of the Lesser Antilles on September 4th. By the morning of the September 5th Hurricane Irma had reached category 5 and remained so into the morning of September 8th as it moved through the northern Antilles and approached the Bahamas. Irma continued moving west northwest as a category 4 storm before turning north over the Florida Straits, and crossing the Florida Keys on the 9th and 10th. Hurricane Irma made landfall over southwest Florida as a category 4 storm during the evening of the 10th and travelled north northwest through western Florida before weakening to a category 1 hurricane as it crossed into southwest Georgia the afternoon of September 11th. Tropical Storm Irma crossed southwest Georgia through the day of the 11th before weakening to a tropical depression over north Alabama early on the morning of the 12th. Tropical storm strength winds produced widespread damage across central and north Georgia through the day of September 11th and into the early morning hours of the 12th. Isolated flash flooding associated with Tropical Storm Irma was reported as well.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
793581	JEFFERSO N (ZONE)	10/10/2018	2200	Tropical Storm	<p>Hurricane Michael made landfall along the Florida panhandle at Mexico beach (just southeast of Panama City) on the afternoon of October 10, 2018 as a high-end Category 4 hurricane (max winds of 155 MPH). Michael then moved rapidly inland, causing widespread wind damage along its path as it swept northeast across south and central Georgia. Hurricane Michael was the first major hurricane, category 3 or higher, to directly impact Georgia since the 1890s. In southwest Georgia, wind gusts as high as 115 mph were recorded. Within the NWS Atlanta/Peachtree City county warning area, wind gusts of 40-60 MPH, with some gusts over 70 mph, across portions of central Georgia on the evening of October 10th into the morning of October 11th led to widespread tree damage and power outages with damage to numerous structures. Severe crop damage was also reported, especially to cotton and pecan crops, as well as devastating impacts to commercial timberland. In addition, a few brief tornadoes in the outer bands of Michael caused isolated damage in portions of the north and central Georgia while heavy rainfall led to localized flooding. Michael quickly exited the state as a tropical storm late on the morning of October 11th.</p>

EVENT_ID	CZ_NAME_ STR	BEGIN_DATE	BEGIN_TI ME	EVENT_TY PE	EPISODE_NARRATIVE
924110	JEFFERSO N (ZONE)	10/29/2020	200	Tropical Storm	During the late evening of October 28th through the morning of October 29th, Tropical Storm Zeta swept rapidly across north Georgia producing widespread wind damage and isolated flooding across north and portions of central Georgia. Around 1.5 million customers lost electricity for some period of time, some for several days.

Severe Weather (Thunderstorm Wind, Lightning, and Hail)

Three types of severe weather were identified by the mitigation team: (1) thunderstorm winds, (2) lightning and (3) hail.

The first severe weather event, thunderstorm winds, can cause death and injury, power outages, property damage, and can disrupt telephone service, severely affect radio communications and surface/air transportation which may seriously impair the emergency management capabilities of the affected jurisdictions. Thunderstorm winds arise from convection (with or without lightning), with speeds of at least 50 knots (58 mph), or winds of any speed producing a fatality, injury, or damage. Severe thunderstorms develop powerful updrafts and downdrafts. An updraft of warm, moist air helps to fuel a towering cumulonimbus cloud reaching tens of thousands of feet into the atmosphere. A downdraft of relatively cool, dense air develops as precipitation begins to fall through the cloud. Winds in the downdraft can reach in excess of 100 miles per hour. When the downdraft reaches the ground, it spreads out forming a gust front: the strong wind that kicks up just before the storm hits. As the thunderstorm moves through the area, the full force of the downdraft in a severe thunderstorm can be felt as horizontal, straight-line winds with speeds well over 50 miles per hour. Straight-line winds are often responsible for most of the damage associated with a severe thunderstorm. Damaging straight-line winds occur over a range of scales. At one extreme, a severe single-cell thunderstorm may cause localized damage from a microburst, a severe downdraft extending not more than about two miles across. In contrast, a powerful thunderstorm complex that develops as a squall line can produce damaging winds that carve a path as much as 100 miles wide and 500 miles long.

The second severe weather event is lightning. Lightning results from the buildup and discharge of electrical energy between positively and negatively charged areas. Rising and descending air within a thunderstorm separates these positive and negative charges. Water and ice particles also affect charge distribution. A cloud-to-ground lightning strike begins as an invisible channel of electrically charged air moving from the cloud toward the ground. When one channel nears an object on the ground, a powerful surge of electricity from the ground moves upward to the clouds and produces the visible lightning strike. Lightning often strikes outside of heavy rain and may occur as far as 10 miles away from any rainfall.

The final severe weather event is hail. Hailstones are created when strong rising currents of air called updrafts carry water droplets high into the upper reaches of thunderstorms where they freeze. These frozen water droplets fall back toward the earth in downdrafts. In their descent, these frozen droplets bump into and coalesce with unfrozen water droplets and are then carried back up high within the storm where they refreeze into larger frozen drops. This cycle may repeat itself several times until the frozen water droplets become so large and heavy that the updraft can no longer support their weight. Eventually, the frozen water droplets fall back to earth as hailstones. Hail can also be a destructive aspect of severe thunderstorms. Hail causes more monetary loss than any other type of thunderstorm-spawned severe weather in the United States, annually producing about one billion dollars in crop damage. Storms that produce

hailstones only the size of a dime can produce dents in the tops of vehicles, damage roofs, break windows and cause significant injury or even death.

The GMIS has the entire county with a wind hazard score of two, where wind speed is between 90 to 99 mph. All 118 critical facilities have a wind hazard score of two with a replacement cost of more than \$328 million. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 Billion with a population of 16,930.

Jefferson County_ National Weather_ Hail						
EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DAT	DAMAGE_PRO	SOURCE	EVENT_NARRATIVE
9994338	JEFFERSON		6/3/1959	0		
9994210	JEFFERSON		4/18/1969	0		
9993804	JEFFERSON		4/14/1984	0		
5546085	JEFFERSON	LOUISVILLE	4/26/1996	0		
5639121	JEFFERSON	BARTOW	4/3/1998	0		
5639962	JEFFERSON	LOUISVILLE	4/17/1998	0		
5638330	JEFFERSON	LOUISVILLE	4/22/1998	0		Jefferson county 911 reported quarter size hail between Louisville and Wrens.
5687497	JEFFERSON	LOUISVILLE	4/24/1999	0	GENERAL P	The public reported hail a little larger than golf ball size, strong winds, and power out in Louisville.
5263645	JEFFERSON	AVERA	8/24/2001	0	POST OFFIC	The Avera Post Office reported dime size hail.
5292022	JEFFERSON	LOUISVILLE	5/3/2002	0	EMERGENC	The Jefferson county 911 center reported dime to quarter size hail.
5308090	JEFFERSON	WRENS	7/6/2002	0	LAW ENFOR	The Wrens police department reported golf ball size hail.
5345634	JEFFERSON	LOUISVILLE	3/19/2003	0	EMERGENC	The Jefferson county 911 center and the public both reported penny size hail.
5349602	JEFFERSON	WRENS	4/7/2003	0	LAW ENFOR	The Wrens Police Department reported quarter-sized hail.
5360827	JEFFERSON	LOUISVILLE	5/2/2003	0	EMERGENC	The Jefferson county 911 center reported penny-sized hail.
5362267	JEFFERSON	LOUISVILLE	5/11/2003	0	GENERAL P	The public reported nickel to quarter-sized hail halfway between Louisville and Wrens.
5410261	JEFFERSON	STELLAVILL	6/12/2004	0	GOVT OFFI	The Jefferson County 911 center reported golf ball-sized hail in the Stellaville area.

5447895	JEFFERSON	LOUISVILLE	4/13/2005	0	GOVT OFFI	The Jefferson County 911 Center reported quarter-sized hail.
5489482	JEFFERSON	LOUISVILLE	#####	5000	TRAINED SP	The Columbia, SC Weather Forecast Office relayed a report from a storm spotter of golf ball-sized hail.
5513048	JEFFERSON	LOUISVILLE	5/14/2006	0	TRAINED SP	The public reported penny-sized hail.
5513050	JEFFERSON	LOUISVILLE	5/14/2006	0	EMERGENC	The Jefferson County Emergency Management Director reported penny-sized hail.
5526793	JEFFERSON	BARTOW	7/28/2006	0	GENERAL P	The public observed penny-sized hail.
89549	JEFFERSON	STAPLETON	3/15/2008	300000	Public	The public observed tennis ball-sized hail across northern Jefferson county, especially in the Wrens area. The Huddle House restaurant on Main Street in Wrens suffered considerable damage from the large hail as a number of windows were broken.
127792	JEFFERSON	LOUISVILLE	7/22/2008	0	County Offi	The Jefferson County 911 Center reported that penny-sized hail fell in the northwest part of the county, south of Avera. Radar data supported that large hail likely fell over a larger area than reported.
128653	JEFFERSON	WRENS	7/28/2008	80000	Public	The public observed golf ball-sized hail in Wrens. Radar supports that large hail of similar size likely fell across a good portion of northeast Jefferson county.

131141	JEFFERSON	WADLEY	8/4/2008	0	Law Enforc	An officer with the Wadley Police Department observed penny-sized hail in the Wadley area.
242837	JEFFERSON	LOUISVILLE	6/20/2010	0	County Offi	The Jefferson County 911 Center relayed reports of quarter-sized hail northwest to west northwest of Louisville in northwest and west central Jefferson county.
347937	JEFFERSON	WRENS	9/25/2011	0	Broadcast M	The Macon television media relayed reports of nickel-sized hail around Wrens.
349823	JEFFERSON	WADLEY	9/27/2011	45000	Public	The public observed golf ball-sized hail just south of Wadley in the far southern part of the county.
451962	JEFFERSON	WRENS	5/21/2013	0	Public	The public reported nickel sized hail in Wrens.
518640	JEFFERSON	LOUISVILLE	5/25/2014	0	911 Call Ce	The Jefferson County 911 Center reported quarter sized hail in Louisville.
511241	JEFFERSON	AVERA	5/27/2014	0	911 Call Ce	The Jefferson County 911 Center reported quarter sized hail south of Wrens.
962690	JEFFERSON	LOUISVILLE	5/3/2021	0	Emergency	The Jefferson County Emergency Manager reported hail the size quarters in Louisville.
				\$430,000.00		

National Weather_Jefferson County_Lightning						
EVENT_ID	CZ_NAME_	BEGIN_DATE	EVENT_TYP	DAMAGE_PROP	SOURCE	EVENT_NARRATIVE
5609002	JEFFERSON	7/23/1997	Lightning	200000		Lightning was responsible for at least three house fires in Jefferson County. The first one was reported at approximately 1:33 am in Zebina. Lightning struck a tree and jumped to a nearby home, entering the home through electrical wiring. Several appliances were damaged and the front door was knocked off of its hinges. A second strike at 1:38 am, entered the homes attic, after having struck a nearby tree. Some of the attic's insulation caught fire. The third lightning strike occurred just before 3:00 am. The lightning struck a pecan tree at the corner of a home, then entered the house. The sole occupant was able to escape and drive for help. The house was a total loss.
5714729	JEFFERSON	8/20/1999	Lightning	10000	NEWSPAPER	Lightning caused a fire that spread throughout the attic of a home on North Main Street. There was damage to the roof and its support above several rooms.
5374576	JEFFERSON	8/10/2003	Lightning	25000	EMERGENCY	The Jefferson county 911 center reported that lightning struck a house and set it on fire. Damage estimates were inconclusive.

EVENT_ID	CZ_NAME_	BEGIN_DAT	EVENT_TYP	DAMAGE_PROP	SOURCE	EVENT_NARRATIVE
340451	JEFFERSON	8/6/2011	Lightning	500	County Offi	<p>The Jefferson County 911 Center reported that lightning struck a tree at the intersection of Georgia Highway 88 and Moore Road in Stapletons Crossroads. The tree was set on fire. The summertime pattern continued. A quasi-stationary front remained across north Georgia and extended westward into the mid-south. A strong subtropical ridge also remained across the south, anchored in north Texas. The upper ridge had retrograded slightly from the previous day allowing slightly more active northwest flow to evolve across the southeastern states. A hot, very moist, unstable air mass remained in place across Georgia. Scattered to numerous thunderstorms developed across west central Georgia during the late morning and early afternoon and propagated on outflow boundaries northward and eastward across much of north and east Georgia. Although very few of these storms reached severe limits, frequent to excessive cloud-to-ground lightning was noted with many of these storms, as well as locally very heavy rain on the order of two to three inches.</p>
				\$235,500.00		

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_ STR	BEGIN_LO CATION	BEGIN_DA TE	BEGIN_TI ME	EVENT_TY PE	DAMAGE_PROP ERTY_NUM	SOURCE	EVENT_NARRATIVE
9995458	JEFFERSON CO.		3/8/1961	800	Thunderst orm Wind	0		
9998216	JEFFERSON CO.		7/4/1966	1500	Thunderst orm Wind	0		
9994540	JEFFERSON CO.		6/27/1971	1800	Thunderst orm Wind	0		
9993514	JEFFERSON CO.		3/21/1974	540	Thunderst orm Wind	0		
9997814	JEFFERSON CO.		4/13/1979	1500	Thunderst orm Wind	0		
9995936	JEFFERSON CO.		2/16/1982	1930	Thunderst orm Wind	0		
9997173	JEFFERSON CO.		4/23/1983	1820	Thunderst orm Wind	0		
9995079	JEFFERSON CO.		7/29/1986	1240	Thunderst orm Wind	0		
9997343	JEFFERSON CO.		7/24/1987	1330	Thunderst orm Wind	0		

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_ STR	BEGIN_LO CATION	BEGIN_DA TE	BEGIN_TI ME	EVENT_TY PE	DAMAGE_PROP ERTY_NUM	SOURCE	EVENT_NARRATIVE
9997344	JEFFERSON CO.		7/24/1987	1430	Thunderstorm Wind	0		
9995171	JEFFERSON CO.		6/26/1988	1945	Thunderstorm Wind	0		
9996313	JEFFERSON CO.		2/28/1989	615	Thunderstorm Wind	0		
9996479	JEFFERSON CO.		4/28/1990	1720	Thunderstorm Wind	0		
10010407	JEFFERSON CO.		8/21/1990	1630	Thunderstorm Wind	0		
10008202	JEFFERSON CO.		3/1/1991	1920	Thunderstorm Wind	0		
10007210	JEFFERSON CO.		7/1/1992	1345	Thunderstorm Wind	0		
10007242	JEFFERSON CO.		7/3/1992	1319	Thunderstorm Wind	0		
10319066	JEFFERSON CO.	Wrens	7/16/1995	2000	Thunderstorm Wind	1000		Thunderstorm winds knocked down trees and powerlines across northern portions of Jefferson County between Wrens and Louisville.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
10319067	JEFFERSON CO.	Wadley	7/24/1995	1755	Thunderstorm Wind	20000		Thunderstorm winds blew trees down on house.
5580616	JEFFERSON CO.	WRENS	1/2/1996	1705	Thunderstorm Wind	60000		
5560047	JEFFERSON CO.	WADLEY	6/26/1996	2010	Thunderstorm Wind	1000		
5595036	JEFFERSON CO.	WRENS	4/22/1997	1905	Thunderstorm Wind	2000		
5604885	JEFFERSON CO.	LOUISVILLE	6/18/1997	1315	Thunderstorm Wind	2000		Thunderstorm winds knocked down trees and tree limbs along Georgia Highway 17.
5607652	JEFFERSON CO.	WRENS	7/16/1997	1820	Thunderstorm Wind	2000		Several trees were knocked down on Old Cornith Road by thunderstorm winds.
5609133	JEFFERSON CO.	WADLEY	7/27/1997	1730	Thunderstorm Wind	1500		Thunderstorm winds knocked down several trees southeast of Wadley.
5640061	JEFFERSON CO.	WADLEY	4/17/1998	2328	Thunderstorm Wind	2000		Several trees were blown down and there were power outages near Wadley.
5652407	JEFFERSON CO.	WRENS	6/9/1998	2010	Thunderstorm Wind	5000	EMERGENCY MANAGER	Jefferson county 911 reported trees and power lines down at 3 different locations between Wrens and Louisville.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
5660795	JEFFERSON CO.	LOUISVILLE	8/18/1998	1600	Thunderstorm Wind	1000	EMERGENCY MANAGER	Louisville 911 reported 3 trees down on highway 296 north of Louisville. Widespread power outages were also reported.
5701539	JEFFERSON CO.	WRENS	6/29/1999	1345	Thunderstorm Wind	1000	LAW ENFORCEMENT	The Wrens police department reported trees down and power outages.
5714664	JEFFERSON CO.	WRENS	8/19/1999	1610	Thunderstorm Wind	5000	EMERGENCY MANAGER	Jefferson county 911 reported trees and power lines down. A newspaper reported the wind blew over a gas pump at a convenience store in Wrens. Some roofing was also ripped away at an auto parts store about a mile to the south.
5151774	JEFFERSON CO.	COUNTYWIDE	6/22/2000	1715	Thunderstorm Wind	5000	EMERGENCY MANAGER	The Jefferson County Emergency Management Coordinator reported trees down on power lines all across the county. In addition, a tree was reported down and blocking Georgia Highway 102 between Avera and Stapleton in the north part of the county.
5172170	JEFFERSON CO.	WADLEY	8/1/2000	1400	Thunderstorm Wind	3000	EMERGENCY MANAGER	The Jefferson county 911 center reported that trees were knocked down on Moxley-Bartow Road.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
5230759	JEFFERSON CO.	LOUISVILLE	1/19/2001	1550	Thunderstorm Wind	2000	EMERGENCY MANAGER	The Jefferson county 911 center reported that trees were blown down.
5255269	JEFFERSON CO.	WADLEY	6/3/2001	1830	Thunderstorm Wind	2000	EMERGENCY MANAGER	The Jefferson County 911 center reported that trees were down.
5263644	JEFFERSON CO.	AVERA	8/24/2001	1540	Thunderstorm Wind	0	POST OFFICE	The Avera Post Office estimated wind gusts at 65 mph.
5308181	JEFFERSON CO.	WADLEY	7/21/2002	1345	Thunderstorm Wind	0	FIRE DEPT/RES CUE SQUAD	The Wadley Fire and Police Department reported that one tree was down.
5308745	JEFFERSON CO.	STAPLETON	7/31/2002	1830	Thunderstorm Wind	1000	EMERGENCY MANAGER	The Jefferson county 911 center reported that some trees were down from Jefferson to Wrens.
5341889	JEFFERSON CO.	LOUISVILLE	2/22/2003	1000	Thunderstorm Wind	3000	EMERGENCY MANAGER	The Jefferson county 911 center reported that power lines were down.
5360826	JEFFERSON CO.	LOUISVILLE	5/2/2003	2030	Thunderstorm Wind	2000	EMERGENCY MANAGER	The Jefferson county 911 center reported that some trees were down.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_ STR	BEGIN_LO CATION	BEGIN_DA TE	BEGIN_TI ME	EVENT_TY PE	DAMAGE_PROP ERTY_NUM	SOURCE	EVENT_NARRATIVE
5361672	JEFFERSON CO.	WADLEY	5/17/2003	1714	Thunderstorm Wind	0	EMERGENCY MANAGER	The Jefferson county 911 center reported that a number of trees had been blown down.
5330257	JEFFERSON CO.	LOUISVILLE	7/1/2003	1600	Thunderstorm Wind	30000	NEWSPAPER	The News and Farmer-Jefferson Reporter of Louisville reported that thunderstorm winds, associated with the remnants of Tropical Storm Bill, caused considerable damage to a home west of Louisville on Grange Road. A portion of the roof over the garage collapsed. The house also sustained other minor damage. A number of trees were blown down or split in half across the street and even up to one-third of a mile away. Several residents in the area reported seeing a tornado that was approximately 10 to 15 feet wide and traveled about 60 to 75 feet above the ground. One resident about four miles west of Louisville reported seeing two tornadoes.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
5427688	JEFFERSON CO.	WRENS	10/3/2004	1430	Thunderstorm Wind	30000	EMERGENCY MANAGER	The Jefferson County Emergency Management Director reported that numerous trees and power lines were down from Wrens to Mathews. Parts of U.S. Highway 1 and Georgia Highways 80, 88, and 17 were blocked by downed trees and power lines. Several locations also suffered structural damage. The roof was blown off an auto parts store. A Huddle House restaurant lost its canopy and several windows from the strong wind gusts. A mobile home was destroyed when a large oak tree split it in half and another site-built home was damaged when a large tree fell on it.
5475692	JEFFERSON CO.	LOUISVILLE	8/22/2005	1538	Thunderstorm Wind	1000	GOVT OFFICIAL	The Jefferson County 911 Center reported that a couple of power lines were blown down.
5492604	JEFFERSON CO.	WADLEY	1/2/2006	2027	Thunderstorm Wind	2000	LAW ENFORCEMENT	The Georgia State Patrol reported that several trees were down on U.S. Highway 1 just south of Wadley.
47822	JEFFERSON CO.	STAPLETON	7/1/2007	1602	Thunderstorm Wind	2000	County Official	The Jefferson County 911 Center reported that a few trees and power lines were down in the Stapleton area in the far northern part of the county.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
55280	JEFFERSON CO.	WRENS	8/17/2007	1700	Thunderstorm Wind	2000	County Official	The Jefferson County 911 Center reported that several trees were down near and just east of Wrens.
55357	JEFFERSON CO.	LOUISVILLE	8/17/2007	1724	Thunderstorm Wind	4000	County Official	The Jefferson County 911 Center reported that many trees were down from Louisville southward toward Bartow. More than 10 trees were down in the Louisville area alone.
102224	JEFFERSON CO.	ALMIRA	5/11/2008	557	Thunderstorm Wind	500000	NWS Storm Survey	A damage survey conducted by the National Weather Service Forecast Office in Peachtree City, Georgia, concluded that strong straight-line winds of 60 to 70 mph up to one mile south of the EF0 tornado track across central Jefferson county caused moderate damage to structures in Louisville and minor to moderate damage to structures elsewhere along the path. A number of trees and power lines were downed as well.
105730	JEFFERSON CO.	LOUISVILLE	5/20/2008	1735	Thunderstorm Wind	10000	County Official	The Jefferson County 911 Center reported that several trees and power lines were down throughout the city of Louisville.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
114400	JEFFERSON CO.	WRENS	6/11/2008	1845	Thunderstorm Wind	3000	County Official	The Jefferson County 911 Center reported that several trees and a couple of power lines were down along Gamble School Road, southwest of Wrens.
123565	JEFFERSON CO.	WRENS	7/5/2008	1700	Thunderstorm Wind	500	Emergency Manager	The Jefferson County Emergency Management Director reported that one large tree limb was blown down onto a power line.
242838	JEFFERSON CO.	LOUISVILLE	6/20/2010	1405	Thunderstorm Wind	5000	County Official	The Jefferson County 911 Center reported that several trees and power lines were down in the northwest and west central part of the county, north through west of Louisville.
323132	JEFFERSON CO.	STAPLETON	6/15/2011	2020	Thunderstorm Wind	2000	County Official	The Jefferson County 911 Center reported that at least six trees were down across the northern portion of the county, mainly near Wrens. The damage was caused by a thunderstorm outflow boundary as an area of thunderstorms moved into the county from the north.
341313	JEFFERSON CO.	WADLEY	8/9/2011	1515	Thunderstorm Wind	3000	County Official	The Jefferson County 911 Center reported that over a dozen trees were down across the eastern and southeastern part of the county.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
355140	JEFFERSON CO.	STAPLETON	#####	1618	Thunderstorm Wind	7000	Emergency Manager	The Jefferson County Emergency Management Director reported that several trees and power lines were down in the far northern part of the county, generally between Stapleton and Wrens.
379033	JEFFERSON CO.	LOUISVILLE	5/31/2012	1608	Thunderstorm Wind	500	County Official	The Jefferson County 911 Center reported that three trees were blown down on the southeast side of Louisville. One tree fell on power lines along Moore Street, and two additional trees fell along U.S. Highway 1.
384604	JEFFERSON CO.	WADLEY	6/10/2012	1847	Thunderstorm Wind	250	Law Enforcement	Law enforcement reported a tree down near Highway 1.
384606	JEFFERSON CO.	LOUISVILLE	6/10/2012	1905	Thunderstorm Wind	500	County Official	The Jefferson County 911 Center reported a couple of downed trees along Old U.S. Highway 1 in Louisville.
396857	JEFFERSON CO.	LOUISVILLE	7/3/2012	1412	Thunderstorm Wind	750	911 Call Center	The Jefferson County 911 Center relayed a report of three trees down in Louisville.
408879	JEFFERSON CO.	BARTOW	8/14/2012	1725	Thunderstorm Wind	2000	Public	The public reported that several trees and many large limbs were blown down, some blocking Highway 221.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
410360	JEFFERSON CO.	AVERA	9/2/2012	1645	Thunderstorm Wind	1500	911 Call Center	The Jefferson County 911 Center reported that half a dozen trees were blown down in the northern part of the county, mainly along Fenns Bridge Road southwest of Wrens.
436979	JEFFERSON CO.	WRENS	3/18/2013	1942	Thunderstorm Wind	120000	Emergency Manager	The Jefferson County Emergency Manager reported that numerous trees and power lines were blown down between Wrens and Louisville. Two houses had trees fall on them; one had minor and the other had major damage. Up to 22 roads were blocked by falling trees.
467979	JEFFERSON CO.	LOUISVILLE MUNI ARPT	7/17/2013	1745	Thunderstorm Wind	5000	911 Call Center	The Jefferson County 911 Center reported numerous trees and power lines down across the county.
496326	JEFFERSON CO.	WRENS	1/11/2014	1258	Thunderstorm Wind	250	Emergency Manager	The Jefferson County Emergency Manager reported a tree down in Wrens.
518649	JEFFERSON CO.	WRENS	5/25/2014	1950	Thunderstorm Wind	1000	911 Call Center	The Jefferson County 911 Center reported that two power lines were blown down at houses along Hill Street.
549350	JEFFERSON CO.	ZEBINA	#####	1820	Thunderstorm Wind	8000	911 Call Center	The Jefferson County 911 Center reported multiple trees blown down in Wrens and Louisville. One tree fell on a house in Louisville.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
592272	JEFFERSON CO.	WADLEY	7/2/2015	1536	Thunderstorm Wind		Emergency Manager	The Jefferson County Emergency Manager reported trees down along Clarks Mill Road near and on East Railroad Street in Wadley.
598793	JEFFERSON CO.	WADLEY	8/6/2015	1658	Thunderstorm Wind	1000	911 Call Center	The Jefferson County 911 Center reported a tree blown down on North Main Street in Wadley.
653867	JEFFERSON CO.	LOUISVILLE	7/19/2016	1630	Thunderstorm Wind	1000	Emergency Manager	The Jefferson County Emergency Manager reported trees blown down in Louisville.
671716	JEFFERSON CO.	CUNNINGHAM CORNER	1/21/2017	1415	Thunderstorm Wind	5000	Public	The public reported trees blown down along Highway 78 to just east of Highway 17.
717203	JEFFERSON CO.	PADGETT CROSSING	7/20/2017	2215	Thunderstorm Wind	1000	Public	The public reported numerous large limbs blown down at Bug's Gourd Farm near the intersection of Highways 88 and 22 southwest of Keysville.
743504	JEFFERSON CO.	WRENS	3/20/2018	100	Thunderstorm Wind	8000	911 Call Center	The Jefferson County 911 center reported a few trees and power lines blown down from Wrens to Louisville.
769692	JEFFERSON CO.	LOUISVILLE	7/3/2018	1600	Thunderstorm Wind	2000	Emergency Manager	The Jefferson County Emergency Manager reported a couple of trees blown down in Louisville.
841974	JEFFERSON CO.	MATHEWS	6/22/2019	1509	Thunderstorm Wind	15000	Emergency Manager	The Jefferson County Emergency Manager reported trees blown down onto a home on Campground Road near Highway 1. No injuries were reported.

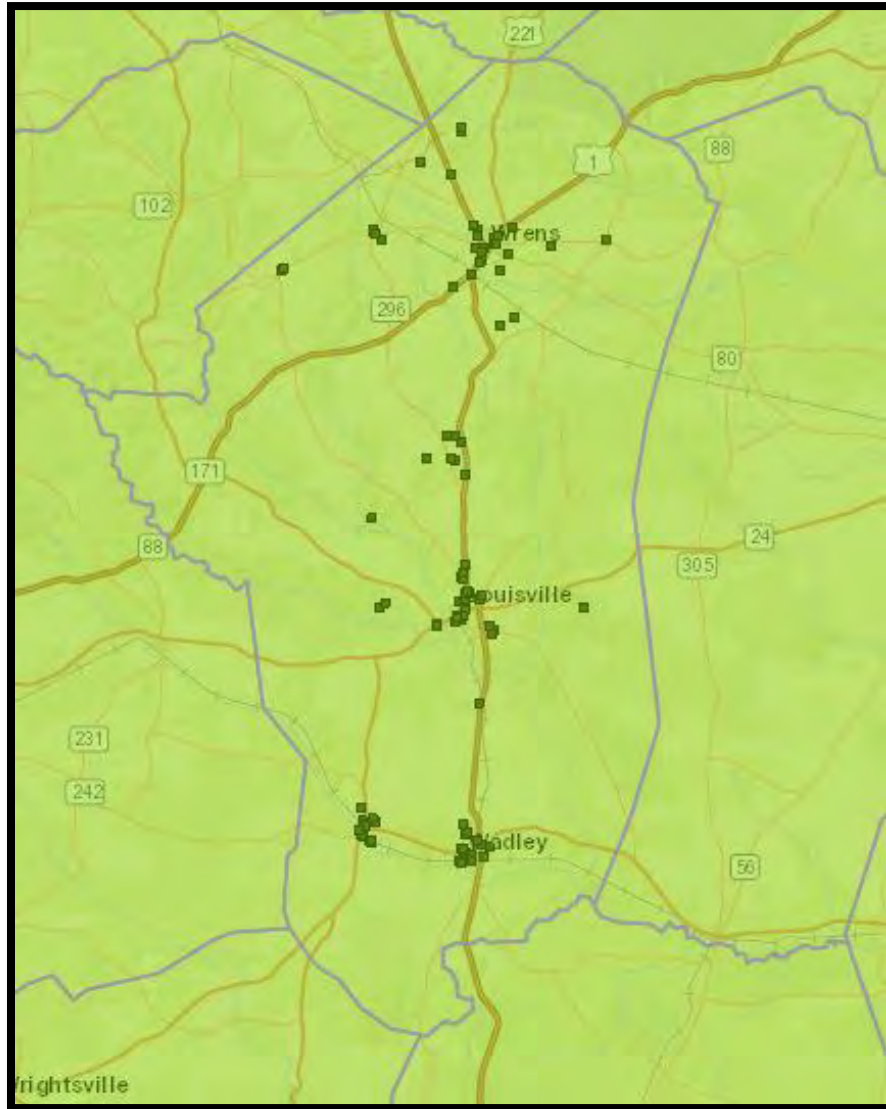
Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
849865	JEFFERSON CO.	MOXLEY	8/23/2019	1806	Thunderstorm Wind	3000	Emergency Manager	The Jefferson County Emergency Manager reported trees blown down along Highway 1 north of Wadley.
893468	JEFFERSON CO.	OMAHA SPRINGS	4/13/2020	320	Thunderstorm Wind	1000	Emergency Manager	Large tree down on Clarks Mill Road, between Avera and Hwy 540 West.
893469	JEFFERSON CO.	LOUISVILLE	4/13/2020	335	Thunderstorm Wind	10000	Emergency Manager	EM reported multiple trees down around the city of Louisville.
1022687	JEFFERSON CO.	LOUISVILLE	4/5/2022	1618	Thunderstorm Wind	0	Emergency Manager	Powerlines reported down along US-1 near the intersection of Wilcher Rd.
1022688	JEFFERSON CO.	LOUISVILLE	4/5/2022	1618	Thunderstorm Wind	1000	Emergency Manager	Tree down in yard along the 1900 block of Hwy 24.
1022689	JEFFERSON CO.	BARTOW	4/5/2022	1620	Thunderstorm Wind	1000	Emergency Manager	Tree down near the intersection of Hwy 221 and Hwy 319.
1022691	JEFFERSON CO.	ZEBINA	4/5/2022	1622	Thunderstorm Wind	0	Emergency Manager	A few trees reported down near the intersection of Zebina Rd and Shady Oaks.
1022690	JEFFERSON CO.	STELLAVILLE	4/5/2022	1622	Thunderstorm Wind	0	Emergency Manager	A metal outdoor structure damaged in addition to trees and powerlines down near the intersection of Campground Rd and Hwy 80.
1034266	JEFFERSON CO.	WRENS MEML ARPT	5/6/2022	1519	Thunderstorm Wind	0	Emergency Manager	Multiple trees reported down along Hwy 221 N between Airport Rd and Ellis Cemetery Rd.

Thunderstorm events _ National Weather _ Jefferson County

EVENT_ID	CZ_NAME_STR	BEGIN_LOCATION	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	DAMAGE_PROPERTY_NUM	SOURCE	EVENT_NARRATIVE
1034267	JEFFERSON CO.	WRENS MEML ARPT	5/6/2022	1524	Thunderstorm Wind		Emergency Manager	Several trees down on Hwy 221 North near the Jefferson/McDuffie County line.
1074971	JEFFERSON CO.	AVERA	1/4/2023	916	Thunderstorm Wind		Emergency Manager	Multiple trees down along and near intersection of GA-296 and GA-88.
1074972	JEFFERSON CO.	ZEBINA	1/4/2023	918	Thunderstorm Wind		Emergency Manager	Trees and powerlines down at Hwy 296 near Jefferson County Middle School.
1138594	JEFFERSON CO.	WADLEY	8/15/2023	1658	Thunderstorm Wind	7000	State Official	The 911 call center reported 7 trees down in Wadley, GA.
1138595	JEFFERSON CO.	PINE HILL	8/15/2023	1708	Thunderstorm Wind	10000	Public	Public report of multiple trees down along Bostic Mill Road between US Hwy 221 and Lonnie Purvis Road.
1158602	JEFFERSON CO.	LOUISVILLE	1/9/2024	1253	Thunderstorm Wind	1000	Emergency Manager	Tree downed on a house along Foley St in Louisville.
						\$929,750.00		

JEFFERSON COUNTY GMIS WIND MAP



Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

Winter Storm

Southeastern snow or ice storms often form when an area of low pressure moves eastward across the northern Gulf of Mexico. To produce a significant winter storm in the south, not only must temperatures be cold enough, but there must also be enough moisture in the atmosphere to produce adequate precipitation. A major winter storm can last for several days and be accompanied by high winds, ice and freezing rain, heavy snowfall, and cold temperatures. These conditions can make driving conditions very dangerous, as well as bring down trees and power lines.

Winter storms are not spatially defined and affect the entire planning equally. There have been 17 recorded winter storms in Jefferson County in the last 74 years. There is an 23% chance of an winter storm event every 4 years. Winter storms can be more accurately predicted than most other natural hazards, making it possible to give advance warning to communities. The National Weather Service issues winter storm warnings and advisories as these storms make their way south. Given the infrequency of these types of storms, southern communities are still not properly equipped to sustain the damage and destruction caused by severe winter storms. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930.

Winter Weather_Jefferson County

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5138950	JEFFERSON		4/9/2000	500	Extreme Co	OFFICIAL N	<p>Following the strong cold frontal passage of the previous day, unseasonably cold air spread over north and central Georgia. Record low temperatures for the date were set or tied at all 4 of the major airports in north and central Georgia. Hartsfield Airport in Atlanta established a new record at 32 degrees, breaking the old mark of 33 set in 1914. At Macon's municipal Airport the new record of 32 broke the previous record of 33 set in 1985. In Columbus the new mark was 34 which broke the old record of 37 set in 1971. In Athens at Ben-Epps Airport the 32 degree reading tied the previous record low for this date set in 1972.</p>
5153841	JEFFERSON		6/7/2000	500	Extreme Co	OFFICIAL N	<p>An unseasonably strong Canadian high pressure system settled over the state causing minimum temperatures to drop into the 50s over most of north and central Georgia. At Ben-Epps Airport in Athens, a new record low of 50 degrees was set which broke the previous record of 54 degrees set in 1976. Although readings in the 50s were widespread elsewhere, the minimums fell just shy of record levels.</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5159864	JEFFERSON		10/8/2000	0	Extreme Co	OFFICIAL N	<p>A very large Canadian high pressure system settled over the southeastern United States following the cold frontal passage of the 6'th. This high pressure system brought unseasonably cold air to the state. Morning low temperatures from the 8'th through the 13'th were 20 to 25 degrees below normal, while high temperatures were 10 to 15 degrees below normal through the period. Frost was widespread across north and central Georgia, while freezing temperatures were observed in a number of cities. A number of locations in the northeast Georgia mountains recorded lows in the middle to upper 20s. Temperatures near 32 were common across north and central Georgia during this period. Many places reported their first freeze of the fall season a month or more earlier than the seasonal average.</p>

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	SOURCE	EPISODE_NARRATIVE
5178100	JEFFERSON		12/1/2000	0	Extreme Co	OFFICIAL N	<p>for much of north and central Georgia. In Atlanta, the monthly average temperature of 37.2 degrees F was the 4th coldest December on record, exceeded only in 1917 and 1935 with 36.2 degrees F and 1963 with 35.5 degrees F. There was a string of ten consecutive days with minimum temperatures 32 degrees F or lower occurring from December 17th through December 26th. The last time that there were 10 or more consecutive days with minimum temperatures 32 degrees F or lower was in December of 1995. There were a total of 20 days during the month that the minimum temperature dropped to or below freezing. In addition, there were 7 days on which the minimum temperature dropped below 20 degrees F in Atlanta, with 13 degrees F on the 20th being the lowest . There were even three days, the 21st, 22nd, and the 30th on which the maximum temperature even failed to rise above freezing. The story was similar across north and central Georgia with Athens reporting an average monthly temperature of 36.9 degrees F, 15 consecutive days of minimum temperatures below freezing from the 17th through the end of the month, a total of 23 days during the month which the minimum dropped to or below freezing, and a minimum temperature for the month of 15 degrees F on the 20th. At Macon, the average monthly temperature was 39.3 degrees F, there were 11 consecutive days on which the minimum dropped to or below freezing from the 17th through the 27th, and 22 days total for the month on which the minimum dropped to or below freezing, with the lowest temperature of 17 degrees F on the 20th. At Columbus, the average monthly temperature was 41.2</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5266304	JEFFERSON		9/26/2001	0	Extreme Co	OFFICIAL N	<p>The first major Canadian high pressure system of the fall season brought record to near record low temperatures across much of north and central Georgia. Record low temperatures were recorded at Atlanta, Athens, and Columbus during the early morning hours of the 26th. At Atlanta's Hartsfield International Airport, a new record low of 43 degrees was recorded, which broke the previous record of 46 degrees set in 1940. Athens tied their record low of 45 degrees set in 1950 while Columbus reported a new record low of 48 degrees, breaking the previous record of 50 degrees set in 1990. Low temperatures in the 40s were widespread across north and central Georgia, while many locations in the north reported lows in the middle to upper 30s, with some locations in the northeast mountains dropping as low as the lower 30s. Similar low temperatures were observed on the 27th, but no record lows were reported. Normal low temperatures for this time of year are in the upper 50s and lower 60s.</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5268568	JEFFERSON		10/27/2001	0	Extreme Co	OFFICIAL N	<p>An unseasonably cold Canadian air mass invaded the southeastern United States behind a strong cold front which moved through the state early on the 25th. The heart of the cold air mass reached north and central Georgia on the 27th. By the morning of the 27th, morning low temperatures had dropped into the 30s across most of north and central Georgia. Highs struggled to rise to 50 in the north and to 60 in the central. Some stations in Northeast Georgia remained in the 40s all day with strong gusty winds. These temperatures were some 20 degrees below normal for the date. By the morning of the 28th, a hard freeze was observed across nearly all of north and central Georgia with lows dropping well into the 20s. Blairsville in Northeast Georgia recorded 21 degrees on the 28th and Peachtree City recorded a low of 23. Similar readings were observed on the 29th. While afternoon temperatures rose back into the 60s, morning lows continued to drop below freezing at many locations through the 31st. Only the Columbus area escaped the unusually early harsh cold reporting its coldest temperature of 34 degrees on the 29th. Macon set a record low temperature for two consecutive days with a low temperature of 27 on both the 28th and 29th. These readings broke record lows of 28 each day set in 1957 and 1976, respectively.</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5277847	JEFFERSON		1/2/2002	500	Winter Stor	OFFICIAL N	<p>The same storm which brought heavy snow to much of north and central Georgia from the 2nd to the 3rd first began across the southeast portion of central Georgia. From early morning through mid-evening on the 2nd about a 12 hour period of wet snow, sleet, and light freezing rain affected these areas. Ice accumulations averaged less than one-quarter inch, but were significant enough, when combined with a wet snow in some areas, to cause large tree limbs, and even some trees (especially pines), to fall on power lines, roads, and even some homes. Several power outages resulted. The hardest hit counties with glaze ice accumulations from freezing rain, freezing drizzle, and snow were Washington, Johnson, Jefferson, Emanuel, and Laurens counties. All together, several hundred trees were damaged or destroyed and thousands of people in these counties lost power during the 2-day storm. Many people did not have any power for 3 days or more. Emergency electrical crews were called out from out-of-state to assist with the cleanup and restoration of power.</p>

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	SOURCE	EPISODE_NARRATIVE
5276932	JEFFERSON		1/2/2002	600	Heavy Snow	EMERGENCY	<p>Georgia since March 1993 began early on the 2nd and continued through mid-day on the 3rd. Over a half a foot of snow fell in some areas just south and southwest of Atlanta, with large areas of north and central Georgia receiving three to four inches of snow during the two-day event. Modified Arctic air invaded the southeast on December 30, 2001. Then, on New Year's day a surface low quickly moved east toward Florida. Weak to moderate upper-level support and overrunning of the warm Gulf air over the colder surface air provided for an extended period of light to moderate frozen precipitation across all of central Georgia and the southern sections of north Georgia throughout the day on the 2nd. Most of the precipitation fell as snow, except for the far southeastern counties of central Georgia, where a mixture of sleet, snow, and freezing rain occurred. During the day on the 2nd, the heaviest snow, from one to three inches occurred within a narrow band that extended from La Grange, to Thomaston, to Jackson. Snowfall amounts in the Atlanta and Athens area were generally around one inch on the 2nd, with only trace amounts reported further north toward Tennessee. However, a strong upper-level system rotated through the southeastern United States early on the 3rd bringing a burst of heavy snow to north and central Georgia. Snowfall amounts of three to five inches occurred in a period of approximately six to eight hours. Total snowfall amounts for the two-day storm ranged from four to six inches in a large approximately 100 mile wide area centered along a line from La Grange, to Atlanta, to Athens, to Homer. Some areas between Carrollton and Newnan</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5279134	JEFFERSON		2/26/2002	1800	Extreme Co	OFFICIAL N	<p>An unseasonably strong late season Arctic cold front raced through north and central Georgia during the mid-day and afternoon hours of the 26th on the heels of 20 to 30 mph northwest winds. Some of the coldest temperatures of the winter season resulted during the ensuing two days. Temperatures during the morning of the 27th were in the teens across much of north Georgia and in the lower and middle 20s across the central sections. Continuing strong winds drove wind chills down to near zero and below. Temperatures struggled to rise to the freezing mark in the north and to near 40 in the central by afternoon, despite abundant sunshine. By the morning of the 28th, the arctic high was centered very near north Georgia resulting in one of the coldest mornings of the winter season. Single-digit temperatures were reported in the northeast mountains, with teens just about everywhere else across north and central Georgia. Blue Ridge dropped to 6 degrees above zero and Blairsville to 8 degrees. Columbus, Hawkinsville, and Dublin in central Georgia were the only locations not to drop below 20 degrees during the morning of the 28th with 20, 21, and 22 degrees, respectively. On the 28th, Macon set a new record low minimum with 19 degrees and Columbus tied their record low minimum with 22 degrees. Minimum and maximum temperatures averaged some 20 to 30 degrees below normal across all of north and central Georgia during this 2-3 day period.</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5281429	JEFFERSON		3/1/2002	0	Extreme Co	OFFICIAL N	<p>The second Arctic cold front to affect Georgia within a one week period surged through north and central Georgia during the morning and early afternoon of the 3rd. Temperatures were just beginning to moderate from the extreme cold observed during the last couple of days of February. For example, Macon still set a new record low temperature of 20 degrees Fahrenheit on March 1st. Temperatures during the first 5 days of March averaged around 15 degrees below normal, but the height of the cold outbreak occurred on the 4th and 5th when temperatures averaged about 20 degrees below normal across most of north and central Georgia. While this Arctic blast was slightly less intense than the one which affected the same area the last couple of days of February, it was certainly significant. High temperatures on the 4th struggled to rise above the freezing mark across north Georgia and struggled to rise into the 40s across central Georgia, after widespread morning lows of 20 to 25 and teens in the north mountains. The coldest readings were observed during the morning of the 5th when lows of 15 to 20 were common in the north and 20 to 25 in the central. Blairsville in the northeast Georgia mountains recorded a low of 12 degrees on the morning of the 5th for the lowest reading.</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
5339649	JEFFERSON		1/11/2003	0	Extreme Co	OFFICIAL N	<p>An extended period of below normal temperatures was observed as a Polar vortex in the northeastern United States provided a cold northwest flow to the region. A series of Canadian/Arctic air masses invaded the region during the period. Temperatures averaged 10 to 20 degrees below normal during the period, with a hard freeze recorded at most location nearly every day between the 11th and the 19th. On the 18th, a strong Arctic high pressure system caused minimum temperatures to drop into the teens in most areas...with some single digit temperatures in the northeast mountains.</p>
5338580	JEFFERSON		1/23/2003	800	Extreme Co	OFFICIAL N	<p>A strong Arctic cold front sent temperatures to their lowest level in several years across north and central Georgia. As the cold front moved through temperatures dropped through the 20s during the day and into the teens by evening accompanied with northwest winds of 25 to 35 mph with higher gusts. By midnight several locations were already below 10 degrees. Minimum temperatures bottomed out in the single digits over nearly all of north Georgia Friday morning, January 24th, with lows mostly in the mid teens in central Georgia. Hiawassee in Towns county recorded the statewide low with -2 degrees F. Some locations in north Georgia failed to rise above the freezing mark for slightly over two days. Several county school districts across the north part of the state were closed on the 23rd and/or 24th because of the extreme cold</p>

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	SOURCE	EPISODE_NARRATIVE
5435773	JEFFERSON		1/28/2005	2000	Winter Storm	GOVT OFFICIALS	<p>nearly all of North and Central Georgia from the evening of Friday January 28th to late morning on Sunday January 30th. The winter storm was a result of a very strong and very cold Arctic surface high pressure system located across the Mid-Atlantic states and an upper-level disturbance moving across the region from the west. North of a line from La Grange, to Thomaston, to Sandersville, the precipitation fell mostly as a mixture of sleet and freezing rain, with typical accumulations of one-half inch glaze ice and one to two inches of sleet. Some areas in North Central and Northeast Georgia experienced significant glaze ice accumulations of three-fourths to one inch. Further south, mainly south of a La Grange, to Thomaston, to Sandersville line, most of the frozen precipitation fell as freezing rain, with 1/4 to 1/2 inch accumulations of glaze ice common as far south as McRae, Abbeville, and Americus. In the southern areas, however, the ice accumulations were generally confined to trees, power lines, and other exposed objects with little or no accumulation of ice on the ground. Extensive damage to trees and power lines were reported throughout the area, especially in North Central, Northeast, and Central Georgia. Damage estimates were in the millions. Numerous vehicle accidents were also reported on the slick ice and sleet covered roads, especially in the Atlanta Metropolitan area. The summary below provides ice and sleet accumulations by county for this event as well as damage information received for that county. The ice and sleet accumulations were largely provided by the county 911 centers or respective Emergency Management Directors. The</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
32456	JEFFERSON		4/7/2007	400	Frost/Freez	Other Fede	<p>A deep upper low and over the northeast U.S. and associated large Canadian surface high pressure area brought record cold to much of the eastern U.S. during the Easter weekend. Temperatures averaged a good 20 degrees below normal during the period. Freezing temperatures were observed each morning from the 7th through the 9th, but the 7th and 8th brought the most widespread and coldest temperatures to the region. Lows in the 20s were common across much of north and central Georgia, with lower 20s in parts of the northeast Georgia mountains. Average freeze dates for most of north and central Georgia are in late March. Farmers in all of the 96 north and central Georgia counties within the Peachtree City, Georgia forecast area were declared eligible for federal loans as a result of the unusually late hard freeze. The unseasonably cold and freezing temperatures resulted in the loss of nearly 100 percent of the wine grape crop, 86 percent of the blueberry crop, 78 percent of the peach crop, 41 percent loss of grasses, 40 percent of grain loss (corn and wheat), and 29 percent loss of pecan crops. Of these crops, wine grapes are nearly all grown in north Georgia and a substantial portion of the peach crop is grown in central Georgia, both within Peachtree City, Georgia's forecast area. Total losses for the entire state as a result of the freeze were estimated at \$258 million, of which 50 to 60 percent of this was estimated to be within the Peachtree City, Georgia forecast area.</p>

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	SOURCE	EPISODE_NARRATIVE
216840	JEFFERSON		2/12/2010	1530	Heavy Snow	County Office	<p>States. An associated area of surface low pressure was moving from the central into the eastern Gulf of Mexico. An Arctic air mass lingered across the eastern U.S. Very cold air aloft and the cold Arctic surface air mass combined with the overrunning Gulf moisture and upper dynamics to produce the most widespread snow observed across north and central Georgia in several years. All 96 counties within the Peachtree City, Georgia forecast area observed measurable snow, indeed a rarity at any time. Average snowfall across most of north and central Georgia was in the two to three inch range. Snowfall amounts ranged from less than one inch in Telfair county, to one inch in Dade county, to three to four inches in the Atlanta metropolitan area, to six inches in parts of Stewart county. Specific details of the maximum snowfall observed or reported for each county are as follows; Baldwin - 3.0 inches, Banks - 3.5 inches, Barrow - 2.0 inches, Bartow - 3.0 inches, Bibb 3.0 inches, Bleckley - 4.0 inches, Butts - 4.0 inches, Carroll - 2.5 inches, Catoosa - 2.0 inches, Chattahoochee - 3.0 inches, Chattooga - 2.0 inches, Cherokee - 3.5 inches, Clarke - 5.0 inches, Clayton - 4.0 inches, Cobb - 4.0 inches, Coweta - 3.0 inches, Crawford - 4.0 inches, Crisp - 1.0 inch, Dade - 1.5 inches, Dawson - 2.0 inches, DeKalb - 4.0 inches, Dodge - 3.0 inches, Dooly - 4.0 inches, Douglas - 3.5 inches, Emanuel - 4.0 inches, Fannin - 2.5 inches, Fayette - 4.0 inches, Floyd - 3.0 inches, Forsyth - 3.0 inches, Fulton - 4.0 inches, Gilmer - 3.0 inches, Glascock - 5.0 inches, Gordon - 3.0 inches, Greene - 4.0 inches, Gwinnett - 3.0 inches, Hall - 3.0 inches, Hancock - 3.0 inches, Haralson - 3.0 inches, Harris - 4.0 inches, Heard - 2.5 inches,</p>

EVENT_ID	CZ_NAME	BEGIN_LOC	BEGIN_DATE	BEGIN_TIME	EVENT_TYPE	SOURCE	EPISODE_NARRATIVE
275146	JEFFERSON		12/25/2010	2100	Winter Weather	County Office	<p>southeastern U.S. from the 25th through the 26th. Ample Gulf moisture was present across the region in advance of the upper trough to support widespread light to moderate rain. Sufficient residual cold air was present in advance of this system that rain quickly changed over to snow across north Georgia with dynamic cooling and additional cold air spreading southward as the attendant surface low moved from the eastern Gulf coastal region during the afternoon of the 25th to off the South Carolina/North Carolina coast by the morning of the 26th. This system later produced a major blizzard in the northeastern U.S. Snowfall of six to eight inches was common across many north Georgia counties, with snowfall of three to four inches common across the north Atlanta metropolitan counties and one to two inches across the south Atlanta metropolitan counties. Only a trace to one-half inch of snowfall was reported further south toward Columbus and Macon, where snow fell only briefly at the end of the precipitation event. Snow lingered in east central Georgia counties on the 26th as the surface deepened off the South Carolina/North Carolina coast. Snow showers and flurries lingered across much of north Georgia and even the northern parts of central Georgia on the 26th as temperatures struggled to even rise above freezing across north Georgia. For Atlanta, this was the first measurable snowfall on Christmas day since 1881. In addition, the 1.3 inches of snowfall that fell at the Atlanta airport before midnight on the 26th was just shy of the 1881 record of 1.6 inches of snowfall for Christmas day. The snowfall fell at a very busy travel time and combined with the subsequent</p>

EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
501829	JEFFERSON		2/12/2014	700	Ice Storm	Emergency	<p>The second major winter storm in as many weeks hit north and central Georgia on February 12th. An area of extremely strong cold air damming moved down the Eastern Seaboard and into north Georgia on the 12th. Southwest flow aloft allowed significant moisture to move across the Southeast, with a disturbance pushing across the southern tier of the country. A surface low developed in the northern Gulf on the 12th, pushing into extreme Southeast Georgia on the 13th. Moisture overspread the area in advance of the surface low and with cold surface temperatures in place from the cold air damming, another significant winter storm hit the area. This storm was different from the storm two weeks prior for two main reasons: firstly, residents across north and central Georgia were well-prepared for the event, and secondly, this storm brought with it catastrophic accumulations of ice along the Interstate 20 corridor east of Atlanta towards Athens. Significant amounts of snow fell in north Georgia as well. The crippling nature of this winter storm, unlike the first, was not necessarily due to the societal impacts but rather to the significant accumulations of ice and snow and resulting widespread power outages.</p>

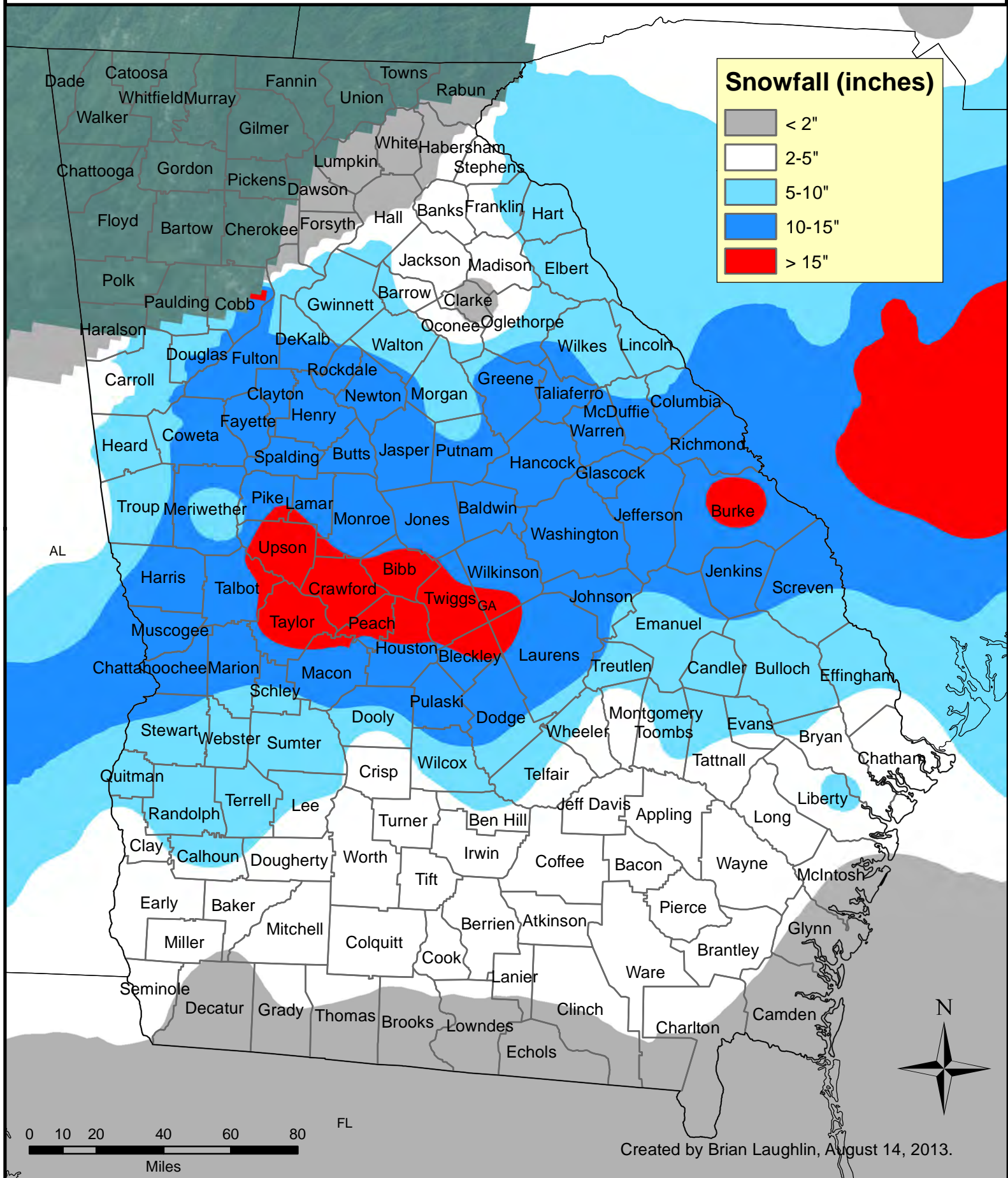
EVENT_ID	CZ_NAME_	BEGIN_LOC	BEGIN_DATE	BEGIN_TIM	EVENT_TYP	SOURCE	EPISODE_NARRATIVE
733795	JEFFERSON		1/17/2018	500	Winter Wea	Emergency	<p>A strong surface low and cold front associated with a large and deep upper-level trough, brought light to moderate snow to much of north and central Georgia from the afternoon of the January 16th through the morning of January 17th. With most of the precipitation post-frontal, temperatures were well below freezing (lower to mid 20s) as the snow occurred. This resulted in widespread icy and snow-packed roadways across the area, especially those that were not pre-treated by GDOT or Public Works.</p>



February 9-11, 1973 Winter Storm

RSI = 12.52, Category 4

NOAA

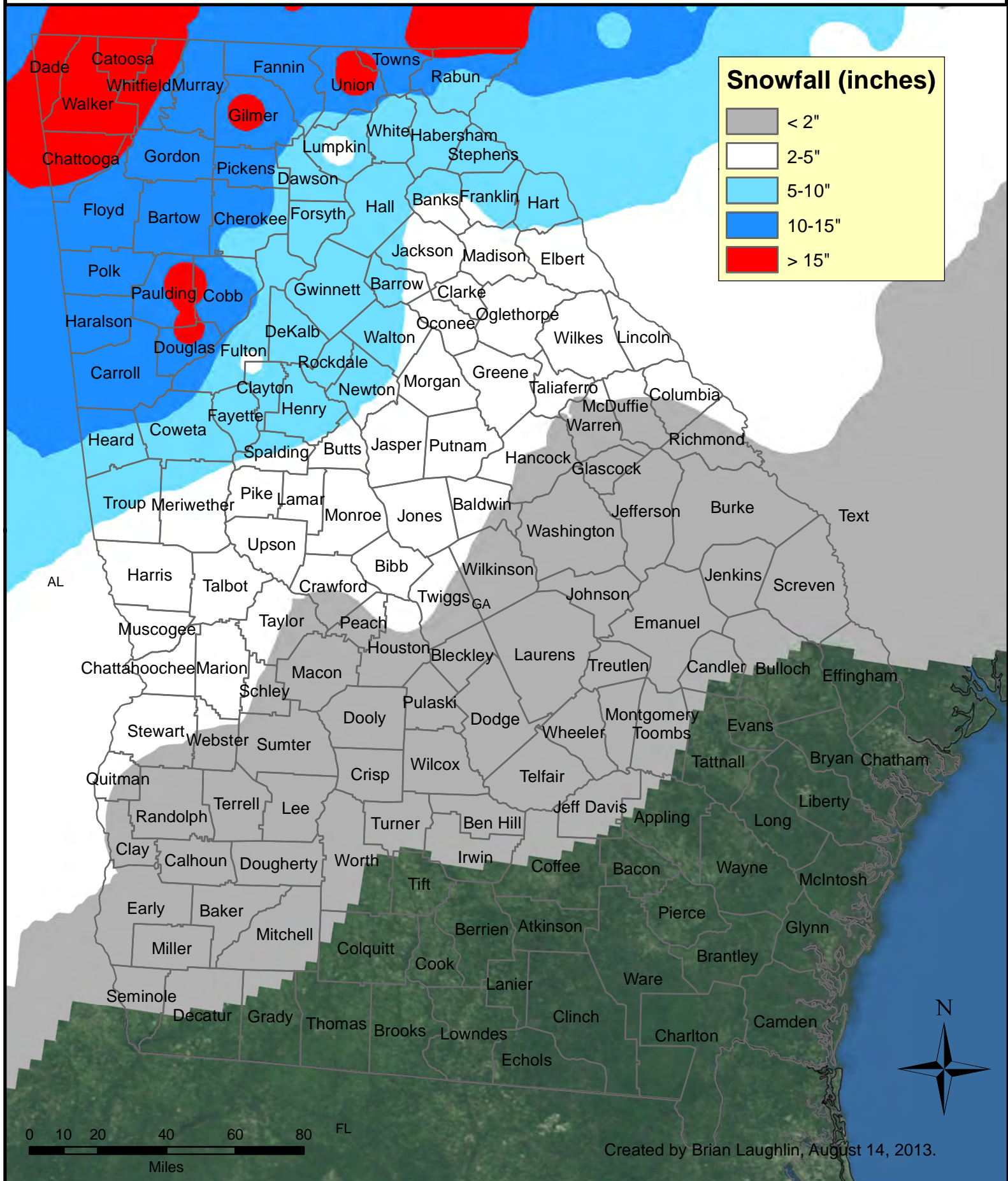




March 12-15, 1993 Winter Storm

RSI = 20.572, Category 5

NOAA

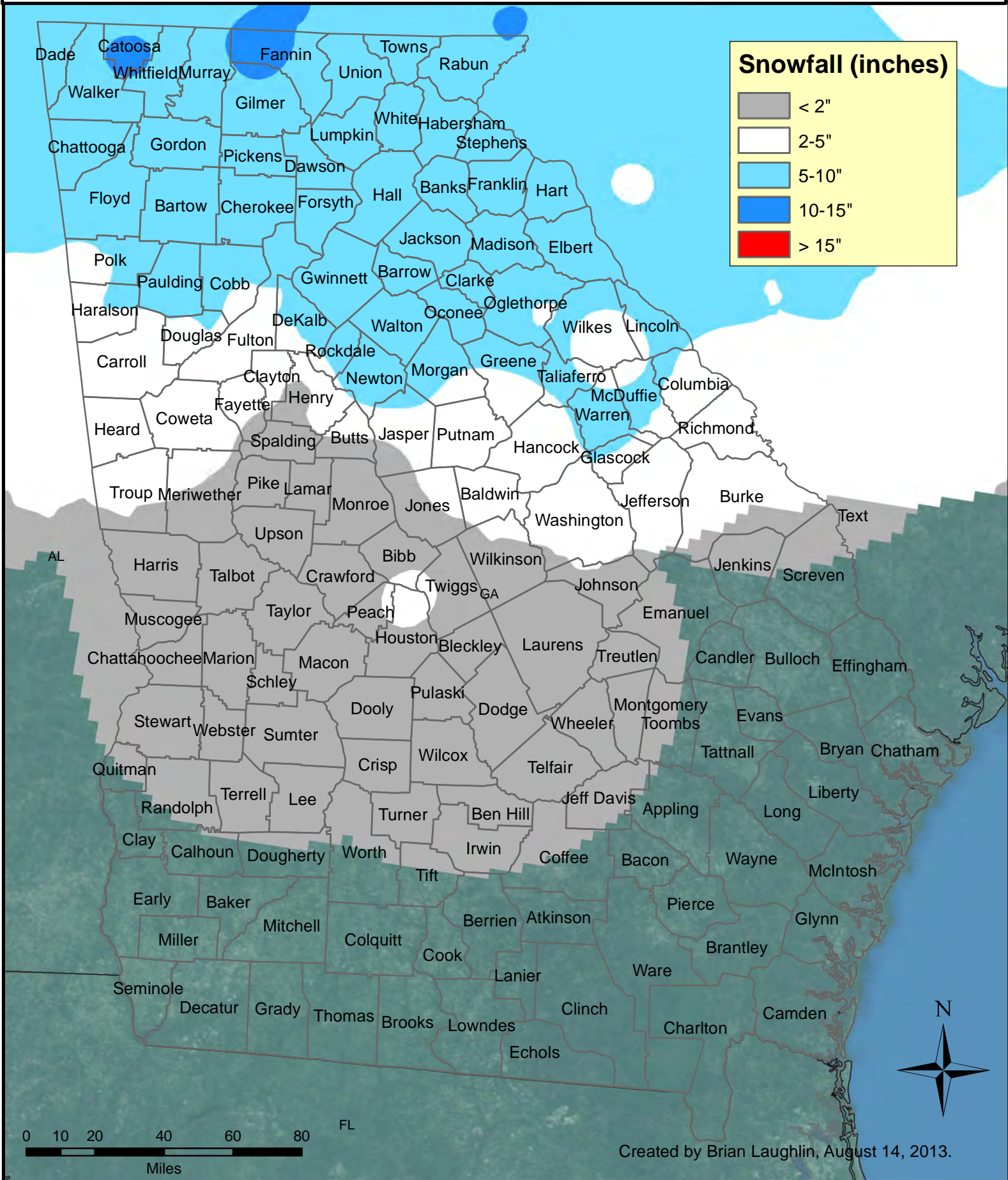




January 9-11, 2011 Winter Storm

RSI = 4.158, Category 2

NOAA



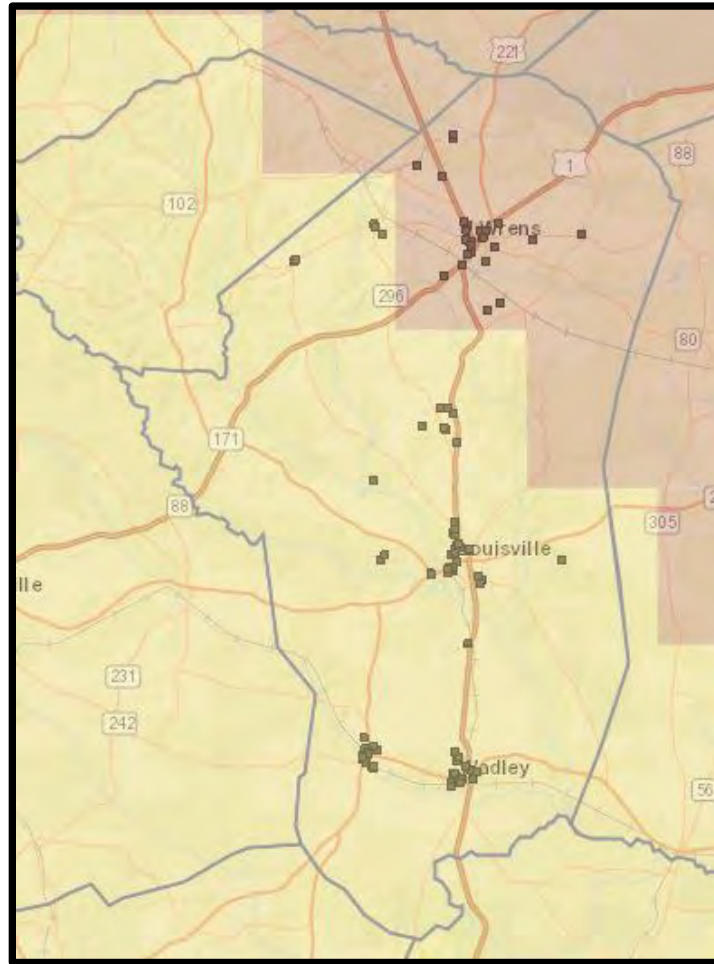
EARTHQUAKE

Earthquakes are one of nature's most damaging hazards. An earthquake is a sudden motion or trembling that is caused by a release of strain accumulated within or along the edge of Earth's tectonic plates. The severity of these effects is dependent on the amount of energy released from the fault or epicenter. The effects of an earthquake can be felt far beyond the site of its occurrence. They usually occur without warning and after just a few seconds can cause massive damage and extensive casualties. Common effects of earthquakes are ground motion and shaking, surface fault ruptures, and ground failure. If the earthquake occurs in a populated area, it may cause many deaths, injuries and extensive property damage.

Magnitude and intensity measure different characteristics of earthquakes. Magnitude measures the energy released at the source of the earthquake and is determined from measurements on seismographs. Intensity measures the strength of shaking produced by the earthquake at a certain location and is determined from effects on people, human structures, and the natural environment.

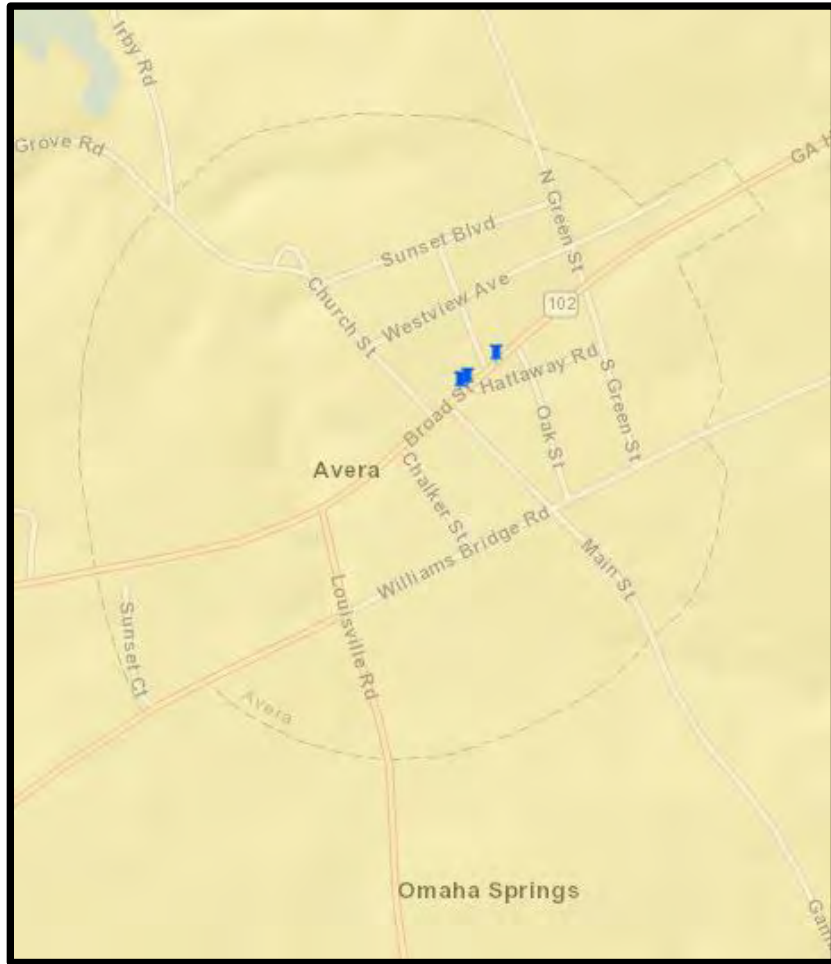
There has never been a reported earthquake event events reported in the last 68 years. Based on a 20-year cycle hazard history there is less than a 1% probability of an annual earthquake event. To summarize, there are approximately 40,626 structures/properties in the county totaling slightly less than \$1.3 billion with a population of 16,930.

Jefferson County Seismic Georgia Mitigation Information System



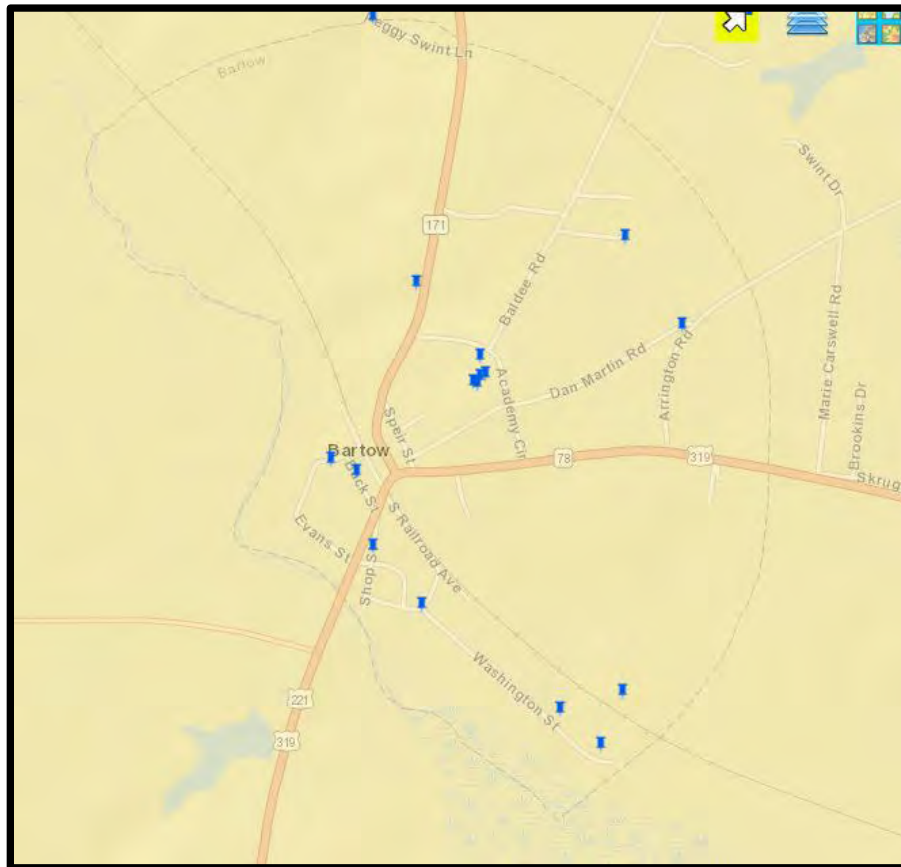
	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Avera Seismic Georgia Mitigation Information System



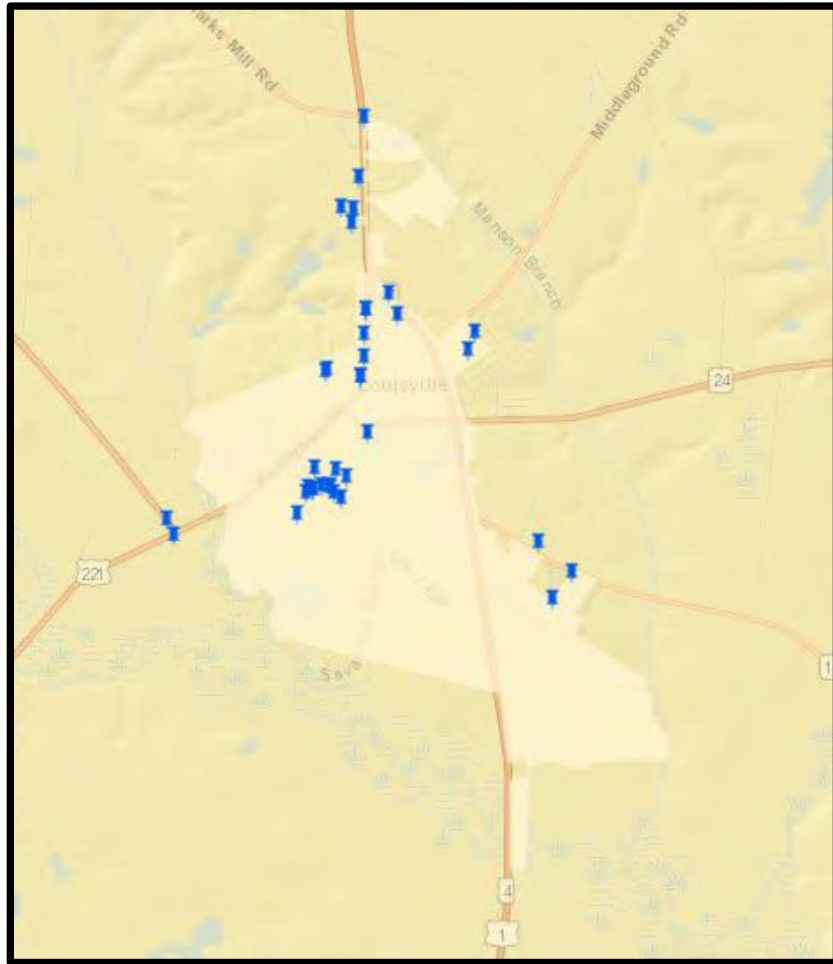
	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Bartow Seismic Georgia Mitigation Information System



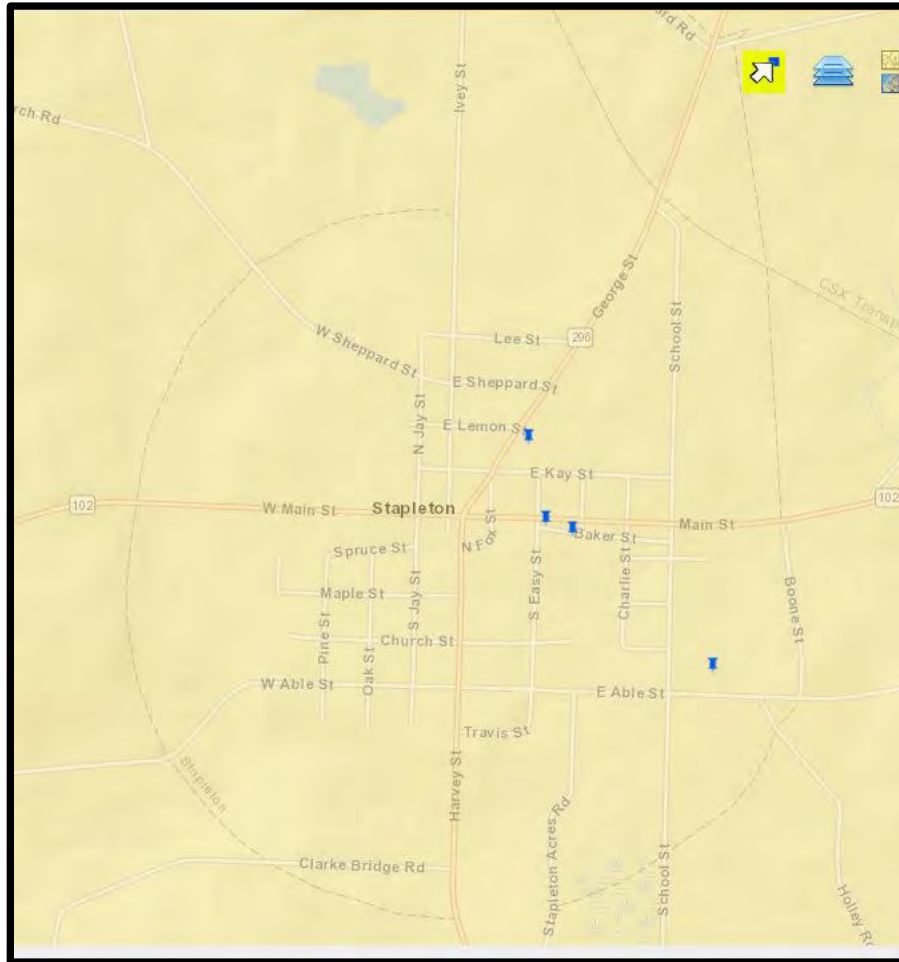
	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Louisville Seismic Georgia Mitigation Information System



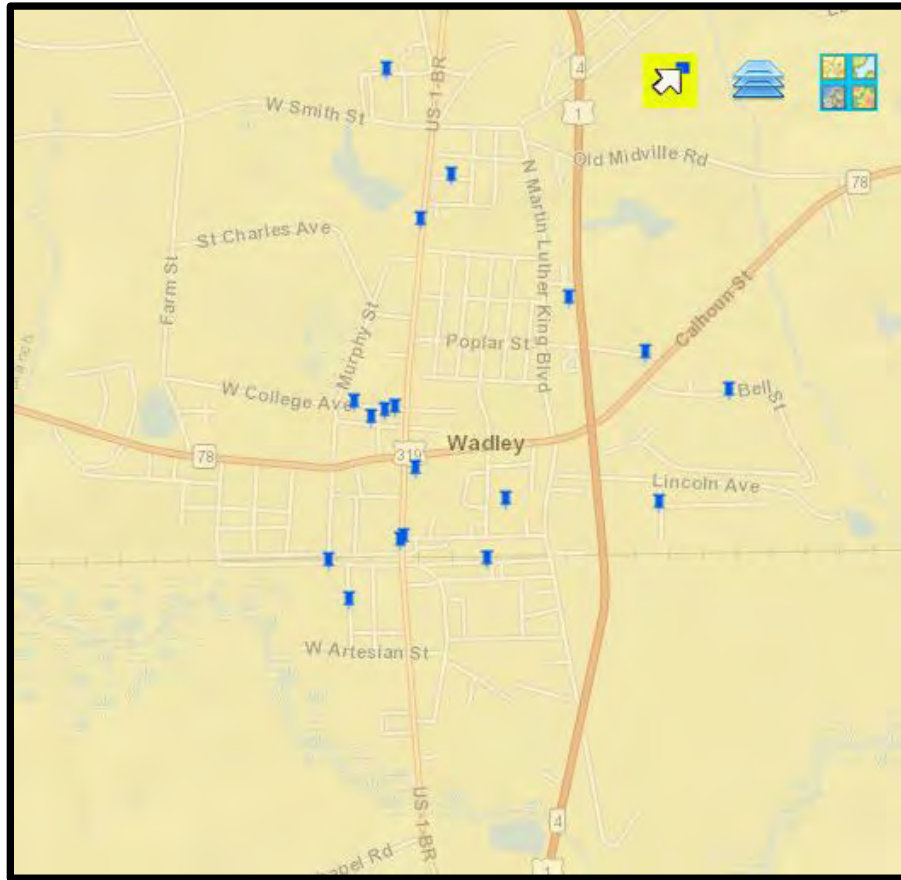
	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Stapleton Seismic Georgia Mitigation Information System



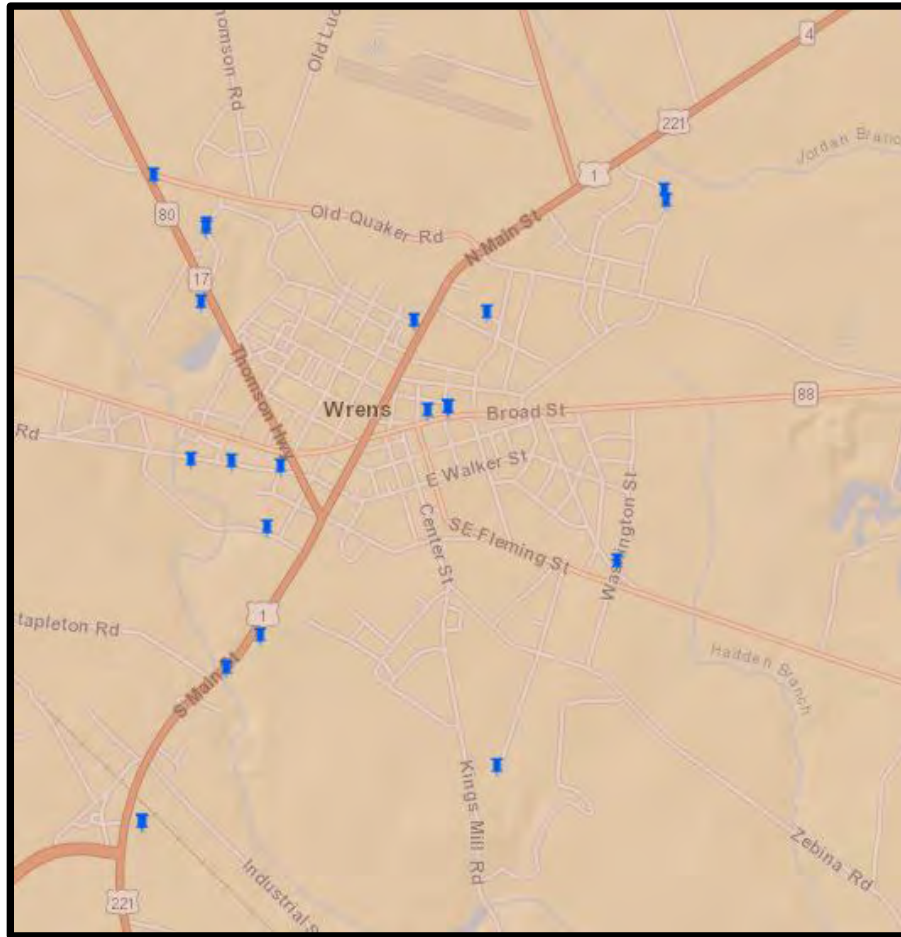
	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Wadley Seismic Georgia Mitigation Information System



	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

Wrens Seismic Georgia Mitigation Information System



	Seismic Threat Category	Original Value	Description
	1	A	0-17% gravity (lowest threat)
	2	B	17-33% gravity (low to moderate threat)
	3	C	33-50% gravity (moderate to high threat)
	4	D1	50-83% gravity (highest threat)
	*	Not applicable	All other values

APPENDIX B

**GROWTH
AND
DEVELOPMENT TRENDS
COMMUNITY INFORMATION**

**A Resolution of Jefferson County for the Adoption of
the
Jefferson County Joint Comprehensive Plan
2023-2028**

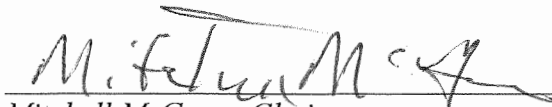
WHEREAS, the Jefferson County Board of Commissioners, the governing authority of Jefferson County in conjunction with the Cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan 2023-2028* to replace their prior joint comprehensive plan and joint comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;"

NOW, THEREFORE, BE IT RESOLVED by the Jefferson County Board of Commissioners that the *Jefferson County Joint Comprehensive Plan 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 12th day of September, 2023



Mitchell McGraw, Chairman
Jefferson County Board of Commissioners

ATTEST:



Bonnie V. Wells, County Clerk
Jefferson County Board of Commissioners



**A Resolution of the City of Avera for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

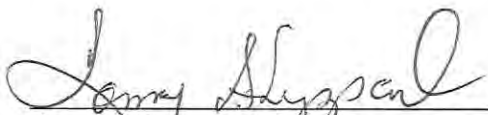
WHEREAS, the Avera City Council, the governing authority of the City of Avera, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,


NOW, THEREFORE, BE IT RESOLVED by the Avera City Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 11 day of September, 2023



Tommy Sheppard, Mayor
City of Avera

ATTEST:



Amy Hadden, Clerk
City of Avera

**A Resolution of the Town of Bartow for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

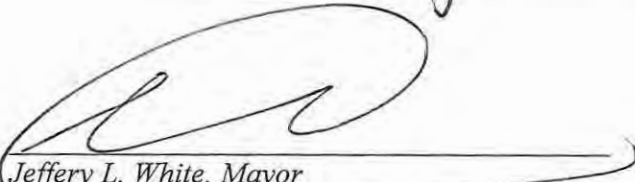
WHEREAS, the Bartow Town Council, the governing authority of the Town of Bartow, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

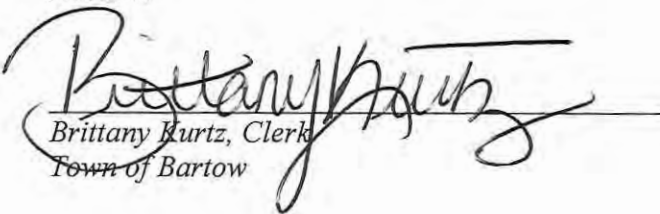
WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,

NOW, THEREFORE, BE IT RESOLVED by the Bartow Town Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 28 day of August, 2023


Jeffery L. White, Mayor
Town of Bartow

ATTEST:


Brittany Kurtz, Clerk
Town of Bartow

**A Resolution of the City of Louisville for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

WHEREAS, the Louisville City Council, the governing authority of the City of Louisville, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,

NOW, THEREFORE, BE IT RESOLVED by the Louisville City Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 12th day of September, 2023



Jenny Smith, Mayor
City of Louisville

ATTEST:



, Clerk
City of Louisville



**A Resolution of the City of Stapleton for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

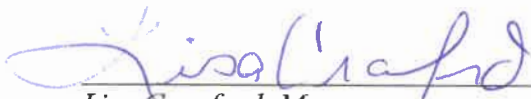
WHEREAS, the Stapleton City Council, the governing authority of the City of Stapleton, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,

NOW, THEREFORE, BE IT RESOLVED by the Stapleton City Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 14th day of September, 2023



Lisa Cranford, Mayor
City of Stapleton

ATTEST:



Cheryl Moore, Clerk
City of Stapleton

**A Resolution of the City of Wadley for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

WHEREAS, the Wadley City Council, the governing authority of the City of Wadley, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,

NOW, THEREFORE, BE IT RESOLVED by the Wadley City Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 11th day of September, 2023



Harold Moore, Mayor
City of Wadley

ATTEST:



Rita Hilton, Clerk
City of Wadley

**A Resolution of the City of Wrens for Adoption of the
Jefferson County
Joint Comprehensive Plan: 2023-2028**

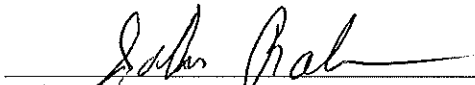
WHEREAS, the Wrens City Council, the governing authority of the City of Wrens, Georgia, has prepared the *Jefferson County Joint Comprehensive Plan: 2023-2028* to replace their prior comprehensive plan and comprehensive plan update and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* was prepared in accordance with the Rules and Procedures of the Georgia Department of Community Affairs; and,

WHEREAS, the *Jefferson County Joint Comprehensive Plan: 2023-2028* has been reviewed by the Central Savannah River Area Regional Commission and the Georgia Department of Community Affairs and found to be in compliance with the minimum "Standards and Procedures for Local Comprehensive Planning;" and,

NOW, THEREFORE, BE IT RESOLVED by the Wrens City Council that the *Jefferson County Comprehensive Plan: 2023-2028* is hereby adopted and that a copy of this resolution shall be submitted to the Central Savannah River Area Regional Commission.

Adopted this 5 day of September, 2023



John Rabun, Mayor
City of Wrens

ATTEST:



Cassie Bartlett, Clerk
City of Wrens





Jefferson County



**JOINT COMPREHENSIVE PLAN
2023-2028**

Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens

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Joint Comprehensive Plan

2023 - 2028

This document was prepared jointly with the cooperation
of the following local governments:

The Chairman and County Board of Commissioners
Jefferson County, GA
PO Box 658
Louisville, GA 30434
Adopted: 9/12/23

The City of Avera

PO Box 125
Avera, GA 30803
Adopted: 9/11/23

The City of Stapleton

PO Box 218
Stapleton, GA 30823
Adopted: 9/14/2023

The Town of Bartow

PO Box 248
Bartow, GA 30413
Adopted: 8/28/23

The City of Wadley

PO Box 219
Wadley, GA 30477
Adopted: 9/11/23

The City of Louisville

PO Box 527
Louisville, GA 30434
Adopted: 9/12/23

The City of Wrens

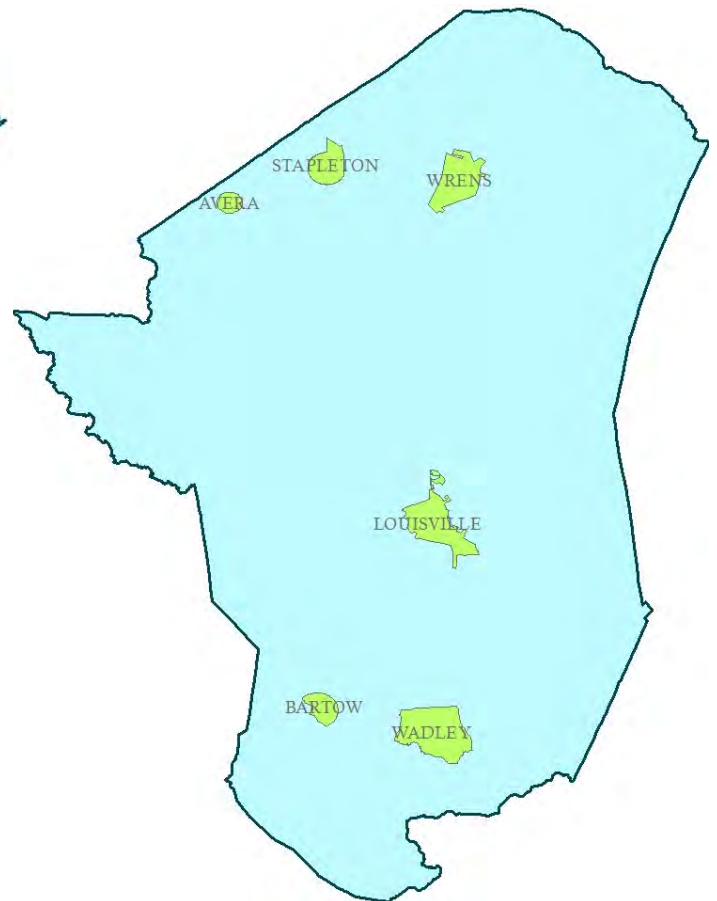
PO Box 125
Wrens, GA 30833
Adopted: 9/5/23

Prepared By:



3626 Walton Way Extension
Suite 1
Augusta, Georgia 30909

The Central Savannah River Area Region



Jefferson County





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Introduction

Counties, cities, and towns in Georgia all desire to provide residents of all ages and backgrounds with a safe, affordable, healthy and beautiful place to live and thrive. These communities, large and small, all experience change at various points in their existence, whether it be environmental, political, geographic, economic, or demographic. For example, rapid, uncontrolled development can lead to sprawl, and declining or stagnant development can lead to dilapidated buildings and increased blight. Change is inevitable, and the long-term viability of every community is affected by it.

Community stabilization is a vital factor in remaining viable and encouraging quality growth. For a community to remain strong in an ever-changing world, it must accommodate its current needs, anticipate future needs, and take advantage of critical opportunities. It also requires adaptation in the face of unforeseen circumstances or emergencies. It is critical to recognize that the effects of change are different for communities that can anticipate, plan for and accommodate it.

Communities that fail to plan can face negative effects that could have been prevented or mitigated with proper planning. A vision which is consistent and locally generated, in conjunction with an implementation plan, can ignite economic opportunities and encourage social cohesiveness in any jurisdiction.

The Jefferson County Joint Comprehensive Plan focuses on unique community traits and assets while identifying present issues and presenting future solutions. The Jefferson County Joint Comprehensive Plan is the official guiding document for Jefferson County and the communities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens. This document serves to:

- Outline a desired future
- Provide a guide for how to achieve that future
- Formulate a coordinated long-term plan

The comprehensive plan coordinates areas of significance in economic development, housing, community facilities, cultural/natural resources and land use in a guide for:

- Land development in relationship with the environment
- Retention and attraction of employment opportunities
- Continued maintenance and access to public services and facilities
- Recreational services created and improved

Comprehensive plans prepared in Georgia that are consistent with the DCA standards include a strategic planning component called the “community work program.” Each community’s five-year community work program lists measurable projects that will be undertaken within the applicable community’s geographic area consistent with their stated comprehensive plan goals. This document includes data at a variety of scales, from the state and region, down to the municipal level. All of which provide valuable context and comparison information for plan users.

In conjunction with the Jefferson County Service Delivery Strategy, this document is a resource to provide a road map for each jurisdiction. Appointed and elected officials should use this resource as they deliberate land development issues and help their respective citizenry understand the benefits of proper community planning.



Community Background

Named in honor of Thomas Jefferson, in 1796 Jefferson County was established as the state of Georgia's twenty-third county on land formerly belonging to Warren and Burke Counties. Since its founding, Jefferson County has been primarily agriculturally driven. Historically, cotton and tobacco were the main crops of the county. However, today the county's farms have cotton, wheat, timber, cattle and dairy operations. According to the USDA's 2017 Census of Agriculture, Jefferson County has 318 farms and 508 farmers. Local industry and manufacturing also play a major role in the local economy. Although closures in some areas have affected local jobs, expansion efforts are underway in others, and the Development Authority is an active participant in industry recruitment.

Avera

Avera was founded in 1885, named after the beloved Dr. Alexander Avera. Dr. Avera donated the land for the town, which was named in his honor.

Bartow

Bartow was named "Wood's Fort" after Solomon Wood who built a log fortification to protect against attacks from the Creek Nation. Part of the area now known as Bartow was a partial payment for Wood's services as a Commander of all Georgia troops who fought in the Revolutionary War. The town was later incorporated in 1860, renamed Bartow in honor of Francis Bartow a Savannah native, who died during the Civil War's First Battle of Manassas. During the Civil War "March to the Sea," General William T. Sherman turned south prior to hitting the town, but briefly Union soldiers entered the town to take cotton and supplies. Bartow served as a source of supplies for Confederate soldiers.

Louisville

Louisville is the county seat and is named in honor of King Louis XVI of France. The City became Georgia's first permanent state capital in 1796, and remained the capital for 10 years. In the City's early years, tobacco and cotton crops helped to drive the economy, along with trade. During the Civil War in 1864, General William T. Sherman in his "March to the Sea" went through Broad Street in Louisville, burning homes and stores.

Stapleton

Stapleton originally served as a county post office named "Spread Oak." In 1885, when the railroad was built the town was renamed in honor of Colonel James Stapleton. During the Civil War the town was hit by General William T. Sherman's "March to the Sea", and homes and livestock suffered. In 1906, Stapleton was incorporated. The city has ideal land for agricultural purposes, and the chief crops are cotton and grain.

Community Background

Wadley

Wadley was known as “Shakerag” in 1873, when the town founder William Donovan put down a tram road running from his mill to the town. William Donovan named the town after his friend William Morrill Wadley, who was president of the Central of Georgia Railway. The newly named town coincided with Wadley becoming an official railroad stop.

Wrens

Wrens is named after an early settler, John Wren. The town developed due to its close proximity to the railroad. During the early 1900s, the town developed with churches, a school and soon after industry. Some of the noted industries in Wrens were a cottonseed oil mill, flour mill, woodwork factory, an ice factory and a Coca-cola bottling plant. One of the City’s unique assets is its gourd farm, the largest east of the Mississippi River.



Jefferson County Snapshot

Total Population



15,708

Poverty Rate



20.30%

Median Household Income



\$42,238

Total Households



5,625

Bachelors Degree or Higher



11.1%

Total Housing Units



7,168

Residents Without Health Coverage



15.2%

Hispanic or Latino Population



462

Median Gross Rent



\$ 624

Median Age



40.5

Planning Process and Community Involvement



What is the Comprehensive Plan

The Comprehensive Plan is a policy document that guides the future growth of Jefferson County. It is designed to facilitate a coordinated planning program that ultimately leads to desired future social and economic outcomes for all its jurisdictions. It serves as a guide to both the public and private sector, providing guidance on items such as land development, housing improvements, economic development, cultural/environmental asset protection, and provision of community services and facilities. In short, the comprehensive plan is a unified document encouraging overarching consistency and coherence in county and municipal policies.

The comprehensive plan is structured as a dynamic document that should be amended when local priorities or conditions change. Periodic updates are necessary to ensure that the document's stated policies align with the needs and aspirations of residents. Over time, local and external conditions have changed. Some objectives have been met, and others have changed or been overtaken by competing priorities. The current comprehensive planning effort addresses these changes and integrates new or evolving priorities among residents and community leaders.

How to use the Comprehensive Plan

This comprehensive plan is a guide for action and is intended to serve as a reference for potential users. A member of the City Council, Board of Commissioners or government staff should refer to this plan's policies when deciding on the approval of a rezoning or location of new development. Companion planning documents should be used in conjunction with the comprehensive plan. These include but are not limited to the CSRA Regional Plan, the County Solid Waste Management Plan, the comprehensive and solid waste plans of other nearby jurisdictions, the Regional Water Plan, the CSRA Regionally Important Resource Plan, and other local and state regulatory documents (e.g. zoning ordinance, subdivision regulations).

The Comprehensive Plan Components

The CSRA-RC is the county’s selected planning coordinator for the Jefferson County Joint Comprehensive Plan 2023-2028. This document has been prepared to exceed the minimum requirements of Georgia DCA’s 2018 Minimum Standards and Procedures For Local Comprehensive Planning (effective October 2018). The 2023 Comprehensive Plan includes the following state-required and elective components:

Community Goals | Needs and Opportunities | Report of Accomplishments
Community Work Program | Public Involvement Overview
Economic Development | Land Use | Housing | Broadband Services
Natural & Cultural Resources | Community Facilities & Services

All state-required comprehensive planning components and additional elective elements listed are distributed throughout the Jefferson County Joint Comprehensive Plan in various chapters and appendices.

The Service Delivery Strategy

The state of Georgia’s “Service Delivery Strategy Act” (O.C.G.A 36-70) was adopted in 1997 by the Georgia General Assembly. It required all Georgia counties and incorporated municipalities to adopt a joint “service delivery strategy” document by July 1, 1990.

The service delivery strategy document is an action plan supported by appropriate ordinances and intergovernmental agreements, for providing local government services and resolving land use conflicts within a county.

The purpose of this Act - and the service delivery strategy document - is for local governments to examine public services, identify overlaps or gaps in service provisions, and develop a better approach to allocating the delivery and funding of these services among local governments and other authorities within each county.

The Jefferson County joint service delivery strategy document has been reviewed and updated in coordination with this comprehensive planning effort.



Overview of the Plan Development Process

First Required Public Hearing: Briefs the public on the process and describes opportunities to participate.

Plan Development: Includes data collection and analysis; includes opportunities for involvement from stakeholders and community members.

Second Public Hearing: Provides an opportunity for comment on the publicly available draft plan and notifies the public of plan submittal for official review.

Submittal of Draft Plan for Review: Requires a formal letter from the highest elected official to the CSRA-RC; CSRA-RC submits the plan to DCA .

Notification of Interested Parties: Provides all interested parties (other governments, state agencies, etc.) the opportunity for plan for review and comment.

Regional Commission & DCA Review: Includes CSRA-RC review for potential conflicts and DCA review for statute compliance.

Report of Findings and Recommendations: Is transmitted within 40 days after submittal.

Plan Revisions: May be made to the plan to meet state requirements or address comments from interested parties.

Plan Adoption: Occurs after official DCA approval of the plan.

Notification of Local Adoption: Requires the submittal of a signed resolution and adopted plan to the CSRA-RC within 7 days; CSRA-RC forwards this to DCA

Qualified Local Government status (QLG): Includes a written notification from DCA that the jurisdiction's QLG status has been extended.

Publicizing the Plan: Occurs after plan adoption and informs citizens of final plan availability.

Public Involvement Overview

A comprehensive plan should be composed to reflect the shared vision, goals and objectives for all communities involved in the process. The Georgia Department of Community Affairs requires the planning process for comprehensive plans to follow a set of minimum procedures to ensure the public has the opportunity to provide input and review the comprehensive plan document as it is created.

Consistent public input is a necessary component for the creation and completion of the comprehensive plan document. One significant part of the process is forming a stakeholder committee of community members. This group of people is critical to the plan creation and informs the decision-making process. A primary purpose of the stakeholder committee is ensuring that CSRA-RC staff adequately presented the aforementioned shared vision, goals, and objectives of the community.

The members of the Jefferson County stakeholder committee for this planning process were:

Mitchell McGraw, Chairman, Jefferson County Board of Commission
Wayne Davis, Commissioner, Jefferson County Board of Commission
Sam Dasher, Superintendent, Jefferson Count Board of Education
Lil Easterlin, Executive Administrative Director, Development Authority
Greg Sellers, Executive Director, Development Authority
Avery Berry, President, Chamber of Commerce
Tommy Sheppard, Mayor City of Avera
Amy Hadden, Clerk, City of Avera
Jeffrey White, Mayor, City of Bartow
Brittany Kurtz, Clerk, City of Bartow
Jenny Smith, Mayor, City of Louisville
Ricky Sapp, Administrator, City of Louisville
Lisa Cranford, Mayor, City of Stapleton
Kimberly Poss, Clerk, City of Stapleton
Howard Moore, Mayor, City of Wrens
Dwayne Flowers, Administrator, City of Wadley
John Rabun, Mayor, City of Wrens
Arty Thrift, Administrator, City of Wrens
Leigh Davis, County Nurse Manager, Health Department
Robert Strickland, Environmental Health, Health Department
Wendy Martin, Hospital Administrator, Jefferson Hospital
Jim Harrison, Hospital CFO
Chris Dillard, CEO, Jefferson EMC
Gary Hutchins, Sheriff, Sheriff's Office
Tim Moore, Chief Deputy, Sheriff's Office
Jerry Coalson, Administrator, Jefferson County
Johnny Davis, Commissioner, Jefferson County
Gonice Davis, Commissioner, Jefferson County
William Toulson, Commissioner, Jefferson County



Stakeholder meetings were held on the following dates to provide information, review data, and gain community perspective:

March 6, 2023 | May 18, 2023 | June 29, 2023

Two public hearings were also held as a part of this process on April 20, 2023 and August 17, 2023

Included in the community planning process this iteration was an electronic survey that received 220 responses. The survey responses were reviewed and used to generate new ideas and provide community confirmation of priorities created by the stakeholder committee. Staff compared what the stakeholder committee developed with what survey results revealed when crafting the plan to ensure that voices were being heard. Local officials also retained survey results, including open ended responses for future consultation.

Public awareness efforts included the newspaper, website posts, social media posts, and online document hosting.

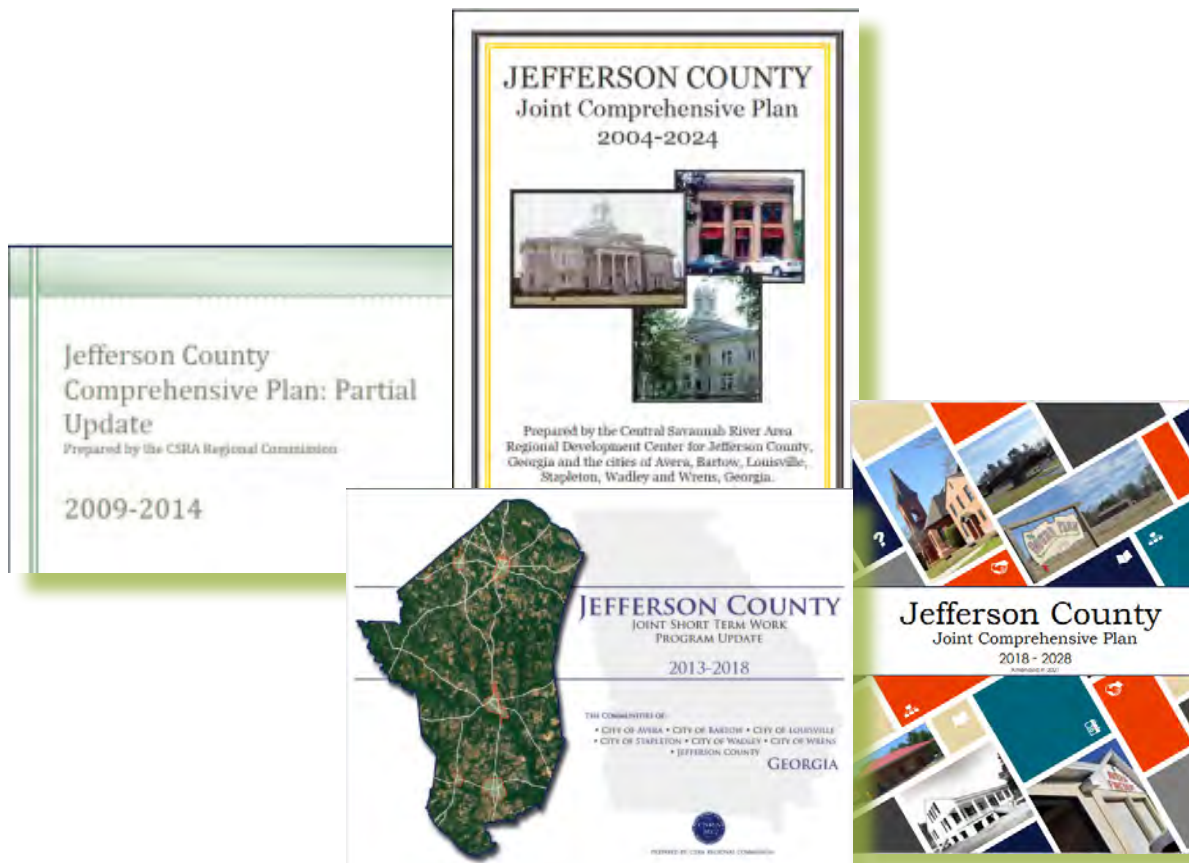


Prior Plans

The Minimum Standards for Local Comprehensive Planning have evolved through past years to make the comprehensive plans more of a user-friendly document for community members. The Jefferson County joint plan 2004-2024 (a 20-year vision) included many of the same elements as today: population, housing, economic development, natural resources, cultural resources, community facilities and services, land use, intergovernmental coordination, and a five-year short term work program (2005-2009).

The next plan, Jefferson County Joint Comprehensive Plan: Partial Update 2009-2014 reflected the state's newly adopted approach to meeting planning requirements. Elements in this plan included a quality community objectives assessment, analysis of areas requiring special attention, identification of issues and opportunities, and an updated implementation program that had the short term work program.

In transition, the Georgia Department of Community Affairs offered an option to defer a full plan update that was required every ten years with the option to develop a short term work program every five years. Jefferson County opted to defer their full plan update to 2018, but revised their short term work program from 2013-2018. As of 2018 when the last full plan update was conducted, full plan updates were required every 5 years.





S. W. O. T Analysis

As part of the planning process, the public was asked to complete a ‘SWOT’ Analysis. SWOT stands for strengths, weaknesses, opportunities, and threats. The information provided the basis for subsequent assessments of needs, opportunities, and, ultimately, formulation of goals and policies.

The results of the SWOT Analysis are summarized on the next few pages.



Strengths

- CTAE at Jefferson County High School
- Pathways in Career, Technical, and Agricultural Education
- 'Work-Based Learning' Program at Jefferson County High School
- Local government cooperation between the cities, county, economic development, and hospital
- Land available to business and residential development
- Agricultural production
- Diverse population
- Schools with dual enrollment programs with Oconee Fall Line Technical and East Georgia University
- TSPLOST funds
- Municipal water available, often provided outside city/town limits
- Municipal airports
- Community centers
- Chamber and Development Authority opportunities
- City parks
- Ogeechee Crossing
- US 1 finished
- Municipal Airport (Louisville)
- Hospital

Weaknesses

- Contaminated properties that could be incredibly valuable for responsible growth
- Soil Amendments from outside companies
- No Brand Name National hotel chain
- Need trained workforce
- Residential housing
- No animal control
- Ambulance service
- Federally funded health clinics taking away from hospital
- Absentee property owners
- Lack of skilled labor
- Lack of quality, affordable housing for rent or purchase
- Poverty
- Poor citizen health
- Lack of commercial businesses
- Aging water/sewer infrastructure
- Vacant buildings
- Dilapidated buildings
- Flood and drainage issues

Opportunities

- Utilities from the City of Wadley out to our industrial property outside of Wadley
- Workforce Housing
- Weak water system (Bartow)
- Transportation
- Retain skilled labor
- Increasing intergovernmental cooperation
- Potential industry expansion
- Use of UGA extension credit counselor
- Available, quality industry sites
- Tourism and recreation on/near the Ogeechee River
- Proximity to Augusta, Fort Gordon, and Columbia County
- Natural gas expansion to Wadley
- Water and/or sewer expansions within or near the municipalities
- Revitalization of downtowns
- Adaptive reuse of structures/facilities
- Expansion of agri-tourism and heritage tourism

Threats

- Possible legislation pertaining to limiting and/or controlling particular activities of development authorities
- Gang activity and people practicing gang activities
- Declining population in the county and region
- Aging population
- Decline in workforce
- Memorial Airport (Wrens)
- Landlocked (Wrens)
- Recruitment and retention of police officers
- Opioid and mental health
- No school social worker available in the county
- Youth mental health threats
- Lack of services for youth and adults with special needs
- Skilled labor leaving county for other cities



Community Need and Opportunities

The needs and opportunities included in this section of the plan present issues to address and possibilities to pursue across both jurisdictions.

These items were generated during the 2023 comprehensive planning process utilizing: input from the stakeholder committee, the previous plan, community survey, and SWOT analysis. This plan section also informed other parts of the plan, including goals and work program activities. As a reminder, these aren't the only possible needs and opportunities, and this document is flexible to change as the community does.

Community Needs and Opportunities

Economic Development

Needs

- More commercial businesses
- Increased resident knowledge in finance
- Better qualified workers
- Improved broadband access and quality
- Revitalized downtowns
- Recruit and expand industry jobs

Opportunities

- Available land for development
- Expansion of natural gas to Wadley
- Space available for telecommunications antennas on the water tanks
- Expansion of Dual Enrollment programs between the high school and nearby colleges, universities, and technical schools
- Better utilization/promotion of the airports
- Evaluate the expansion of the solar industry
- Renovate, reuse, or demolish vacant buildings
- Create and promote tourism opportunities for natural, agricultural and historic assets
- Refine permit process for fiber optic placement

Needs

- More diverse housing options
- Additional housing for rent or purchase
- Additional quality, available affordable/ workforce housing
- Redevelopment and/or rehabilitation of deteriorated housing stock
- Demolition of vacant, dilapidated structures
- Financial literacy
- Home buyer education

Opportunities

- Available land for housing development
- North end growth in the county is capable of absorbing residents from neighboring counties
- Refine permit process, make it easier to get a permit to build quality housing.

Housing

Community Needs and Opportunities

Community Facilities

Needs

- More recreation opportunities for residents
- Improved and expanded water and sewer infrastructure
- Flood and drainage improvements
- Additional support for the county hospital
- Public access to information and technology for improved quality of life
- Improved community health
- More community collaborative events

Opportunities

- Available land for development
- Using TSPLOST funding, especially discretionary funds for critical projects
- Community centers that can be rented out
- Continue review and evaluation of courses offered through CTAE
- Promotion the scenic byway and historic sites nearby
- Expand recreation facilities at Ogeechee Crossing
- Expand recreation facilities county-wide

Land Use

Needs

- Improved code enforcement
- Updated digital zoning maps
- Current, codified ordinances that address current conditions

Opportunities

- Available land for development
- Utilizing the RC to create or update GIS maps and review ordinances
- Shared code enforcement

Community Needs and Opportunities

Natural and Cultural

Needs

- Additional recreation options
- Protect the quality of drinking water sources and sensitive natural areas
- Protect valuable redevelopment forces and/or historic properties from demolition by neglect

Opportunities

- Expansion of existing walking trails and parks
- Expand and construct new community, service and senior centers
- Promotion of community assets like local museums
- To include green space in new developments
- Use Ogeechee Crossing as an orientation and ROTC training ground

Intergovernmental

Needs

- Continued cooperation and more opportunities to work together between jurisdictions
- School safety

Opportunities

- Service consolidation where logical
- Utilizing the RC for joint planning efforts
- County-wide community events
- County-wide viable school safety program



Community Goals and Policies

Goals are broad statements of understanding that are intended to provide guidance toward a desired future outcome. Goals put short-term decisions in proper context. Goals are some of the most valuable insights gleaned from the comprehensive planning process, in that they shape the ventures into which the community will invest its limited resources.

A community reaches its goals through the establishment of and adherence to supporting policies. The next section details Jefferson County's goals and policies.

Community Goals & Policies

Broadband

Goal: To ensure that all residents, businesses and institutions have access to quality, affordable high speed internet throughout the county.

Policies:

- Provide residents, businesses and institutions with opportunities to discuss their broadband
- Pursue funding opportunities to expand and/or improve access
- Maintain the “Broadband Ready” site designation for community and designated buildings, as defined in the 2018 ACE Act
- Seek opportunities to partner with neighboring jurisdictions to create or expand high speed internet infrastructure where feasible

Economic Development

Goal: To have a diverse local economy built on a prepared workforce, business attraction and retention, creation of new employment opportunities and utilization of natural and cultural resources.

Policies:

- Maintain an updated list of available industrial sites
- Increase water/sewer/natural gas capacity and extend service
- Maintain an inventory and map of publicly owned land that’s suitable for development
- Periodically review dual enrollment program options and update as feasible
- Encourage collaboration on tourism efforts
- Encourage the Chamber of Commerce to meet with all businesses
- Encourage adaptive reuse of structures and brown field redevelopment
- Expand workforce and talent through community development
- Develop new and existing industry that expands the tax digest and/or increases opportunities to expand the county workforce
- Dedicate a portion of ad-valorem taxes will be allotted for the purposes of economic development within the county
- Focus on attracting new industry to the industrial parks
- Cities will coordinate with the Jefferson County Chamber of Commerce to attract new retail businesses, particularly to the downtown areas
- Cities will coordinate with the Development Authority of Jefferson County to attract new industries to the area
- Continue Development Authority member training when needed
- Engage in efforts to improve downtown storefronts



Housing

Goals: To provide a mix of housing options in a variety of price ranges for all residents that establishes an adequate, safe supply of units for owners and renters.

Policies:

- Encourage new housing development to locate in proximity to existing or planned infrastructure and near important community attractions
- Examine patterns of non-resident commuters and develop housing options to encourage them to settle in Jefferson County
- Encourage incorporation of green space in new subdivision developments
- Maintain a housing inventory at the municipal level, noting unit type and condition
- Encourage sewer tap on, not septic tanks
- Encourage water tap on, not wells
- Educate the public on down payment assistance, USDA Rural Development guaranteed loans and other home ownership options
- Encourage rehabilitation or removal of dilapidated housing stock
- Improve access to low and moderate income housing to provide housing options for current and future residents
- Use code enforcement to designate vacant, dilapidated properties and use local funds or pursuing grants to do demolition where necessary
- Perform and update housing inventories or similar process at the municipal level
- Periodically review building permits and real estate data from the previous few years to get a better picture of housing availability, type and price

Community Facilities

Goal: To ensure that residents of all ages, ability and income have access to critical facilities, resources and recreational opportunities.

Policies:

- Identify potential passive and active recreation opportunities and apply for funding to develop them
- Update and renovate public buildings and look for opportunities to reuse vacant ones
- Explore opportunities to expand collegiate and vocational programs
- Continue to provide financial and human resource support to the Jefferson County Public Library System to meet identified needs
- Replace fire protection and public safety equipment and vehicles as needed
- Improve flood and drainage throughout the county
- Pave roads within municipal limits and in designated county areas
- Maintain quality water and sewer infrastructure and make improvements as needed
- Repair and replace insufficient bridges throughout Jefferson County

Land Use

Goal: To maximize the efficient use of available land and existing infrastructure that creates areas with access to necessary resources, while determining the best areas to extend services and eliminate incompatible uses.

Policies:

- Encourage appropriate infill housing and the revitalization of older neighborhoods
- Encourage rehabilitation and reuse of downtown buildings
- Coordinate new development with siting of public facilities and utilities
- Base project approval decisions on the ability of the existing or planned public facilities to accommodate increased use
- Maintain updated digital and paper zoning maps
- Encourage staff and planning commissioner attendance at planning and zoning trainings
- Review and update land use regulations and ordinances as needed
- Annually review the Comprehensive Plan
- Focus residential development along Calhoun Street with the possibility of some mixed-use development also occurring (Wadley)

Natural and Cultural Resources

Goal: To adequately protect sensitive natural areas and cultural resources while encouraging public access and visitation.

Policies:

- Monitor naturally sensitive areas for pollution and or degradation
- Review and update natural resource protection ordinances as needed
- Prevent landfills from being developed near or adjacent to streams, rivers, and/or creeks
- Encourage development away from naturally sensitive areas
- Consider the negative effects of development on cultural resources
- Develop and promote scenic views and sites
- Periodically update historic resource surveys
- Encourage expansion of existing trails and parks where feasible
- Conduct activities to maintain the “Tree City” certification (Louisville)
- Implement street scape enhancements that conform to center city conceptual designs, improve safety and aesthetics, and support multiple modes of transportation



Intergovernmental Coordination

Goals: Maintain existing formal and informal intergovernmental coordination mechanisms within county jurisdictions (including quasi-governmental institutions), among neighboring jurisdictions, and within regional organizations.

Policies:

- Encourage, where outlined, formal intergovernmental coordination mechanisms
- Examine consolidation of similar services
- Hold meetings to discuss projects occurring at different levels of government or within different agencies that affect other levels or agencies
- Actively seek opportunities for county and city officials to meet

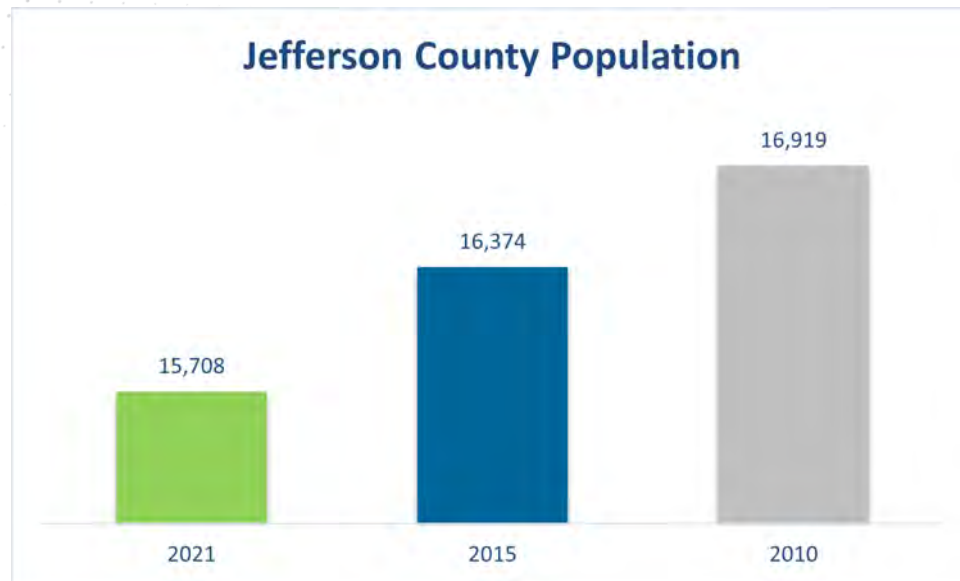


Demographic Overview

The demographic overview aims to provide an understanding of who Jefferson County's residents are, and how the County is changing. Though the accuracy of data from national sources is often disputed for rural communities, these sources do provide a valuable baseline for understanding rural population dynamics. The Census Bureau and other generators of data and analysis commonly utilize statistical methods to produce projections based on trends. These measures are typically offered with a margin of error or confidence interval, and a disclaimer acknowledging that the measures are samples or projections.



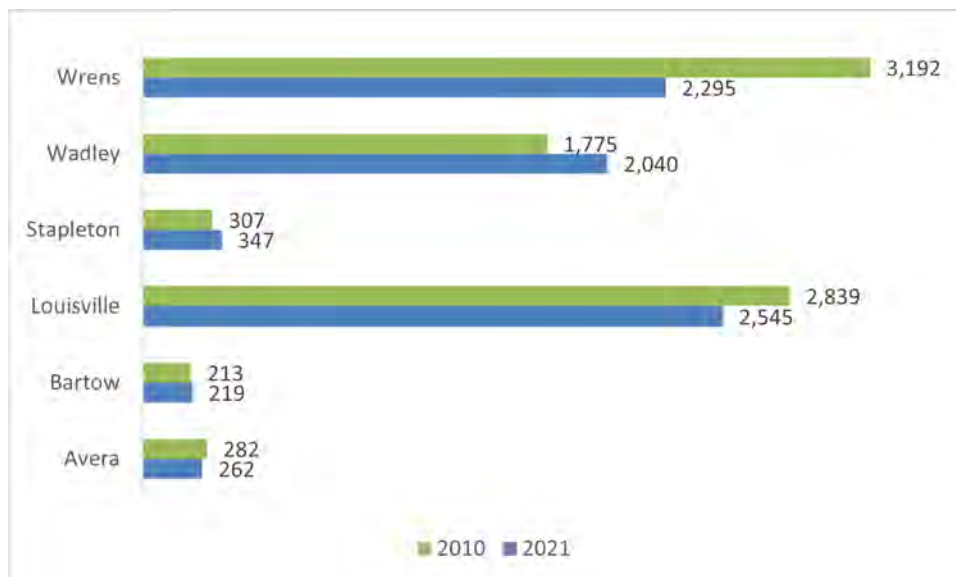
Population



Source: American Community Survey, 5-year estimates , S0101, 2010, 2015, 2021

According to the American Community Survey, the population in Jefferson County in 2021 was 15,708, which reflects a decrease of 7% from 2010. In 2021 the median age in Jefferson County was 40.5.

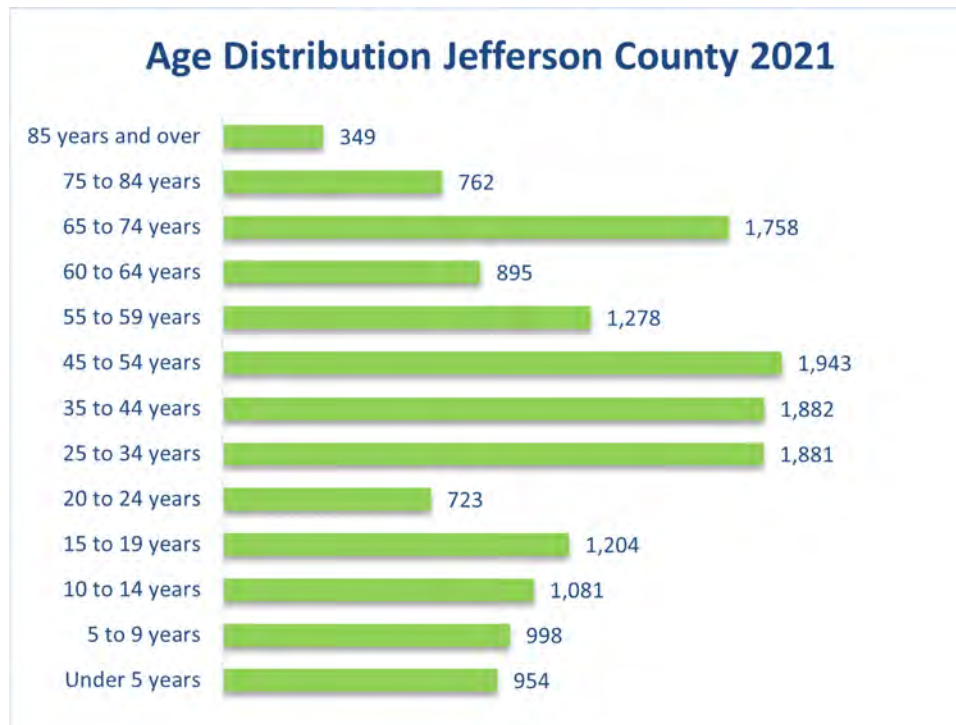
Wrens, Louisville, and Avera all saw a decrease in population since 2010. Wrens saw the largest decrease in population at almost 24%, Louisville saw a 10% decrease, and Avera 7%. Cities of Wadley, Stapleton, and Bartow saw an increase in population over this same period of time. Wadley saw an almost 15% increase, Stapleton 13%, and Bartow almost 3%.



Source: American Community Survey, 5-year estimates , S0101, 2010, 2015, 2021

Population

In Jefferson County, the age group with the largest portions of the population in 2021 were 45 to 55 year olds. The age group with the smallest population was age 85 and older.



Source: American Community Survey, 5-year estimates , S0101, 2010, 2015, 2021

FREE

**Wireless
Hot Spot**

Broadband Services

Access to high speed Internet (broadband) is an important part of life today. Broadband enables greater connectivity and expands possibilities for individuals and families to improve their quality of life. From students in the classroom and professionals providing telemedicine to patients with no rural hospital or clinic, to county staff streaming online training and residents using library computers, broadband touches the lives of citizens of all ages and backgrounds.

This section of the plan provides an overview of broadband and the ACE Act reviews the state of local and regional connectivity.



What is Broadband?

Broadband is high speed Internet. The FCC currently defines high speed Internet access as download speeds of at least 25 Mbps and upload speeds of at least 3 Mbps.” Mbps is megabits per second. These minimum upload and download speeds are essential to quality of service for end user customers. Broadband includes several high-speed transmission technologies, such as fiber optic, wireless, Digital Subscriber Line (DSL) and coax cable. The goal in many communities may be terrestrial service, but mobile or satellite may be the only option. Jefferson County is no exception in many parts of the county.

Different technologies:

- Fiber optic cable - buried underground and transmits data over light through glass or plastic
- Coax Cable - copper-based infrastructure deployed by cable TV and telephone broadband providers; is described as durable and the dominant technology for residential broadband service. It involves wireless devices or systems providing service in fixed locations.
- DSL - copper-based and offered over traditional telephone networks. It is not as rapid as other technologies and may degrade over distance.
- Wireless is fixed where the wireless systems provide service in fixed locations. Mobile wireless consists of cellular networks that deliver service to mobile end-users. Satellite wireless utilizes geostationary satellites that provide service in low-density locations. Lastly, microwave wireless uses mid-to-high frequency signals to deliver service between line-of-sight locations.

THE ACE ACT

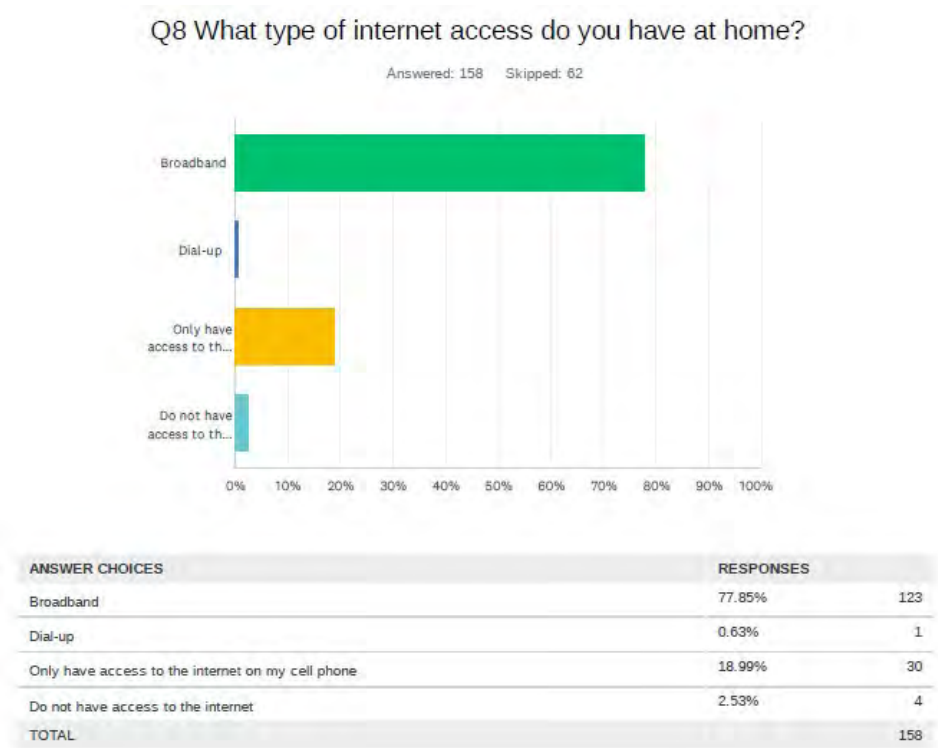
In 2018, the Georgia General Assembly passed “Achieving Connectivity Everywhere (ACE) Act” (Senate Bill 402). Provisions in the Act include:

- Requires that each local government in the state incorporate a “Broadband Services Element” into its local comprehensive plan.
- Enables local governments to take advantage of applying for financial incentives (such as grants) for broadband services, if they meet certain criteria.
- Enables the Georgia Department of Transportation to use interstate highway rights-of-way for deployment of broadband services and other emerging communications technologies.
- Enables a political subdivision that has a comprehensive plan that includes the promotion of the deployment of broadband services to the Department of Community Affairs for certification as a broadband ready community.
- The Georgia Department of Community Affairs - determine and publish which areas in the state are served and unserved; development and deployment of the Broadband Ready certification program. A served area means a census block that is not designated by DCA as an unserved area. An unserved area means a census block in which broadband services are not available to 20 percent or more of the locations as determined by DCA. The map below is provided by DCA to determine served and unserved areas of broadband service, based on service information collected for the locally-provided addresses.

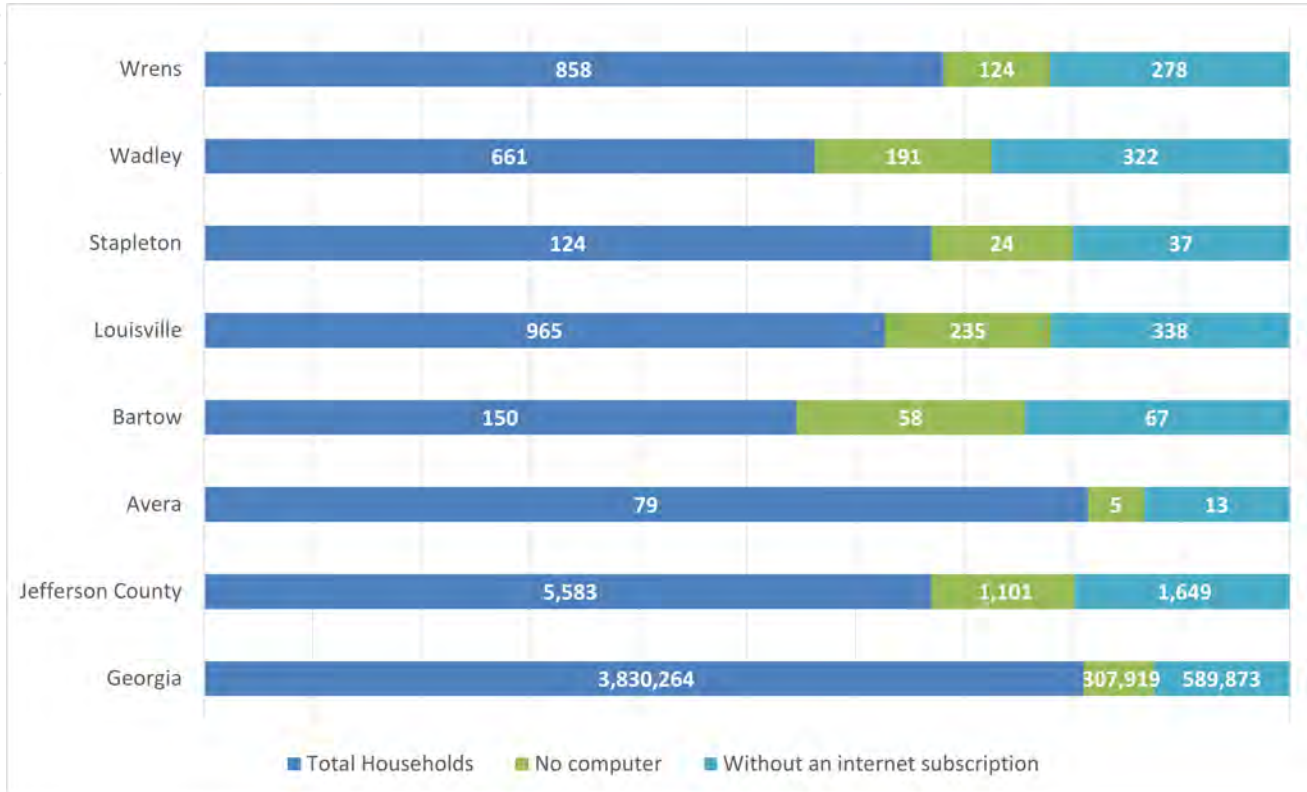
Rate of Broadband Adoption

Much attention has been paid to the problem of sparse rural broadband infrastructure provision. However, relatively little has been said about how to activate the latent potential that broadband brings to exurban communities. Research on the outcomes of broadband expansion has revealed unexpected trends, among which is the revelation that provision of the infrastructure itself is not typically sufficient to realize the myriad benefits touted. In fact, results suggest that policy makers must broaden their focus to include adoption and efficient use of the technology. More directly, once broadband is available, residents must be willing and able to pay for subscriptions and adequate hardware, and competent to employ the technology for their personal and professional benefit. Research sponsored by the Benton Institute for Broadband and Society developed a four part strategy as being essential to promoting meaningful broadband adoption. The four-part strategy is on the next page.

Based on the Jefferson County Community survey, 2.53% of respondents indicated that they did not have access to the internet.



1. Providing Low-Cost Broadband
2. Connecting digital literacy training with relevant content and services
3. Making Low-Cost Computers Available
4. Operating Public Access Computer Centers

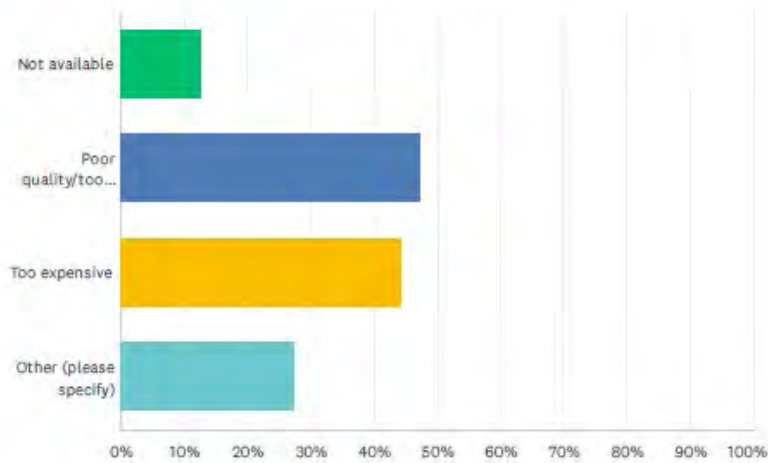


Source: American Community Survey 2020 5-year estimates S2801

The table above shows the total number of households that do not have a computer or internet subscription according to the American Community Survey. Jefferson County has about 30% households without an internet service subscription. Avera has 16% of households without an internet subscription. Bartow 44% of households without internet subscription. Louisville 35% of households without internet subscription. Stapleton has almost 30% of households without internet subscription. Wadley has about 48% of households without internet subscription, and Wrens has about 32% of households without internet subscription.

Q9 What issues do you have with internet at home? Check all that apply.

Answered: 135 Skipped: 85



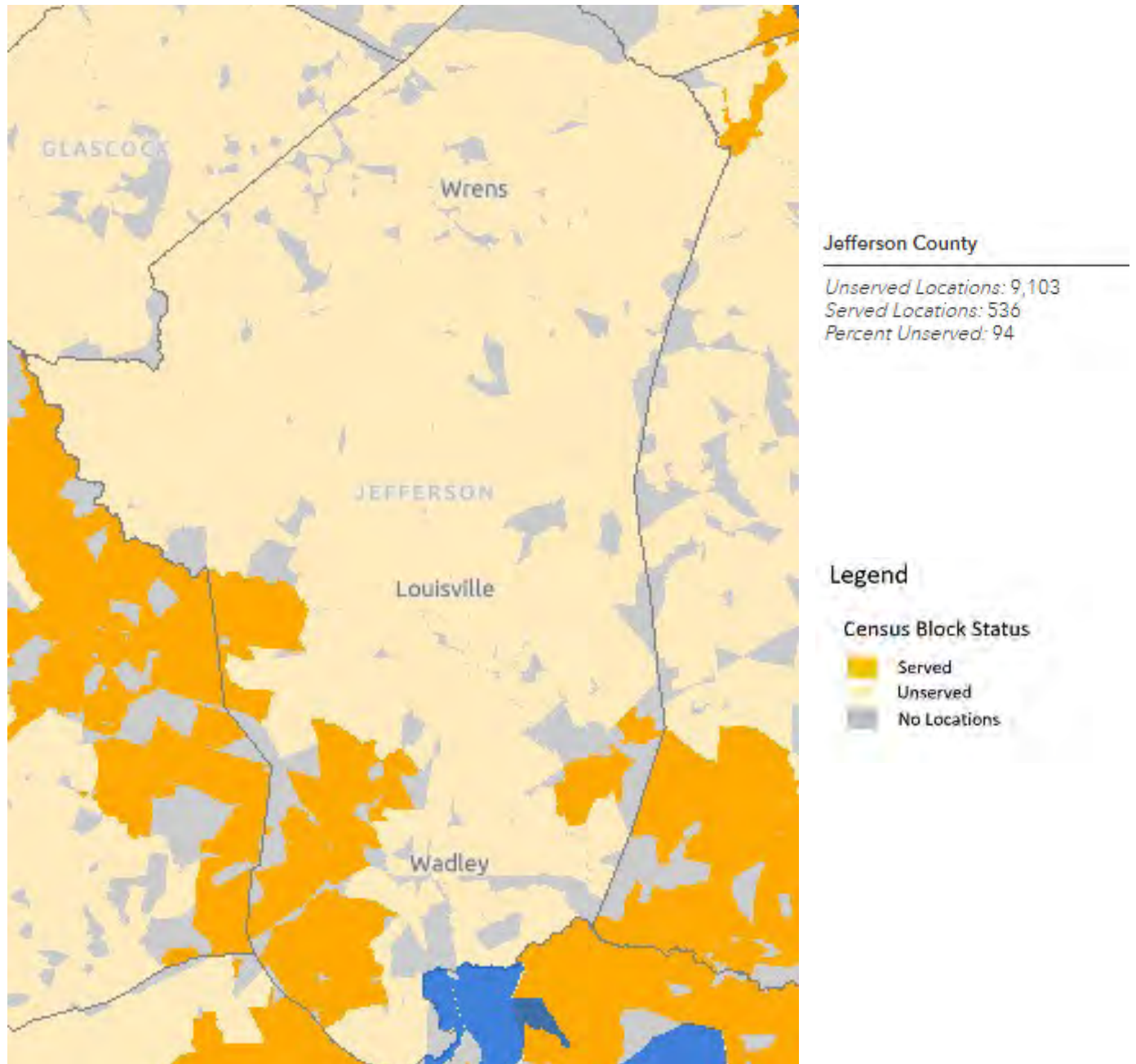
ANSWER CHOICES	RESPONSES	
Not available	12.59%	17
Poor quality/too slow	47.41%	64
Too expensive	44.44%	60
Other (please specify)	27.41%	37
Total Respondents: 135		

According to the Jefferson County Community survey , 12.59% of respondents indicated that they do not have internet available at home. 47.41% of respondents indicated that they have poor quality or too slow internet service at home. 44.44% of respondents indicated that internet service at their home is too expensive.



2022 Georgia Broadband Availability Map : Jefferson County

According to the Department of Community Affairs, Georgia Broadband Availability Map, there are around 9,103 location in Jefferson County that are unserved by broadband. The map depicts access to broadband, not subscription to broadband.



Source: <https://broadband.georgia.gov/2022-georgia-broadband-availability-map>



CITY OF
AVERA



Economic Development

A community's employers are one of the key determinants of resident quality of life. This section briefly discusses the firms operating within Jefferson County and the industries in which Jefferson residents are employed throughout the region. This analysis is intended to support local decision-makers in their efforts to facilitate industrial growth and workforce preparedness.

Labor Force Participation in Jefferson County

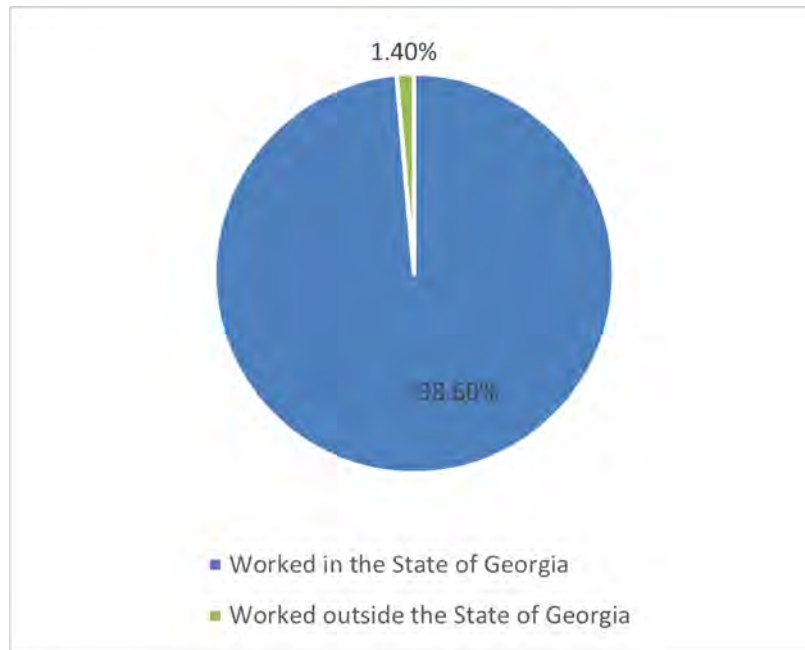
	2021	2010
Population age 16 and over	12,422	13,079
Population in Labor Force	6,620	7,263
Employed	6,236	6,309
Unemployed	384	923
Unemployment Rate	5.80%	12.80%
Population not in Labor Force	5,802	5,816

Source: American Community Survey 2021, 2010 DP03

The American Community Survey shows that the population over the age of 16 has decreased since 2010 by 5%. The total population in the workforce also decreased by almost 9% since 2010. The percentage of population aged 16+ that is unemployed has decreased by 50% since 2010. This decrease in the number of unemployed citizens should have also decreased the number of citizens not in the labor force. The percentage of residents not in the labor force has remained relatively stable and only decreasing by 0.24% since 2010.

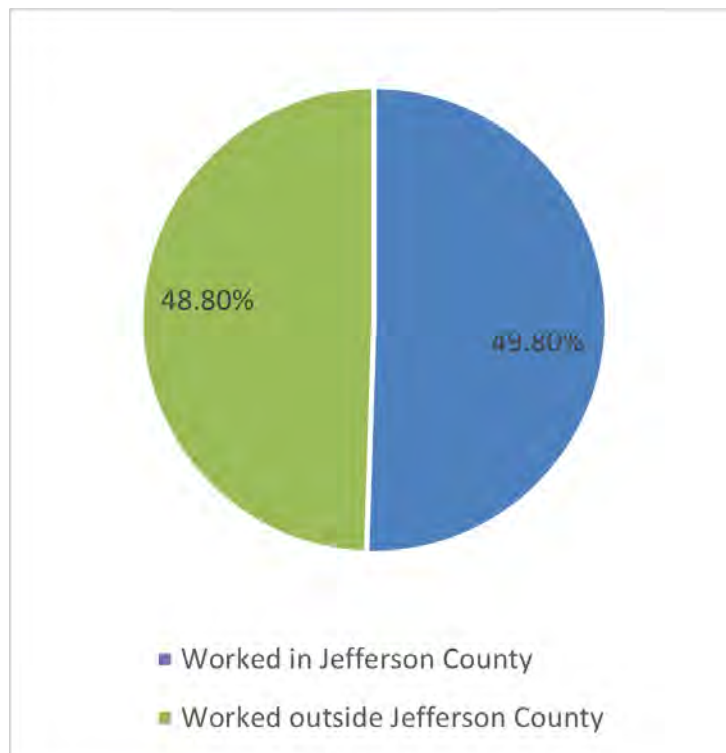
Location of Employment

According to the American Community Survey, nearly all residents of Jefferson County work in the State of Georgia, with only 1.4% of residents working outside the state.



Source: American Community Survey 2021 S0801

2021 data for the American Community Survey reports nearly half of all residents work outside of Jefferson county with 49.8% of residents working in Jefferson County.



Source: American Community Survey 2021 S0801

Educational Attainment

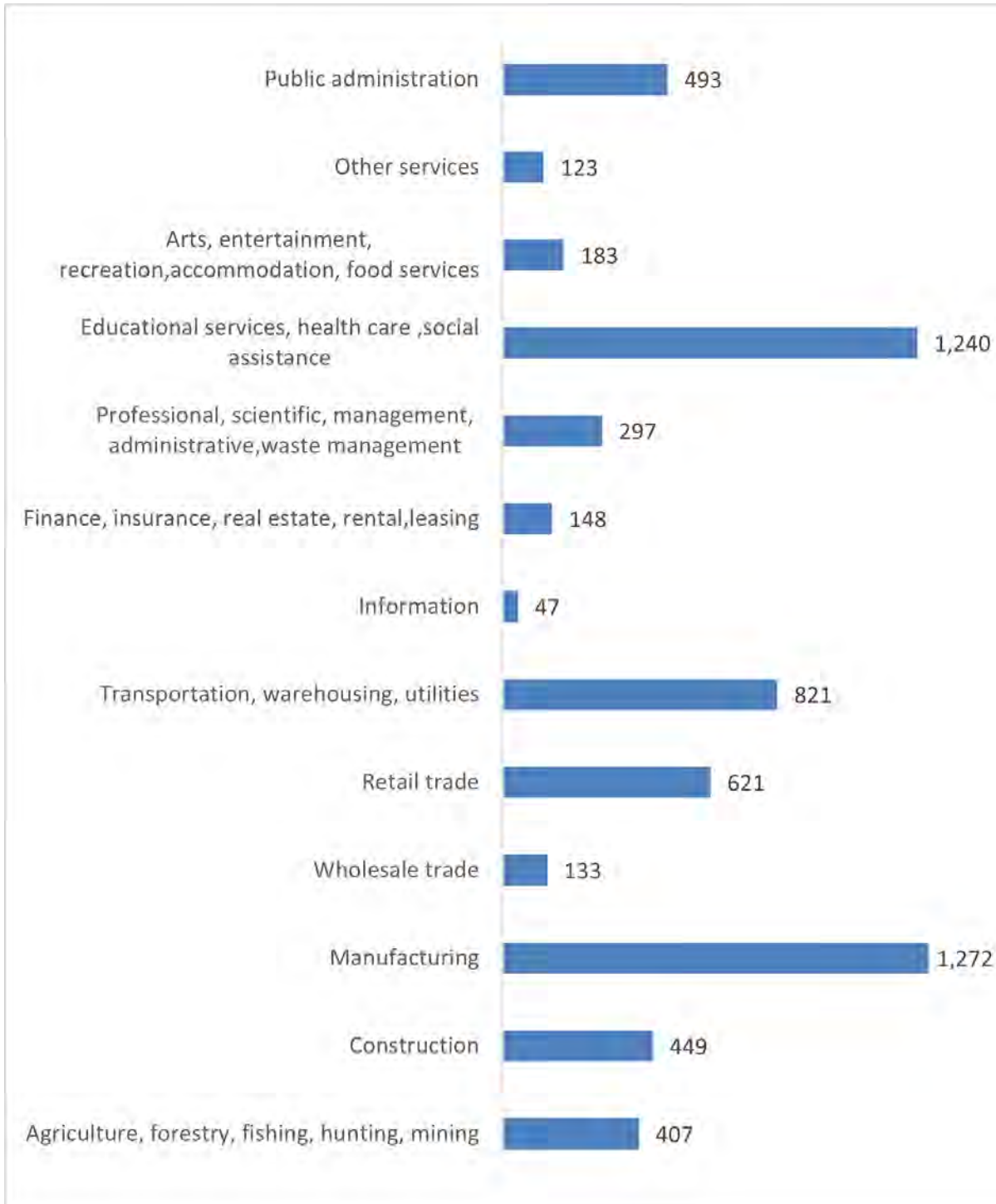
Population 18 years and older	12,003
Attended School/No HS diploma	2,702
High School Graduate	4,976
Attended College/No diploma	2,413
Associates Degree	695
Bachelors Degree	982
Graduate Degree or Higher	235

Source: American Community Survey 2021 S1501

According to the 2021 American Community Survey, 77.4% of the population over the age of 18 in Jefferson County has a high school equivalency or higher. In 2021, 16% of residents over the age of 18 were reported to have an associates degree or higher.

Manufacturing trade was the largest industry of employment by citizens in Jefferson County in 2021 at 19%. Educational services/healthcare/social assistance was the second largest industry at 18% of employment. Transportation/warehousing/and utilities was the third largest industry of employment in Jefferson County at 12% in 2021.

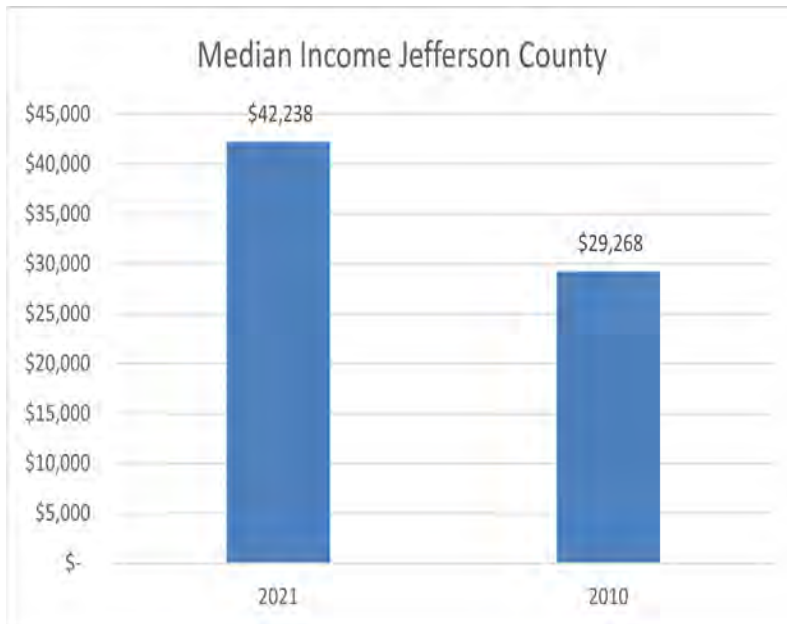
Employment by Industry



Source: American Community Survey 2021 DP03

Average Annual Income

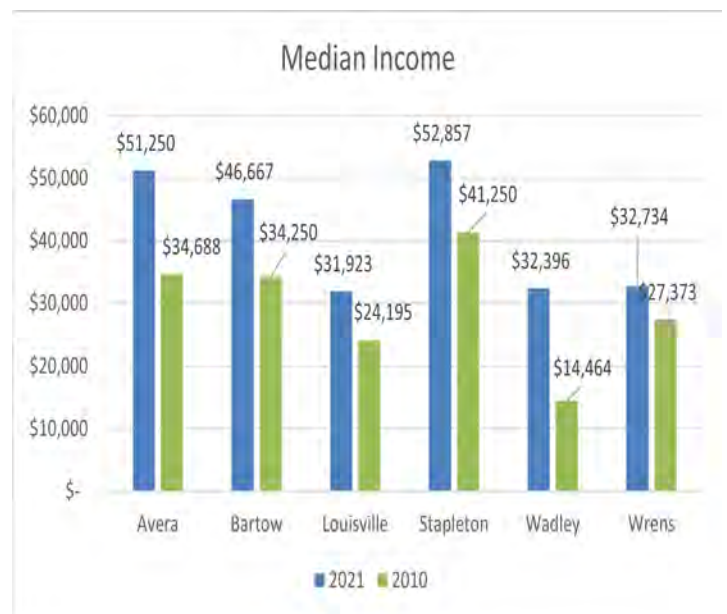
In general, poverty describes an absence of money or resources that would allow an individual to satisfy their basic needs. In an effort to qualify poverty, the U. S. Census Bureau along with the Office of Management and Budget (OMB) established monetary thresholds using the Consumer Price Index, but do not change based on geography. For example, in 2021, a family of four was considered to be living beneath the poverty threshold if their combined income was under \$27,479.



The U.S. Census Bureau gauges a geographic area's income using Median Household Income (MHI). The MHI is meant to represent the average person living in a respective area. The MHI in Jefferson County in 2021 was \$42,238. This was an increase of 44% in annual income since 2010.

Source: American Community Survey 2010, 2021 S1901

Since 2010, Avera saw an increase of average income of about 48%, Bartow saw an increase of about 36%, Louisville saw an increase income about 32%, Stapleton saw a 28% increase, Wadley saw the greatest increase in income of about 124%, and Wrens saw an increase of about 20%.



Source: American Community Survey 2010, 2021 S1901



Housing

Housing types and conditions vary across the county. Examining this information is important because housing conditions within a community provide insight into its economic and social health. High vacancy rates, large quantities of deteriorated housing, and lack of new development are indicators of population decline, stagnant growth, and potentially low quality of life. This section of the plan examines the housing mix, occupancy, home values and age of housing stock.



Existing Housing Stock

Jefferson County's housing stock includes both owned and rental units and mix of housing types. The majority of the county's housing stock is classified as single-family. Approximately 78 percent of housing units are occupied and 22 percent are vacant units.

Housing inventories suggest that the county's housing stock is aging, almost 49 percent being built before the 1980s. In areas where residents are also low-income, housing repair can be a major issue. Some home owners have been able to utilize Community HOME Investment Program (CHIP) grants for housing rehab, although issues of their property has been a problem. The CSRA has a need for more housing options for those who are working lower-wage jobs, retired, aging in place, and in poverty.

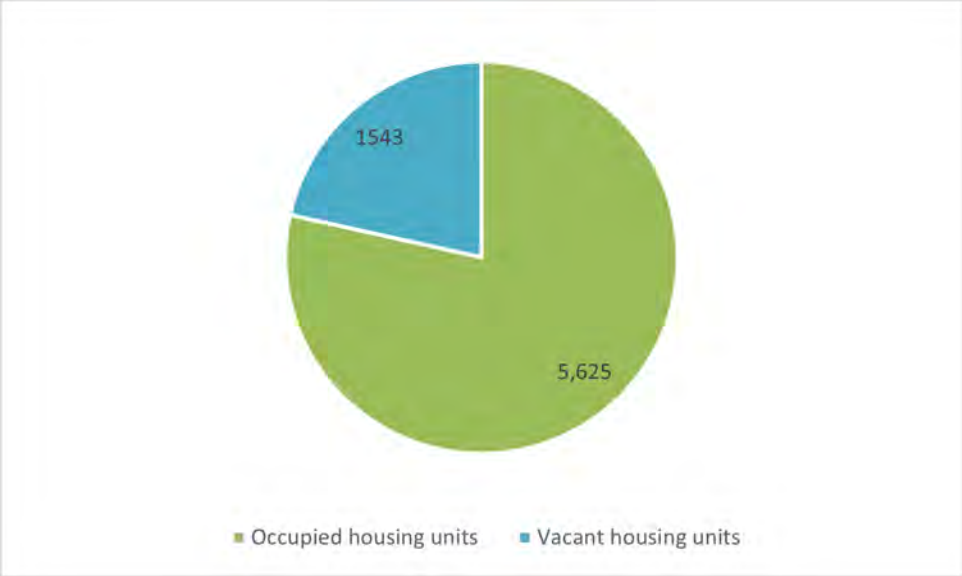
Housing constructed through CHIP could fill some of this need. The demand for affordable housing is rising in the region, and although many residents want to see single-family homes in their area, apartments, duplexes, and other multi-family options are necessary.



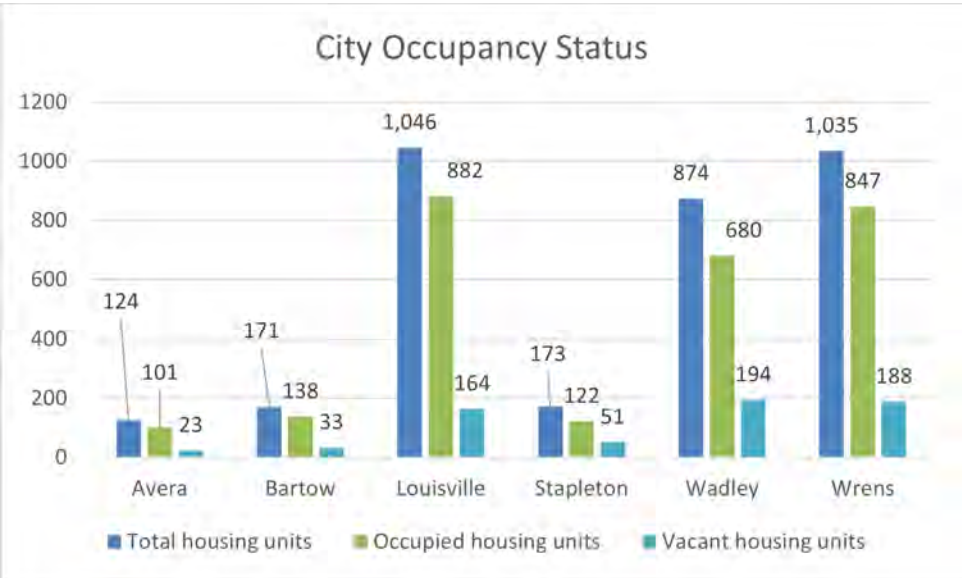
Number of Housing Units

Jefferson County as a whole contains 7,168 housing units according to the 2021 American Community Survey (ACS). The city's of Avera and Bartow have an 81 percent occupancy, Louisville 84 percent, Stapleton 71 percent, Wadley 78 percent, and Wrens 82 percent.

Occupied and Vacant Housing Units Jefferson County



Source: 2021 American Community Survey 5-year estimates DP04



Source: 2021 American Community Survey 5-year estimates DP04



Housing Unit Types

According to the 2021 ACS, roughly 90 percent of the housing stock in Jefferson County is comprised of either single family detached residences (60 percent) or mobile homes/trailers (30 percent).

The development of multifamily housing in Jefferson County would be beneficial. Currently small (3-9 unit) housing makes up only 4 percent of the multifamily housing. Medium sized (10-19 unit) developments 1 percent and large (20+ unit) developments only make up 0.02 percent of the housing stock.

1-unit, detached	4,285
1-unit, attached	16
2 units	321
3 or 4 units	154
5 to 9 units	149
10 to 19 units	74
20 or more units	2
Mobile home, RV, Etc.	2,167

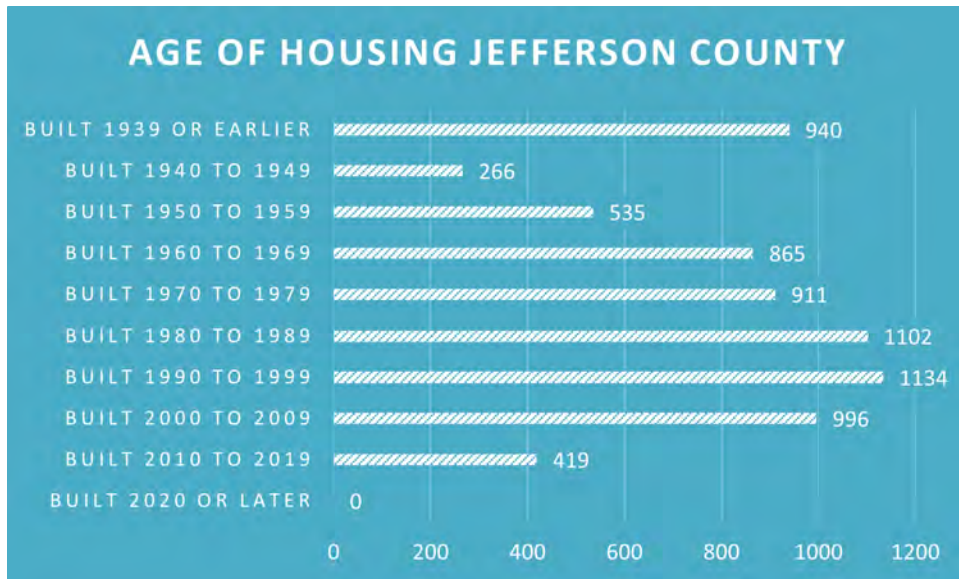
Source: 2021 American Community Survey 5-year estimates DP04





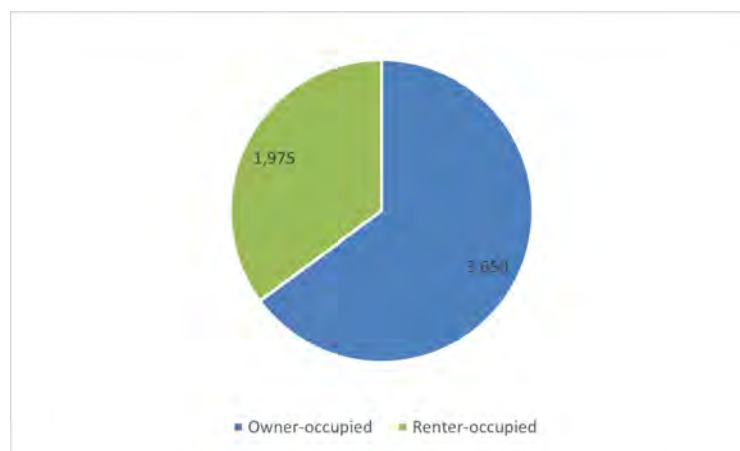
Age of Housing

Jefferson County's housing stock is aging. All of Jefferson County had a spike in development in the 1980's leading to a boom in two decades from 1980 to 1999. Activity continued, though at a less vigorous pace through 2009. Around 50% of the current housing stock appeared during this 30-year cycle. There has been a less intense burst of growth, which occurred between 2010 and 2019.



Source: 2021 American Community Survey 5- year estimates DP04

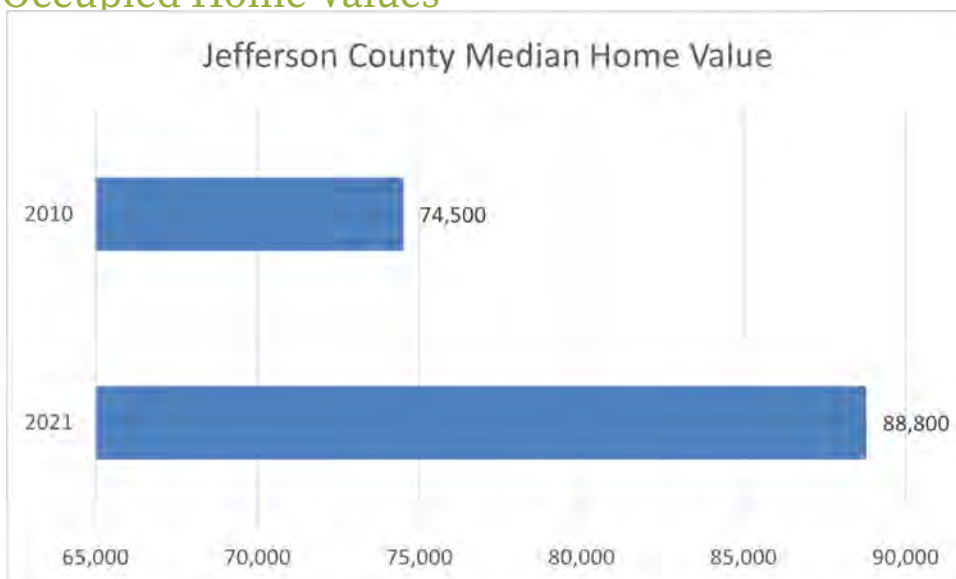
Housing Unit Owner vs Renter



Source: 2021 American Community Survey 5- year estimates DP04

Owner occupied housing makes up 65 percent of the occupied housing units in Jefferson County. Renters make up 35% of the occupied housing.

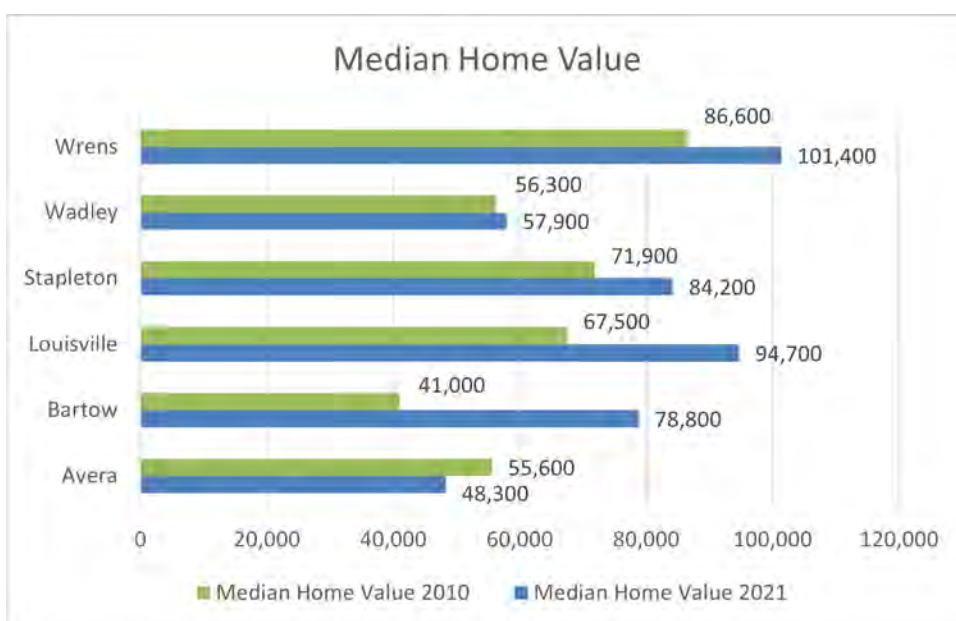
Owner-Occupied Home Values



Source: 2021 American Community Survey 5- year estimates DP04

Median home value in Jefferson County rose around \$14,300 since 2010. The median home value in Jefferson County in 2021 was \$88,800.

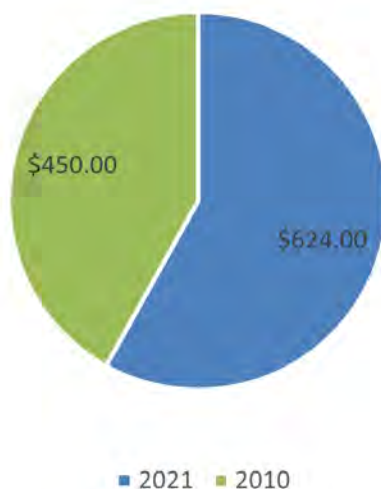
Each city in Jefferson County saw an increase in median home value since 2010, with the exception of Avera who saw a decrease of 13 percent during this time. Bartow saw an increase in median home value at 92 percent. Louisville saw an increase of 40 percent, Stapleton saw an increase of 17 percent, Wadley almost 3 percent, and Wrens saw a 17 percent increase.



Source: 2021 American Community Survey 5- year estimates DP04

Median Rent

Jefferson County



Source: 2021 American Community Survey 5- year estimates DP04

In 2021, median rent in Jefferson County increased by \$174 a month since 2010. Each city also saw an increase in median rent during this time except for Bartow which has a decrease in median rent of \$143 a month. Avera saw an increase of \$183, Louisville saw an increase of \$118, Stapleton saw an increase of \$259, Wadley saw an increase of \$110, and Wrens saw an increase of \$179 a month.



Source: 2021 American Community Survey 5- year estimates DP04



BROAD STREET BOOKS



Natural & Cultural Resources

Natural and cultural resources are often unrecognized community assets that contribute to the vitality and sustainability of the county. They have the potential to draw visitors who value natural beauty or historic character. These assets can be connected to similar resources in other counties for regional tourism.

As conditions change, it is important to focus efforts on protecting critical natural features like watersheds, and avoid hazards like floodplains. When development decisions are made, the natural and cultural resources that make Jefferson County unique must be considered.



NATURAL RESOURCES

Wetlands

Wetlands can be defined as lands which are saturated, either permanently or seasonally, creating an ecosystem that contains characteristic vegetation that has adapted to the unique soil conditions. Wetlands serve as a unique habitat for fish and wildlife, breeding ground, and home for unique plant and animal species that have adapted to these special conditions.

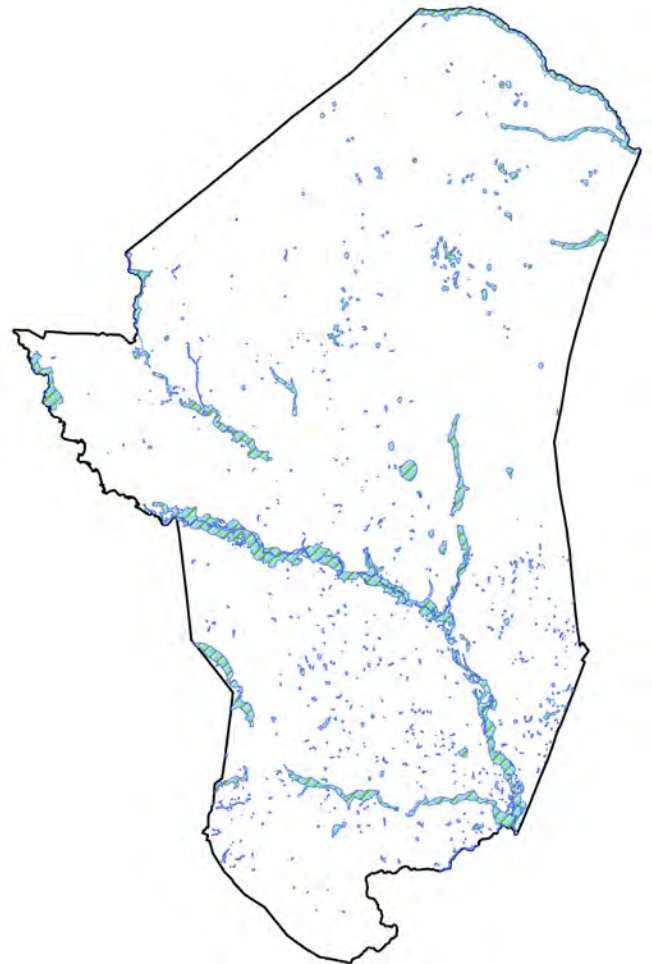
The Georgia Department of Natural Resources has identified five categories of wetlands which require special protection through ordinances. These wetlands include: Open water, scrub/shrub, altered, non-forested, and forested.

Land uses in wetland areas should be limited to low to no impact uses which include the harvesting of lumber and timber and wildlife and fishery management.

Jefferson County has adopted a Wetlands Protection Ordinance. The ordinance was passed to promote wetland protection, while taking into account varying ecological, economic development, recreational and aesthetic values. The objective of the ordinance is to protect wetlands from alterations that will significantly affect or reduce their primary functions for water quality, floodplain or erosion control, groundwater recharge, and aesthetic nature and wildlife habitat. This ordinance refers to projects located within a wetlands area to the Army Corps of Engineers for review.

Flood Plains

Flooding can be defined as a situation in which an overflow of water submerges land which usually is not inundated with water. A floodplain is an area designated to store natural water and conveyance, maintain water quality, and provide groundwater recharge. Designated flood zones as determined by the U.S. Federal Emergency Management Agency's (FEMA) are located on the Flood Insurance Rate Map (FIRM). The FIRM can be found on the FEMA website, and areas located within the 100-year flood plain are in Zone A.

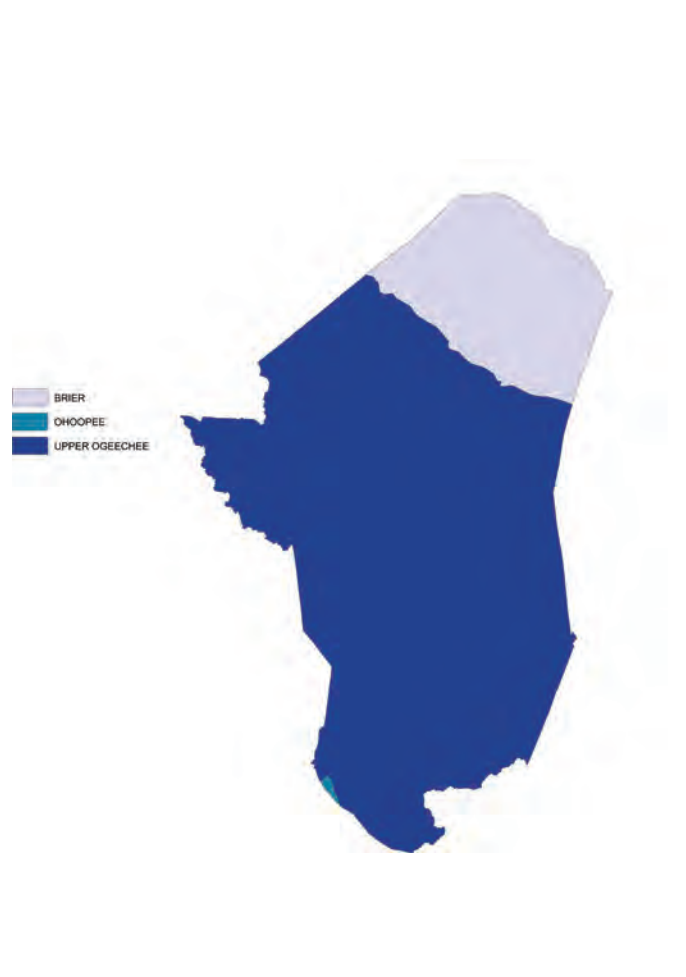


Watersheds

Watersheds are important components to public water supply. Watersheds are land formations which direct water (primarily rain water) flows in a certain direction and feeds smaller flows and water bodies.

The removal of vegetation and the introduction of paving for roads, parking lots, etc. increase the total run-off on a site which in turn increases erosion, flooding, and sedimentation of water resources. To protect drinking water supplies downstream, The Department of Natural Resources has recommended buffer requirements to water supply watersheds that are less than 100 square miles in size.

Protection of Jefferson County's water supply will help keep drinking water for county residents free of contamination from various pollution sources. By limiting the amount of pollution that gets into the water supply, governments can reduce the cost of purification and guarantee improved public health.

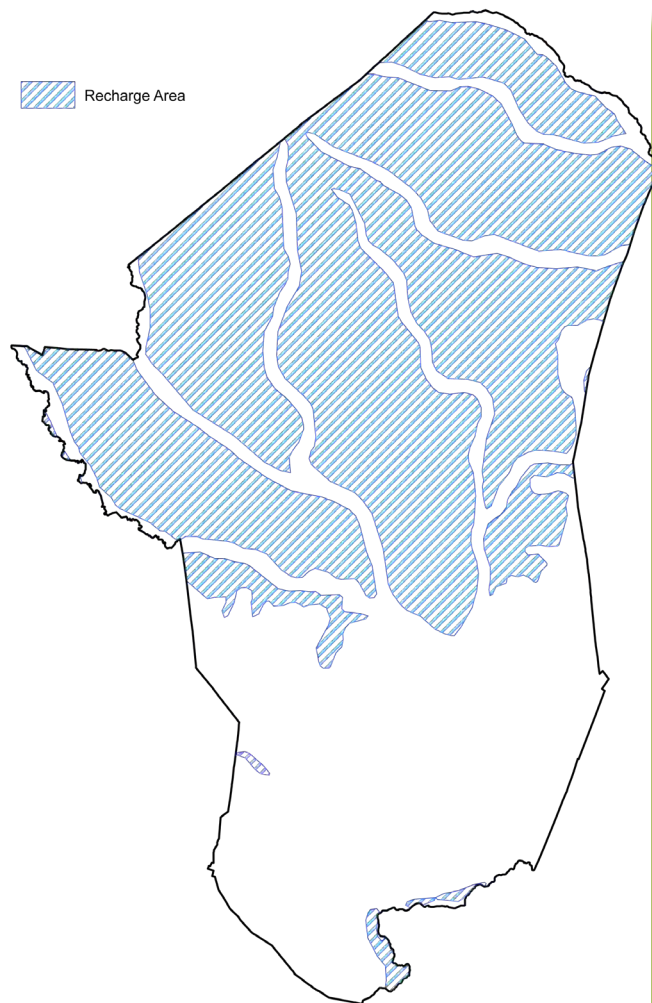


Groundwater Recharge Areas

Groundwater recharge areas are specific surface areas where water passes through the ground to replenish underground water sources. These areas should continue to be protected because contamination of this water supply is a possibility which must be considered when discussing the development or placement of any type of facility in these areas.

The only significant groundwater recharge area in Jefferson County is located in the northern half of the county. Most of the area lying north of the fall line is within the Cretaceous aquifer where it is more practical to draw water from surface sources than from deep wells. The southern half of the county is located within the Floridian Aquifer region where deep wells are used to draw water and the environmental concerns are not as great. The Georgia Department of Natural Resources recommends that local governments adopt criteria for groundwater protection as part of their land use regulations. This is particularly important for the cities that lie within the groundwater recharge areas in the northern part of the county. The new recommended criteria should pertain to any new development within the recharge areas.

Groundwater Recharge Areas in Jefferson County



Soil Types

Jefferson County is in both the Carolina and Georgia Sand Hills land resource area and the Southern Coastal plain major land resource area. Characteristics of the Carolina and Georgia Sand Hills area are very gently sloping to moderately sloping steep soils on uplands. These soils are well drained to excessively drained. They commonly have a thick, sandy surface layer and a loamy subsoil or are sandy throughout. The subsoil, if it occurs, is generally firm. The Southern Coastal Plain major land resource area, which makes up a large part of the county, is made up of mainly nearly level to gently sloping soils on uplands. These soils are well drained and have a sandy surface layer and a loamy or clay-like subsoil.



CULTURAL RESOURCES

Cultural Resources

Jefferson County was the site of several historically significant places and events, including the Constitutional Convention of 1798 and the Civil War. The County currently has *five sites* listed on the National Register of Historic Places (NR), in the cities of Louisville, Bartow, and Wadley. There are dozens of other sites in city and county areas that are eligible for the National Register, and jurisdictions should consider this nomination and additional local protections through ordinance.



Market House

The Market House is the only remaining structure from the 18th century in Louisville. Located in the town center, it was built between 1795 and 1798. While the exchange of goods, furniture, and town lots was common, the Market House was known as being the site for the sale of slaves. It was commonly referred to as the Slave Market. While portions of the structure have been replaced, the original timber still exists reinforced by steel. In addition, the Market House has a French cast bell that made its way to Louisville after being stolen off a ship by pirates and sold in Savannah. Due to its cultural and historical significance to both the state and nation, the Market House has been on the National Register of Historic Places since 1978.

Jefferson County Courthouse

The Jefferson County Courthouse is located on the site of the old State Capital. In 1799, Georgia's Great Seal was adopted on this site. The courthouse was designed by native Louisville architect, William Franklin Denny, and built in 1904. Best known for church and residential architecture, the Jefferson County Courthouse is the only courthouse Denny designed. The Jefferson County Courthouse was placed on the National Register of Historic Places in 1980. Today, the courthouse houses the State and Superior courts and many other county offices.



Louisville Commercial District

The Louisville Commercial District has always served as Louisville's primary commercial area. It extends four blocks NW to SE along Broad Street and was listed on the National Register of Historic Places in 1994. The District includes 180 acres, 43 buildings, and 1 structure. The Jefferson County Courthouse and Market House are within this District. Other significant structures include the post office, county jail, former Baptist Church Sunday School, Jefferson Hotel, Abbot and Stone building, Planter's Cotton Warehouse, and the Pal Theater. The period of significance is 1750-1949. Architectural styles of the district include Beaus Arts, Romanesque, and Early Commercial. Majority of the buildings are brick and one story in height. The District has a state level of significance.



Bartow Historic District

The Bartow Historic District was entered into the National Register of Historic Places in 2009. It has a period of significance ranging from 1850 to 1958. The District includes the town's historic commercial, residential, industrial, and institutional resources. It contains 125 contributing resources. Buildings and structures within the district represent common architectural types and styles found in Georgia through the late 19th to mid-20 centuries, such as the Queen Anne cottage, Georgian house, and the gabled-ell cottage. Notable community landmark buildings include the Central of Georgia depot, Bartow Baptist Church, Bartow United Methodist Church, and the 1956 Bartow High School. The district is also noted for its significance in the areas of African-American heritage and community planning and development.



Cunningham-Coleman House



Wadley, GA

The Cunningham-Coleman House was entered into the National Register of Historic Places in 1984. The house is significant in architecture, agriculture, and local history. The house is a Sand Hills cottage with Greek Revival detailing. It was the center of a middle-sized cotton plantation. William Armstrong Cunningham purchased the plantation in 1869 and played a significant role in the area, running a store in the area. Cunningham's widow sold the property to John C. Coleman, a business owner and public official in adjacent Emanuel County, in 1895. The family has been in the Coleman family since its purchase in 1895.





Community Facilities

Community facilities and services are a critical component of life in Jefferson County. These facilities and services contribute to the health, safety and welfare of residents, help to improve the overall quality of life, and often foster new business and residential development opportunities. Community facilities include public safety, education, parks and recreation, hospitals, and cultural and historic assets.

An effective local government continually assesses and makes efforts to enhance the service operations of the facilities provided in an effort to offer residents and other stakeholders value for their investment in the community.



In order to promote community-wide economic development and improve the quality of life for a community's residents, the effective maintenance of public facilities and services is crucial. Rural communities like Jefferson County may find it particularly difficult to maintain existing infrastructure in a manner that does not stress the personal finances of the existing population - not to mention searching for resources to fund new infrastructure to attract additional growth.

Jefferson County communities collectively provide or support numerous public services which benefit citizens, business owners and property owners. Local public services include standard infrastructure categories such as: water, sewer, streets, public safety, EMS, educational facilities, among others. In addition, the jurisdictions have collaborative arrangements for specialized service categories such as: economic development, community development, code enforcement, and parks and recreation.

This section does not provide a detailed inventory, but rather an overview of key community-provided services and facilities.



Water Treatment and Supply

Access to adequate water supply is of both residential and commercial importance in the region. Communities in Jefferson County suffer from deterioration of parts of the local water systems due to aging lines or constrained growth opportunities due to undersized lines, which inhibit increased flow and carrying capacity. Having adequate water supply and properly sized lines also helps with fire protection in assuring capacity and proper flow. Each municipality has available capacity in water storage tanks and capacity to expand service areas.

Jurisdiction	Tanks	Tank Storage Gallons
Avera	1	60,000
Bartow	1	75,000
Louisville	4	500,000
Stapleton	2	135,000
Wadley	2	550,000
Wrens	4	800,000

Sewerage and Wastewater

Sewer service is not widespread in the county. Additionally, Jefferson County turned its water and sewer system over to the City of Louisville. Like water, sewer service is primarily offered at the city level, and much of the unincorporated areas use septic systems. Some cities have extended sewer service outside of city boundaries and have agreements with the county for how those unincorporated areas are served.



Fire, Police, and EMS

An effective fire department is a vital link in the chain of regional development, affecting insurance costs and, thus, the willingness of people and industries to settle in a given area. Fire protection is directly affected by the quality of the water system and a lack of infrastructure can severely reduce the community's ability to provide adequate fire protection. The existence and adequacy of a water system become a determining factor in the rating given a fire department by the Insurance Services Organization (ISO). Other factors include: the size and type of buildings in a community, the presence or absence of a fire alarm system, how calls are received and handled, whether fire fighters are paid or volunteer, the size of water mains, and call response time. The ISO weighs these factors to assign a department a rating between one and ten, with a rating of nine or ten meaning that an area is relatively unprotected. ISO ratings are not legal standards but recommendations that insurance companies can use to set fire insurance rates. Because they are set by an independent organization, they become an easy way of comparing community fire departments. However, because these ratings involve weighing several variables, they do not directly compare. For instance, a rating of seven in two different communities does not mean that each is working with the same equipment under the same circumstances. Rather, one could have an adequate water system but inadequate personnel and equipment, the other, the reverse. In our region, firefighting services are provided by both full-time and volunteer firefighters.

According to the 2018 Government Management Indicators (GOMI) survey, Jefferson County's ISO rating overall is a 6. The county is currently working to upgrade its fire station and the 911 system to NextGen 911. Dispatch services for all public safety agencies except Wadley Police Department which has its own dispatchers.

Jefferson County Sheriff's Department has 27 full-time and 4 part-time sworn officers, Three additional sworn officers work in other departments such as EMA, Building Inspection, Code Enforcement. Jefferson County Law Enforcement Center serves as the counties jail facility.

Jefferson County has two fire stations, one is operated by the City of Wrens. The county employees one full-time firefighters, EMA Director/Fire Chief, and has 15 volunteer firefighters.

Police and Fire Statistics by Jurisdiction Jefferson County				
Jurisdiction	Number of Sworn Police Officers	Number of firefighters	Number of Fire Stations	Fire Classification Rating (ISO)
Avera	0	9 volunteer	1	4
Bartow	1	Volunteer	1	5
Louisville	5 ft, 1 pt	5 ft, 1 pt	1	2
Stapleton	3	10 volunteer	1	4
Wadley	7pt	volunteer	1	4
Wrens	10 ft, 3 pt	5 ft, 1 pt	1	3

Libraries

Jefferson County Library System (JCLS) is a locally-funded system and has three (3) libraries with locations in Louisville, Wrens, and Wadley. They employ 3 full-time and 4 part-time employees. These three libraries spread across the county provide access to citizens throughout the County. With approximately 11,000 registered patrons as of fiscal year 2016, the system contained 47 public use computers with internet. The 3 libraries operate with 5 full-time and 4 part-time employees who oversee a collection of approximately 44,000 items housed within the facility. The JCLS also offers a van delivery service to local schools to supplement children's access to books. As plans for broadband access move forward, the County should discuss patron and facility needs with library staff.

Hospitals

The Jefferson Hospital, located in Louisville, GA, is a 37-bed facility which uses hospital staff and contract physicians. It is a member of the Georgia Hospital Association's for Rural Health and is directed by a 7 member Hospital Authority. Ninety percent (90%) of patients come from Jefferson County. The remaining ten percent (10%) come from many surrounding counties, including Burke, Glascock, Jenkins, Emanuel, Johnson, McDuffie, Warren, Washington, and Richmond counties. The hospital also has three (3) rural health clinics in Louisville, Wadley and Wrens.

Support for the hospital is important. Like many other parts of the state, the rural hospitals have struggled. Some counties in the CSRA have no hospital at all, which forces residents to travel and decreases overall quality of life. This becomes a concern for residents with health concerns and those who are aging or have young children in those areas. Opportunities to improve local access to healthcare in Jefferson County include increasing telemedicine activity. This would be well-served by improving high-speed internet access at the hospital, clinics and residences.

Solid Waste

In the unincorporated areas of Jefferson County and Avera, the county collects refuse from dumpster sites. The city of Bartow collects their own. Stapleton, Louisville, and Wrens have contacted with a collection service.



Educational Facilities

Public school systems are critical in providing the education and skill foundation for future employees and business leaders. The quality of public schools is also a significant consideration to business leaders deciding where to locate their companies. How schools perform on state and national standardized tests helps to measure readiness for higher education and employment opportunities. The Jefferson County school district contains five public (5) schools with a 2022 enrollment of 2,149. This represents a decline in total enrollment over the last 20 years, wherein enrollment was 3,680 in 2000 and 2,982 in 2010. This follows the pattern of general population declines in the County. With 166 graduates in 2022, the graduation rate at Jefferson County High School was 90.2 percent. Jefferson county's graduation rate is higher than the State of Georgia average of 84.1% in 2022.

Jefferson County currently offers dual-enrollment program with Oconee Fall Line Technical College (OFTC) for high school seniors. OFTC operates the Jefferson County Center, an extension campus in Louisville. Across its system, the college offers more than 100 associate degree, diploma and certificate programs. Programs offered at the Louisville location include commercial truck driving, early childhood and education, nurse aide, and welding ad joining technology. County residents will hopefully be able to benefit from increased collaboration between local and regional colleges and universities, businesses and K-12 educational institutions to develop a qualified workforce capable of meeting the needs of existing and expanding business through new degree programs, apprenticeships, and expanded dual enrollment options.

Alternative Modes of Transportation

Jefferson Transit is a public transportation system, owned and operated by the Jefferson County Board of Commissioners and has served Jefferson County since 1987. Jefferson Transit receives funding from the Federal Transit Administrator, the Georgia Department of Transportation, the Department of Human Services, Jefferson County, and rider fares. Scheduled bus service is available Monday - Friday throughout the County; pricing is available on the County's website.

Jefferson Transit's mission is "to provide efficient, effective, safe and affordable transportation that will allow riders to access jobs, medical/dental offices, education, social service agencies, government offices, and for shopping/personal purposes.

CSRA cities and counties have been active in implementing numerous bicycle and pedestrian improvements, Including the development of a bicycle and pedestrian plan in 2005. The plan aimed to designate a regional bicycle network as well as recommend actions to improve pedestrian facilities, particularly in downtown areas. The plan for Jefferson County included a multi-use trail through Avera, Stapleton, Wrens, and Louisville that would connect to Glascock and Burke counties.



Sidewalks are available in the incorporated jurisdictions in downtown and neighborhood areas. However, there is currently no comprehensive sidewalk inventory for Jefferson County and its municipalities. Jefferson County communities should focus on repair and maintenance of sidewalks in existing areas as well as seek opportunities to expand into new areas.

One opportunity to observe areas of potential need is the SRTS program, for which the CSRA RC is a partner. The SRTS program enables and encourages students to walk or bike to school by facilitating projects and activities that improve safety and reduce traffic and air pollution in the vicinity of schools. The previously-mentioned walk audits also can provide recommendations of where to install additional bike/ped facilities.

Railroads

Two statewide freight corridors pass through Jefferson County, Norfolk Southern and Louisville & Wadley.



Road Network

Roadways drive the Jefferson County economy and are considered significant as much for economic development function as for local transport needs. Jefferson County has 186 miles of State Routes, 546 miles of County roads, and 96 miles of city streets. The expansion of U.S. 1 to four lanes will likely have a significant impact over the coming years. Given the municipality's ability to provide water and sewer infrastructure, it is likely that manufacturing plants will locate in proximity to Louisville, Wadley and Wrens. Should that occur, the municipalities and Jefferson County will need to consider the traffic implications of potentially significant truck and vehicular traffic along U.S. 1. Overall land use patterns are also of increasing concern, and the municipalities and county will benefit from a county land use ordinance update. Jefferson County will also be repairing and replacing its bridges over the next few years.

Electric Vehicles (EV)

The innovative technology of electric vehicles has made them more popular among consumers. They may reduce the use of imported fuels and reduce greenhouse emissions. Any jurisdiction that wishes to promote or support the adoption of EVs will need to build out its public EV charging infrastructure while also making it easier for individual EV owners, businesses, and developers to install private charging stations or networks. EV's use rechargeable batteries to power an electric motor. These batteries need to be recharged regularly. Local governments can play a key role in encouraging the adoption of EVs by influencing standards, codes, processes, and policies to approve the installation of private and public charging stations. Local governments may chose to host or operate public charging stations.



Transportation Investment Act (TIA)

The Transportation Improvement Act (TIA, aka TSPLOST) in 2012 provided transportation improvements across the region. TIA represents a 1% transportation sales tax to fund regional and local transportation improvements, of which 75% of funds go to a predefined project list. Discretionary funds are used on a variety of projects, such as airports, roads, bridges, bike lanes, and pedestrian facilities. The funds can be used on any new or existing transportation projects, including operation and maintenance or as a match for state and/or federal funds.



Jefferson County TIA Projects
www.ga-tia.com

Project	Description	Band	Original Project Budget
Hoyt Braswell Road Truck Route	Convert Hoyt Braswell Road to Truck Route	1:2013 to 2015 (TIA 1)	\$4,341,344
Walker St Improvements	Walker Street (Sidewalks, Curb&Gutter, Resurface) from SR 4/US Hwy 1 to Young St	1:2013 to 2015 (TIA 1)	\$500,000
Louisville Bypass Widening	Louisville Bypass Widening	2:2016 to 2019 (TIA 1)	\$20,000,000
SR 4-US 1 FM N of Nimron Road to Louisville Bypass; Inc Bridges	Widening to 4 lanes from the Wadley to the Louisville on US1- SR 4	2:2027 to 2029 (TIA 2)	\$45,000,000
SR 4-US 1 FM Louisville Byp @CR 325 to CR 138-Mennonite Church Road	Widening to 4 lanes with grassed median from Clarks Mill Rd to Warrior Trail on SR 4	1:2023 to 2026 (TIA 2)	\$26,100,000
SR 4-US 1 From CR 138-Mennonite Church Road to SR 540	Widening to 4 lanes from Warrior Trail (JCHS) to HWY 88 south of Wrens on US1-SR 4	1:2023 to 2026 (TIA 2)	\$35,300,000

Jefferson County Service Center

The Jefferson County Service Center for intellectually and developmentally disabled adults, was renovated. This center was built in 1986 and benefits around 38 adults. This project was funded by a Community Development Block Grant (awarded in 2018) for \$719,700, with a total project cost of \$772,847. The project closed in Oct. 2020.



Jefferson County Leisure Center

The Jefferson County Leisure Center for senior citizens, is currently undergoing an addition and renovations. A Community Development Block Grant (CDBG) was awarded in 2021 to benefit 105 seniors from throughout the county enjoy coming to the Leisure Center for various activities.

Jefferson County's 2021 Community Development Block Grant (CDBG) application was to improve and enhance living conditions of the low-to-moderate income senior citizens building by renovating and expanding the Jefferson County Leisure Center, as it has been named. The building is located at 209 East 7th Street in Louisville which is owned by Jefferson County. It is on the corner of Green and 7th Streets in downtown Louisville, only two blocks from the Jefferson County courthouse in a quiet historic neighborhood. The program provides Jefferson County's Seniors with a "home away from home" with countless programs, events, and activities for the County's 55-and-over population.

There are a total of 135 seniors enrolled in the Leisure Center program, of which 105 are active in the congregate program at the Center and 30 are homebound who receive delivered meals. All enrollees are funded through the Center by the Older Americans Act for nutrition and meals and some activities. The building expansion of 1,600 SF will directly benefit the 105 congregate senior citizens of whom 100% are presumed of low to moderate income as limited clientele.

The 2021 Jefferson County CDBG awarded is for \$750,000 with a total project cost of \$960,122.



Parks and Recreation

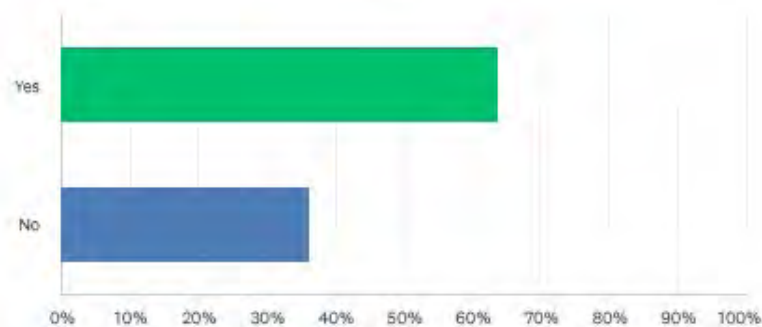
Jefferson County Recreation and Parks agency's mission is "to enhance the quality of life for all youth in Jefferson County by providing athletic fields, indoor basketball court, playground and fun enjoyable recreation programs that promote healthy lifestyles and an active community."

Parks, playgrounds and walking tracks are located throughout Jefferson County at traditional park locations, schools, and health facilities. This is a good option for including and increasing active and passive recreation in a community. Current county efforts to increase recreational facilities include a picnic site/pavilion and disc golf course at Ogeechee Crossing Park. Recreation should not be limited to what we normally see. Even in more rural areas of the County, residents can benefit from passive recreation such as non-paved, soft surface trails.



Q16 Do you use public facilities such as parks, trails, and ball fields?

Answered: 149 Skipped: 71



ANSWER CHOICES	RESPONSES	
Yes	63.76%	95
No	36.24%	54
TOTAL		149

Ogeechee Crossing Park

The Ogeechee Crossing Park" is located southwest of Louisville in rural Jefferson County. Conserve Georgia funds will provide needed assistance for development of the 230-acre Ogeechee Crossing Park bordering the Ogeechee River to expand opportunities for recreation, healthy living and wellness, learning about nature, and conservation of land for public use.

Three areas will be developed. Amenities include playground, butterfly garden and gazebo, picnic tables, restrooms with showers, viewing center for competition cross country races, camp sites with electricity and water, educational outdoor classroom, kayak launch, and trails of approximately 7 miles for mountain biking, cross country, and hiking/walking.

Jefferson County has, additionally, built a disc golf course in the middle of the Park. "Where the Moss Meets the River: Master plan Implementation for Ogeechee Crossing Park," GA Outdoor Stewardship Program, Conserve Georgia Grant, agreement signed 9/22/2020. The grant award is \$898,983, and the total project cost is \$1,201,645.74.







Land Use

Land use is at the heart of planning for the future of any community. The timing and location of new development, or reuse of existing developed land, depend in large part on factors discussed in previous sections: population change, economic growth, availability of or need for community facilities and infrastructure, housing stock, and natural and historic resources. Each of these components of a community has a direct impact on how land will be used. In essence, land use is the intersection of all other facets of community planning.

This section details the tools currently in place to shape development, and provides prescriptive guidance to ensure that future development occurs in a manner that moves Jefferson County toward realizing its desired end.



Existing and Future Land Use

The purpose of the Land Use Element is to ensure that the distribution of land uses meets the future economic, social, physical, and environmental needs of Jefferson County and its municipalities. The future land use map can assist local governments in making development decisions that complement long-term goals and policies established in this planning process and avoid the emergence or continuance of inefficient development patterns. This section of the Plan includes the a collection of future land use maps and defining narrative that use classifications to depict the location of future land uses.

An examination of zoning, land uses and development patterns throughout the county reveals that little has changed since the last comprehensive plan update. The county's predominant land uses overall continue to be agricultural and residential in nature. Jefferson County has experienced a relatively small amount of growth. On the whole, the county remains rural and has not experienced the booming suburban growth seen elsewhere in the region. Despite lags or decline in the unincorporated area, some incorporated areas have grown in population, increased infrastructure service area and annexed land.

Transportation is one of the strongest influences on land use patterns. Travel behavior and the existence of roads have a direct impact on the location of new development. Jefferson County has an abundance of state routes intersecting the rural areas and linking them with the county's six cities. Historically, development patterns in the unincorporated areas have occurred along, or within close proximity to these major road networks. Widened highways and reduced commute times have increased Jefferson County's location benefit of proximity to the Augusta/Aiken area. Growth and job opportunities in these nearby counties served as a catalyst for residential development along the commuting corridor.

This same proximity has also affected commercial development. For the most part, much of the county's residents traditionally traveled outside the county to take advantage of larger shopping and entertainment opportunities in Augusta-Richmond County. Over time, major commercial and business development has been focused in areas inside and near to the incorporated areas. Commercial land use is significantly higher in Louisville, Wadley and Wrens than the other municipalities, reflecting larger population shares and traditional status as trading centers.

Conversely, Avera, Bartow, and Stapleton have experienced lower rates of conversion from agricultural to residential and commercial uses. Additionally, in downtown areas, all the cities contend with the need and desire to recruit businesses in order to promote revitalization and prevent or resolve issues of vacant commercial structures. Industrial land in Jefferson County includes several mining sites and industrial parks. The cities and county are seeking to better connect and expand existing industry and plan for the future as new projects such as highway widening and broadband deployment happen. One industry that has seen regional growth is solar, and there are opportunities to grow

this industry in the county.

The improved efficiency of road networks and lack of robust public transit has contributed to an increased reliance on cars, which is reflected neighborhood development. Prominent features of the county's subdivisions are garages, driveways, and a lack of sidewalks. The increased mobility of the population, in general, has led to a decrease in mixed-use and neighborhood commercial development and has decreased our mobility options through a forced reliance on the automobile, even for the shortest of trips.

The communities in Jefferson County have decided to change some of that. In the future, the jurisdictions would like to pursue more mixed-use development, particularly along important corridors and in areas immediately outside the incorporated areas that can support it. Some of the existing county zoning can support mixed-use developments, such as the planned unit development (PUD) district. Other options currently not in the code should be developed to complement the others. One possibility is a commercial overlay along major highways. Additional study and refinement of the ordinances needs to happen in order to best define what code adjustments will be made.

As Jefferson County and its communities continue to change, awareness of the impacts of Fort Gordon's growth and expansion remain important. Land use regulations and patterns that encourage appropriate growth and development will become increasingly important. Recommendations from the forthcoming JLUS report will be examined and incorporated into this plan and other documents in the future.



Land Use Designations

The following is a list and description of Jefferson County land uses:

- **Agricultural-Residential.** This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, commercial timber or pulpwood harvesting, and low-density single-family housing.
- **Residential.** The predominant use of land within the residential category is for single-family and multi-family dwelling unit organized into general categories of net densities.
- **Commercial.** This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensity. Commercial uses may be located as a single use in one building or grouped together in a shopping center or office building.
- **Industrial.** This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses, organized into general categories of intensity.
- **Public/Industrial.** This category includes certain state, federal or local government uses, and institutional land uses. Government uses include city halls and government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc.
- **Parks/Recreational/Conservation.** This category is for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses.
- **Transportation/Communication/Utilities.** This category includes such uses as major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities or other similar uses.

When determining how best to use the Comprehensive Plan future land use maps and supporting narratives, the reader should be mindful of the following parameters:

- **Boundaries:** The future land use map is parcel based and does not cross parcel lines. Generally, a tract should develop according to the parameters established in the specific land use in which it is located. The county is strongly encouraged to initiate amendments to their Future Land Use Map whenever the community intends to promote a development pattern in an area that is contrary to the adopted map.
- **Narrative:** The included narratives correspond to the Future Land Use Map for the county and its jurisdictions and should be viewed as general policy statements - as statements of intent. Their use and applicability is similar to those other goals and policy statements found in the “Community Goals” section. They should inform future development decisions. Questions about underlying zoning should be answered by the jurisdictions.



Agricultural-Residential

This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, or commercial timber or pulpwood harvesting.

Low-density single-family dwelling units are the only allowable housing type. Recreation, such as bicycle and pedestrian trails would be appropriate in this area.



Residential

The predominant use of land within the residential category is for single-family and multifamily dwelling unit organized into general categories of net densities.

Housing types and densities vary between the incorporated areas, the areas immediately outside city/town limits, and the balance of unincorporated Jefferson County.



Commercial

This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use on one building or grouped together in a shopping center or office building.

Most commercial activity in the county takes place in the larger cities of Louisville, Wrens, and Wadley. The cities are working toward improving their downtowns and continuing to attract new businesses and pedestrian traffic.



Industrial

This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses, organized into general categories of intensity.



Public/Institutional

This category includes certain state, federal or local government uses, and institutional land uses. Government uses include city halls and government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc.

They do not include facilities that are publicly owned, but would be classified more accurately in another land use category. For example, publicly owned parks and/or recreational facilities should be in the park/recreation/conservation category; landfills in the industrial category; and general office buildings containing government offices in the commercial category.

This land use includes land used for public and semi-public uses. Public uses include government and educational activities and structures. Semi-public uses include churches, synagogues, as well as and clubs and fraternal organizations.



Transportation/Communication/Utilities

Transportation/Communication/Utilities. This category includes such uses as major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, port facilities or other similar uses.



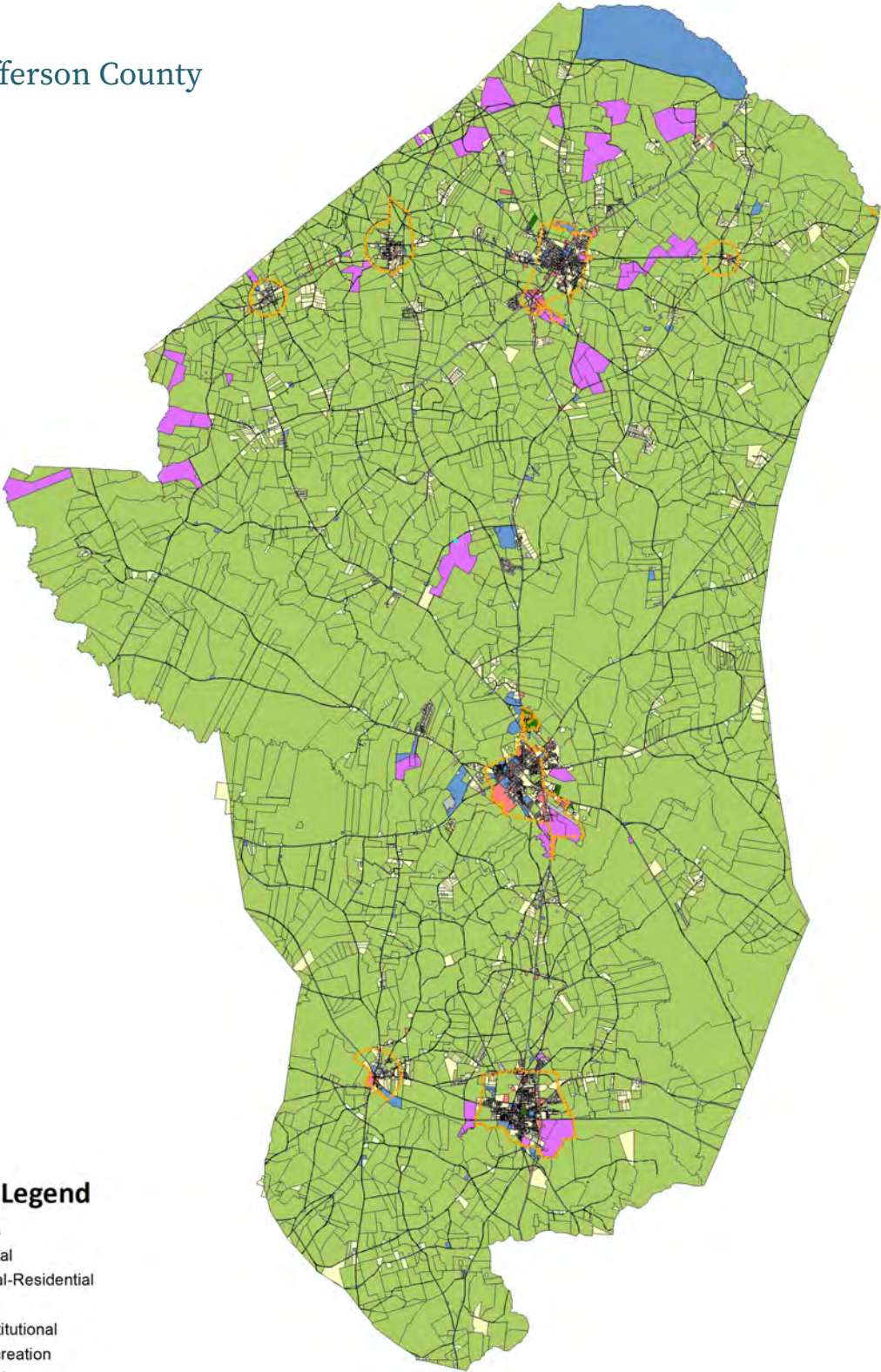
Parks/Recreation/Conservation

This category is for land dedicated to active or passive recreational uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers or similar uses.



Future Land Use

Jefferson County

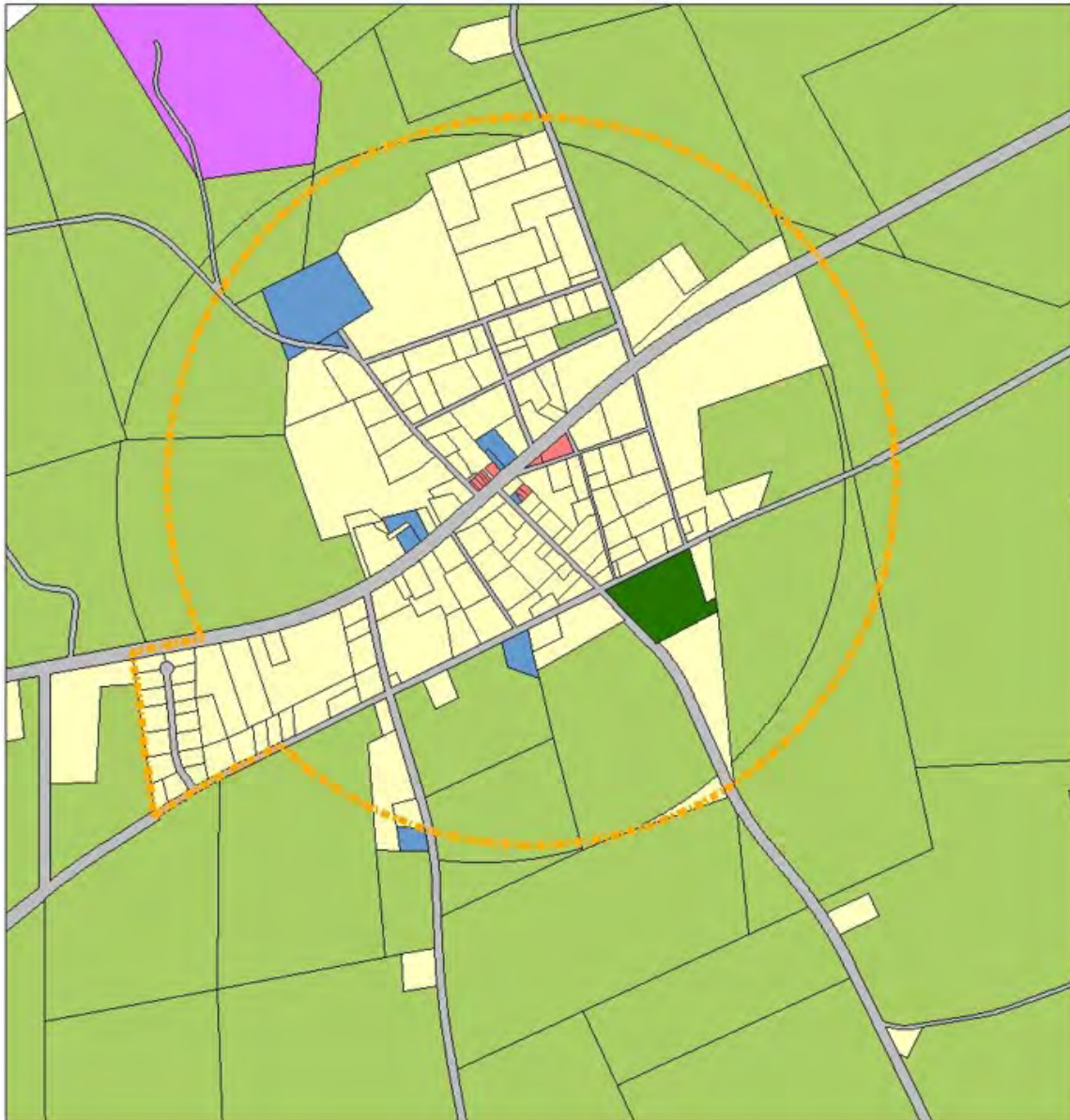


Legend

- City Limits
- Commercial
- Agricultural-Residential
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities

Future Land Use

Avera

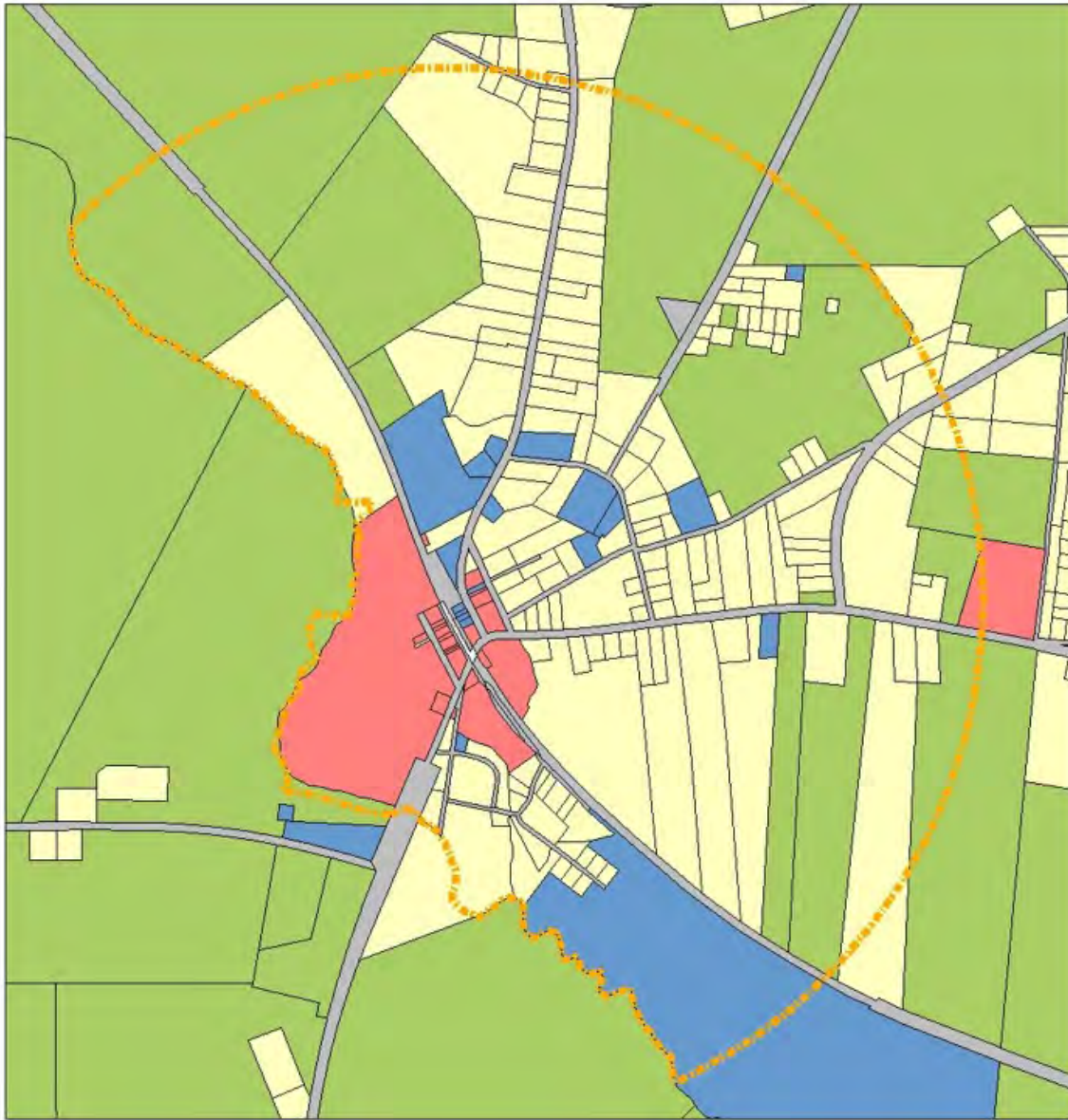


Legend

-  City Limits
-  Commercial
-  Agricultural-Residential
-  Industrial
-  Public/Institutional
-  Parks/Recreation
-  Residential
-  Transportation/Communication/Utilities

Future Land Use

Bartow

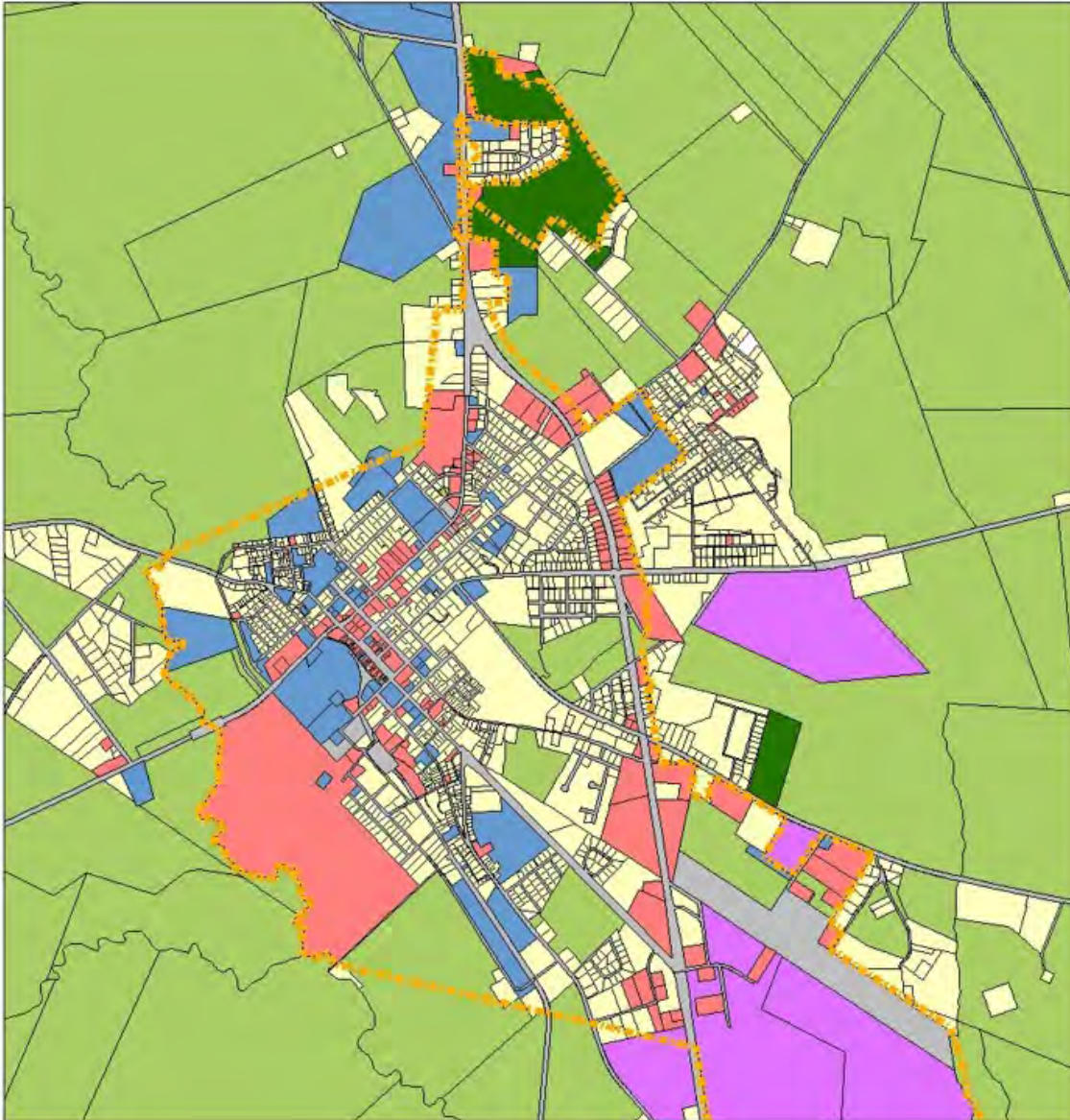


Legend

-  City Limits
-  Commercial
-  Agricultural-Residential
-  Residential
-  Public/Institutional
-  Parks/Recreation
-  Transportation/Communication/Utilities

Future Land Use

Louisville

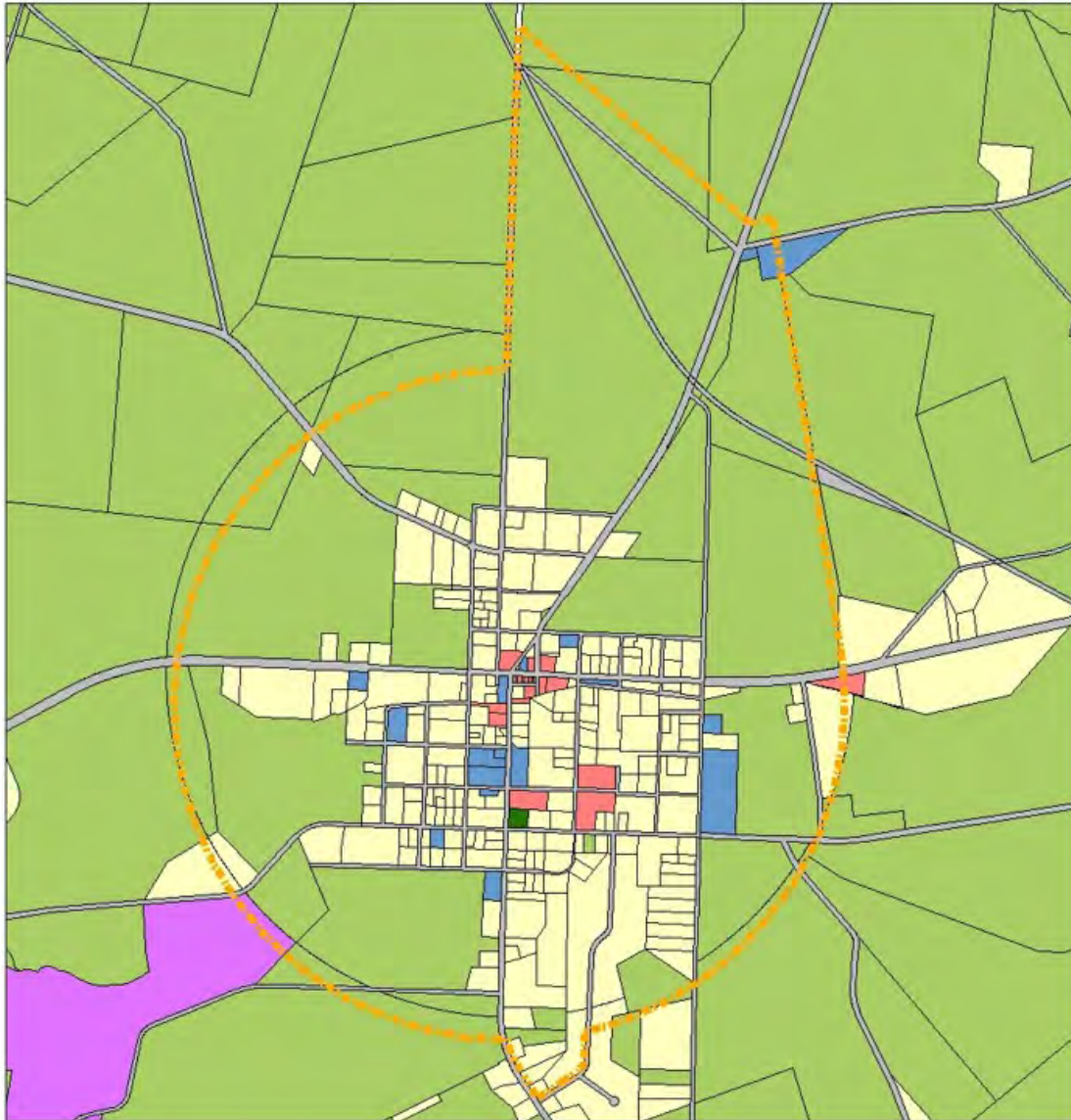


Legend

-  City Limits
-  Commercial
-  Agricultural-Residential
-  Industrial
-  Public/Institutional
-  Parks/Recreation
-  Residential
-  Transportation/Communication/Utilities

Future Land Use

Stapleton

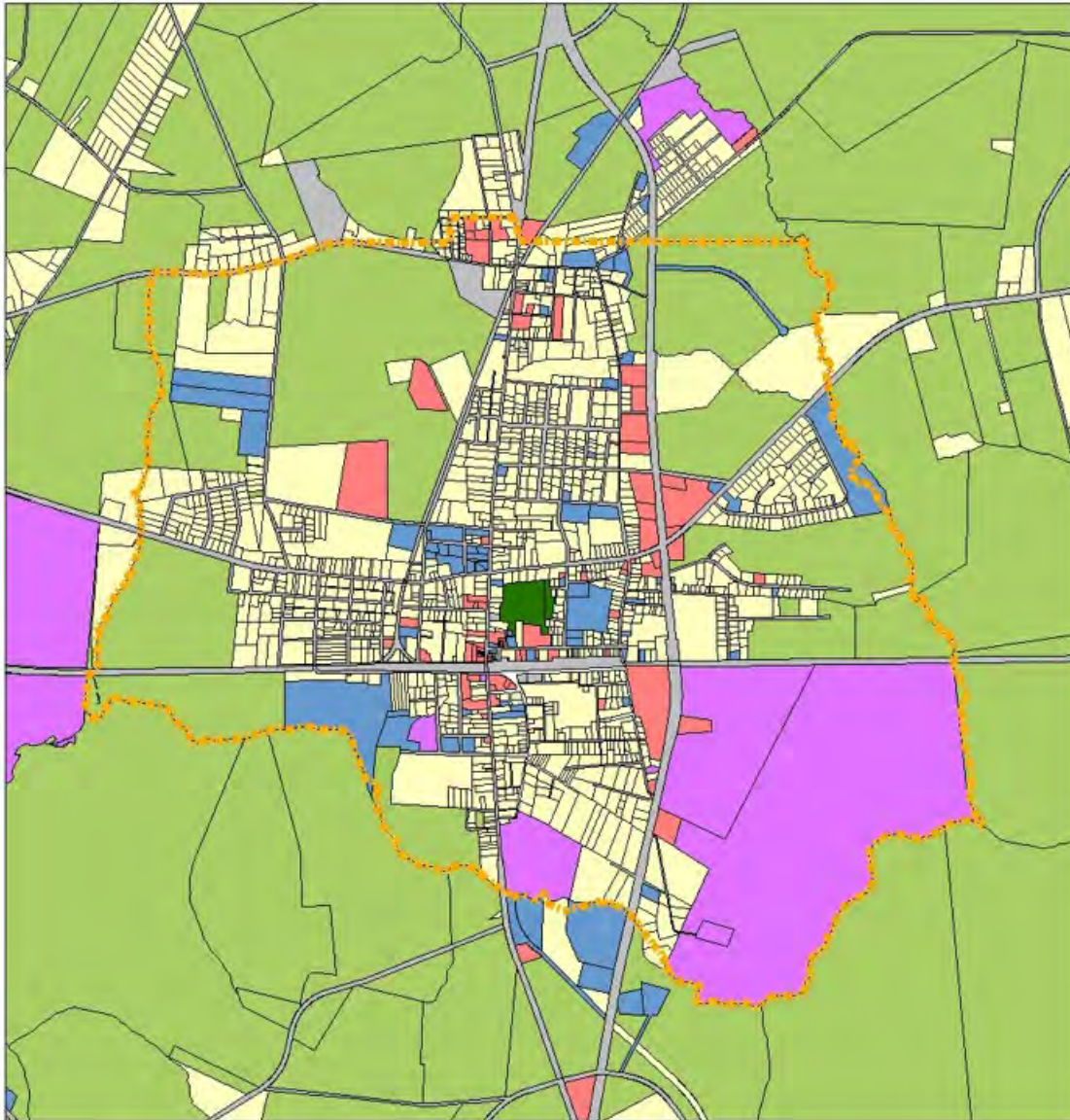


Legend

- City Limits
- Commercial
- Agricultural-Residential
- Industrial
- Public/Institutional
- Parks/Recreation
- Residential
- Transportation/Communication/Utilities

Future Land Use

Wadley

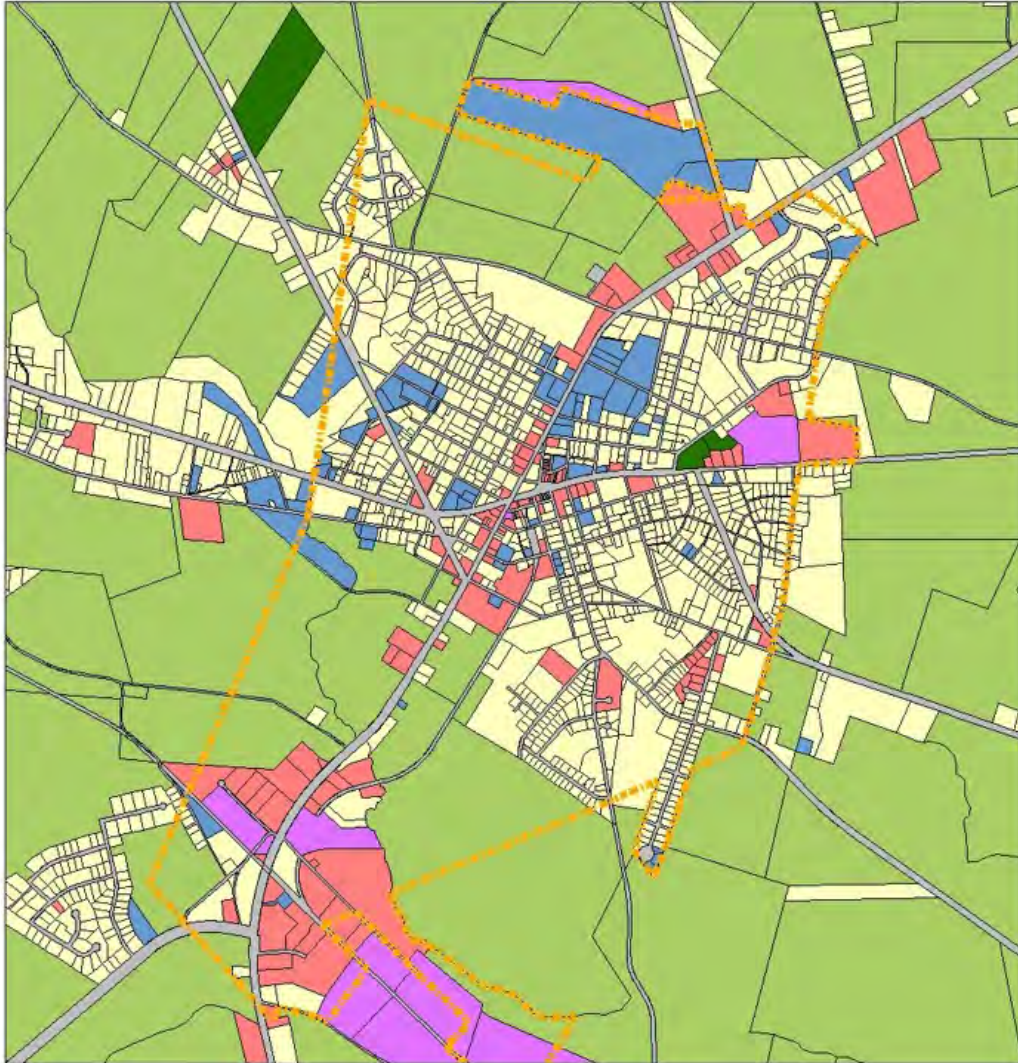


Legend

- City Limits
- Residential
- Agricultural-Residential
- Industrial
- Public/Institutional
- Parks/Recreation
- Transportation/Communication/Utilities
- Commercial

Future Land Use

Wrens



Legend

-  City Limits
-  Commercial
-  Agricultural-Residential
-  Industrial
-  Public/Institutional
-  Parks/Recreation
-  Residential
-  Transportation/Communication/Utilities





Report of Accomplishments

The Report of Accomplishments reviews the current status of activities identified as priorities in the previous five-year work program. The status of each activity is indicated as one of the following four categories: completed, ongoing, postponed, not accomplished. Activities indicated as 'ongoing' are carried over to the upcoming five-year work program. For activities indicated as 'postponed' or 'not accomplished' a supporting rationale is also provided.



Jefferson County

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important County locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				
Expand infrastructure in the county industrial sites.	X				
Assist Louisville Airport Industrial Park in becoming GRAD certified.				X	Due to the cost and lack of demand, the project has been canceled.
Create a pad ready site at Kings Mill Commerce Park.			X		Postponed due to lack of funding and the economic downturn during COVID. This will be in the 2023-2028 CWP.
Review county communication channels for the permitting process to locate places for streamlining and improvement.	X				
Work with GDOT, RC, and others to expand US 1/SR 4 for all of Jefferson County.		X			Project approved, funded, and underway. Projected to be finished by 2028. This will be in the new 2023-2028 CWP.

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.			X		A housing rehab project was completed under the last plan. This will be in the 2023-2028 CWP.

Jefferson County

Natural and Cultural Resources

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Identify recreational and green space options for Ogeechee Crossing Park and seek funding for implementation support.		X			Construction will be completed 2024. This will be in the new 2023-2028 CWP.

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Purchase extrication equipment.	X				
NextGEN Phone System 911.	X				
AVL (Automatic Vehicle Locator).		X			This has been approved by the board, ordered and should be installed within 6 months. This will be in the new 2023-2028 CWP.
Fire Station.				X	Not being considered at this time, may revisit in the future.
Capacity max upgrade for a new radio system.	X				
Purchase motor graders (2).			X		This will be combined with replacement motor graders and reworded to say, sell two motor graders and purchase two motor graders in the new 2023-2028 CWP.



Jefferson County

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Replacement Motor Graders (2).			X		This will be combined with purchase two motor graders and reworded in the new 2023-2028 CWP as, sell two motor graders and purchase two motor graders.
Landfill - cell construction/engineering.	X				
Construct a disk golf area at Ogeechee Crossing.	X				
Construct a pavilion/picnic site at Ogeechee Crossing.	X				
Install a HVAC unit in the Armory for the purpose of making the community space usable.	X				
Roof Replacement - Green Street Old Jail.	X				
Renovate the Service Center.	X				
Update and expand Jefferson County Leisure Center (Senior Center) for code compliance. Apply for a 2021 CDBG.		X			Under construction; projected completion 2024. This will be reworded in the new 2023-2028 CWP as Continue construction on Jefferson County Leisure Center (Senior Center) for code compliance.
Replace senior center windows.	X				
Remodel and re-purpose the Old Jail building on the courthouse grounds.	X				
Remodel the inside of the old sheriff's house for use as county office/meeting space.		X			Upon inspection of the condition and layout of the building, the old sheriff's house is not conducive to being adapted for office meeting space. This will appear in the new 2023-2028 CWP as, Evaluate the condition of the Old Sheriff's House. Develop a plan for the use of the space consistent with the long-term needs of the County.
107					

Jefferson County

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Improve handicap access at the county courthouse by adding an ADA ramp with portico on the back.	X				
Upgrade the courthouse grounds to include a “Veteran’s Plaza” & landscaping.	X				
Develop a list of projects for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens and farmer’s markets for inclusion in regional food asset mapping.	X				
Partner with cities to expand natural gas access, especially to the Wadley area.			X		This project has postponed until a funding source can be identified. This will be in the new 2023-2028 CWP reworded as Support the expansion of natural gas access in County, especially to the Wadley area

Land Use

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Rezone mining areas to industrial zoning districts.		X			Several parcels are still listed as agricultural. This will be in the new 2023-2028 CWP.
Conduct a land development ordinance review for the purpose of auditing the manner in which the County manages growth and development.	X				



Jefferson County

Land Use					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Update county zoning ordinance, particularly regarding PUD districts and mixed-use options.		X			This will appearing the new 2023-2028 CWP and be reworted as Update zoing ordinance.
Update comprehensive plan to include recommendations from the Fort Gordon Joint Land Use Study (to be released later in 2019).				X	The Land Use Study was released in 2021, the board decided not to sign a MOU with Fort Gordon at this time.
Update the digital version of the zoning map.		X			This project has been reworted as Improve the quality of Planning and Zoning Maps, On-line access. in the 2023-2028 CWP.
Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Create a county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate county buildings like senior centers to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Jefferson County desires to be fully served by broadband capability through broadband deployment.	X				

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important City locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Locate and map blighted areas of the city for potential redevelopment.				X	Lack of interest. Project canceled.
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.				X	Lack of interest. Project canceled.

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Make improvements to the city storm water drainage system.			X		Lack of funding. This will be in the new 2023-2028 CWP.
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer's markets for inclusion in regional food asset mapping.	X				



City of Avera

Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate city buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Avera desires to be fully served by broadband capability through broadband deployment.	X				

Town of Bartow

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important Town locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				
Offer grants to encourage facade improvements for downtown businesses.		X			Will research funding source. This will be in the new 2023-2028 CWP.

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Locate and map blighted areas of the Town for potential rehabilitation or redevelopment.		X			Working on the map. This will be in the new 2023-2028 CWP.

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer's markets for inclusion in regional food asset mapping.	X				



Town of Bartow

Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate Town buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Bartow desires to be fully served by broadband capability through broadband deployment.	X				

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important City locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.		X			Starting construction on three new houses using CHIP Grant. This will be in the new 2023-2028 CWP.
Complete a dilapidated property inventory.	X				Completed inventory. Have about 65% success rate getting property owners to address problems

Land Use

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.		X			This project has not been completed. This will be in the new 2023-2028 CWP.
Update the digital version of the zoning map.		X			This project has not been completed. This will be in the new 2023-2028 CWP.



Community Facilities					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Construct a four-lane by-pass.		X			Estimated to be complete in 2024. This will be in the new 2023-2028 CWP.
In conjunction with the Jefferson County Board of Education and Jefferson County, construct a natural gas filling station.			X		Will research funding opportunities for this project. This will be in the new 2023-2028 CWP.
Resurface basketball courts.	X				
Seek funding for the development of center city recreational opportunities that link downtown to Revolutionary War cemetery and the creek.		X			Parking lot almost complete. Trails have been cleared, looking into funding bridge connector. This will be in the new 2023-2028 CWP.
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer's markets for inclusion in regional food asset mapping.	X				
Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				

Broadband

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Evaluate city buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Louisville desires to be fully served by broadband capability through broadband deployment.	X				



City of Stapleton

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important City locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.				X	Not a priority of the City at this time.

Community Facilities

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Upgrade restroom facilities at the city park to include ADA facilities.	X				
Extend water lines along Stapleton Acres Road and in other locations.	X				
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer's markets for inclusion in regional food asset mapping.	X				

Natural and Cultural Resources

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Rehabilitate the Stapleton city-owned gym.				X	The gym needs to be removed. Not able to rehabilitate.

BroadBand

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate city buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Stapleton desires to be fully served by broadband capability through broadband deployment.				X	Not a priority of the City at this time.



City of Wadley

Economic Development

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important City locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				

Housing

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.	X				

Natural And Cultural Resources

Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Place the Old Wadley Middle/High School on the National Register of Historic Places.				X	City plans to demolish in September 2024.

Community Facilities					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Rehabilitate the “Old Wadley Middle/ High School” for the purpose of creating a community center.	X				
Complete drainage and road improvements along MLK and Butts Streets.		X			This will appear in the new 2023-2028 CWP.
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer’s markets for inclusion in regional food asset mapping.	X				
Replace fire hydrants and corroded galvanized water lines with PVC and/or ductile iron line on the following streets but not limited to: Burton St, Cooper St, Forbes St, Hawkins St, Hinkins St, Jordan St, N. Main St, Sargent St, Spann St, Stevens St, and W. Smith St.			X		Applied for CDBG in 2019 but was not funded. We will look for additional funding opportunities in the future. This will be in the new 2023-2028 CWP.
Upgrade sewerage to provide appropriate capacity.	X				
Land Use					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Draft a downtown master plan.			X		This project has been funded but has not been completed at this time. This will be in the new 2023-2028 CWP.



Land Use					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.			X		Plan to update zoning maps and will work with Jefferson County on the project. This will be in the new 2023-2028 CWP.
Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate city buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Stapleton desires to be fully served by broadband capability through broadband deployment.	X				

Economic Development					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Provide the RC with a list of important City locations and events for inclusion in the regional database of historic landmarks, festivals, and attractions.	X				
Housing					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Market an available 15 acre tract to a developer for a residential subdivision.		X			Need development plans moving forward on this project. This will be in the new 2023-2028 CWP.
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.		X			Applied in 2022, was not awarded. Will reapply again in 2023. This will be in the new 2023-2028 CWP.
Natural And Cultural Resources					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
The Johnson Lake facility at Memorial Lake will be upgraded.		X			Need development plans moving forward on this project. This will be in the new 2023-2028 CWP.



City of Wrens

Community Facilities					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Complete 2017 CDBG grant for Sewer Improvements on Geter St., Stephens St. Extension, a part of Stephens St., a part of Center St., and the two apartment complexes of Green Meadows and Pine Valley.	X				
Purchase three police vehicles.	X				
Purchase 15 SCBAs for Wrens Fire Department.		X			Applied for 2023 grant for 24 SCBA's for \$224,000. We are in critical need of these 24 SCBA's. Reworded in the 2023-2028 CWP.
Purchase three pickup trucks for the Utilities Department.	X				
Conduct water/sewer improvements throughout the city.		X			This will appear in the new 2023-2028 CWP.
Participate in discussions for the next regional TSPLOST initiative.	X				
Provide the RC with a list of school gardens, community gardens and farmer's markets for inclusion in regional food asset mapping.	X				
Implement phased airport improvements such as pavement rehabilitation, fencing for a fuel farm, runway lighting, etc.		X			Just completed a lighting rehab project at the airport. Pavement rehabilitation, fencing for a fuel farm will be reworded in next 2023-2028 CWP.

Land Use					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.		X			This will be in the new 2023-2028 CWP.
Update comprehensive plan to include recommendations from the Fort Gordon Joint Land Use Study (to be released later in 2019).				X	The county has decided not to sign MOU with Fort Gordon at this time.
Update the digital version of the zoning map.		X			This will be in the new 2023-2028 CWP.
Broadband					
Project	Completed	Ongoing	Postponed	Not Accomplished	Comments
Designate a representative for the county-wide broadband committee aimed at improving quality and access across all jurisdictions.	X				
Assist CSRA RC in collection of address data, which will assist DCA with address-level evaluation of broadband service.	X				
Evaluate city buildings and other public spaces to determine which may be improved to become a “Broadband Ready” site under the ACE Act.	X				
Adopt a resolution stating that Stapleton desires to be fully served by broadband capability through broadband deployment.	X				





Community Work Program

The Work Program consists specific activities that the cities of Jefferson County will undertake in the five-year period from 2023 through 2028 to meet identified community needs and advance local goals. Although the plan was developed jointly, each jurisdiction has developed its own set of work program activities. Some activities will be completed as joint effort with participation by all local governments. Each work program entry includes: a description of the activity, a time frame for completion, parties responsible for implementation, a cost estimate, and a funding source.



Jefferson County

Economic Development

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Work with GDOT, RC, and others to expand US 1/SR 4 for all of Jefferson County.	X	X	X	X	X	County, GDOT	TBD	TSPLOST, GDOT
Create a pad ready site at Kings Mill Commerce Park.			X			County, DJAC	TBD	State Grant
Work with Wrens to extend water, sewer, and natural gas north on US 1 to promote residential growth.		X	X			County, Wrens	TBD	State Grant
Promote workforce development by working with schools on work ethics programs.	X	X	X	X	X	County	Staff Time	Local Funds
Research feasibility of installing Electronic Vehicle charging station.	X					County	Staff Time	TBD, Grant Funds

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Continue to maintain and upkeep the County Landfill.	X	X	X	X	X	County	TBD	Landfill Fees
Feasibility of building and operating a public safety (Fire and LE) training facility behind the Forestry Office.		X	X			County	TBD	State Grant
Install AVL (Automatic Vehicle Locator) for County Equipment.	X					County	\$75,000	SPLOST
Sell two motor graders and purchase two motor graders.		X			X	County	\$2M	SPLOST, TIA, TSPLOST

Jefferson County

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Adjust SW fee structure to charge Mobile home parks and campgrounds for each unit.		X				County	TBD	Landfill Fees
Continue construction on Jefferson County Leisure Center (Senior Center) for code compliance.	X	X				County	\$960,000	CDBG, Local Funds
Upgrade facilities--operationally and aesthetically--at the Recreation Department.	X	X				County	TBD	Local Funds
Evaluate the need for Animal Control.	X	X	X	X	X	County and Cities	\$1.5M	Local Funds
Evaluate efficiency and effectiveness of County building facilities. Initiate the appropriate changes.	X	X	X	X	X	County	TBD	Local Funds
Evaluate the condition of the Landfill leachate tank and make the appropriate repairs.	X					County	\$90,000	Landfill Fees
Evaluation the condition of the County fire station and make the appropriate renovations.		X				County	TBD	SPLOST 22
Reevaluate the location of County fire stations and make the appropriate adjustments.			X			County	TBD	Local Funds
Explore the need for a Fire Tax to fund additional equipment, facilities, and personnel in Fire Departments.	X	X				County and Cities	TBD	Local Funds
Evaluate options for using GIS technology to map and inventory all roads documenting their ownership, appropriate attributes and traffic control facilities.		X	X			County, RC	TBA	Local Funds



Jefferson County

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Use a road inventory mapping system to establish policy and steer daily decision on road maintenance and rehab.			X	X		County	Staff Time	Local Funds
Evaluate the condition of the Old Sheriff's House. Develop a plan for the use of the space consistent with the long-term needs of the County.	X					County	TBD	Local Funds
Evaluate best use for Old Louisville Middle School. Develop a plan for the use of the space consistent with the long-term needs of the County.	X					County	TBD	Local Funds
Support the expansion of natural gas access in County, especially to the Wadley area			X			County and Cities	Staff Time	Local Funds
Upgrade the building and facilities of the Elections and Registrars Office	X	X				County	\$2M	ARPA Fund Balance
Continue to evaluate and upgrade voting equipment as required.		X	X	X	X	County	TBD	Local Funds
Continue to investigate grant opportunities to improve and upgrade law enforcement equipment and use technology at the Sheriffs Department to improve safety for citizens and staff.	X	X	X	X	X	County	TBD	State Grants
Evaluate the feasibility of expanding the Transition Center at the Correctional Institute.	X					County	\$500,000	User Fees
Evaluate the feasibility of using fleet maintenance software at the County Maintenance Shop.		X				County	\$15K/annually	Local Funds

Jefferson County

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Evaluate the feasibility of using a Fleet Management Company to purchase, manage, and dispose of vehicles.		X				County	TBD	Local Funds
Continue to identify and expand programs at the Leisure Center to improve the quality of life for seniors.	X	X	X	X	X	County	TBD	Local Funds
Evaluate the effectiveness and efficiency of using other transportation options such as small vans, on-demand app services, and outside services in the Transit Department.		X				County, GDOT	TBA	GDOT, User Fees
Encourage the development of a ministerial association to act in an advisory and liaison capacity with the community.			X			County	Staff Time	Local Funds
Upgrade dispatch equipment and technology at 9-1-1 Center.			X			County	TBD	State Grants
Improve access to minutes and agendas for meetings, On-line access.		X				County	Staff Time	Local Funds

Natural and Cultural Resources

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Identify recreational and green space options for Ogeechee Crossing Park and seek funding for implementation support.	X					County	TBD	TBD



Jefferson County

Natural and Cultural Resources

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Install signage at Ogeechee Crossing Park to promote the historical significance of the property.		X				County	\$5,000	Local Funds, Green Fees
Analyze the need for additional staff at Rec Dept.	X	X				County	\$50,000 annually	Local Funds, User Fees
Continue to upgrade facilities and accommodations at OCP Campgrounds to improve the stays for visitors.		X	X	X	X	County	TBD	State Grants
Expand facilities at OCP to include more attractions for local residents such as miniature golf, foot golf, amphitheater, arts and crafts festival, school and recreation activities, etc.		X	X	X	X	County	\$2M	State Grant
Work with schools to make facilities usable for ROTC and other school related activities.	X	X				County	TBD	TBD
Update the County's social media page and website to better market services and provide information to the public.	X	X				County	\$5,000	Local Funds
Expand participation in Recreation and Leisure Center activities and events with better marketing.	X	X	X	X	X	County	\$2,000	Local Funds

Jefferson County

Land Use								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Improve the quality of Planning and Zoning Maps, On-line access.		X	X			County, RC	\$10,000	Local Funds
Perform comprehensive review of Land Use Ordinance and Map.		X	X	X		County	Staff Time	Local Funds
Rezone mining areas to industrial zoning districts.	X	X				County	Staff Time	Local Funds
Update Zoning Ordinance.		X	X			County	\$60,000	Local Funds, User Fees
Provide periodic training to staff and Planning Commission.	X		X		X	County	\$10,000	Local Funds
Analyze Land Use regulations to confirm compatibility with promoting housing growth.	X	X	X	X	X	County	Staff Time	Local Funds
Identify other means of working with cities to promote growth.	X	X	X	X	X	County	Staff Time	Local Funds
Continue to evaluate the County's level of implementation in the Fort Gordon Lighting Study.	X					County	Staff Time	Local Funds
Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Promote Workforce Housing.	X	X	X	X	X	County	TBD	State Grants



Jefferson County

Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Promote activities design to remove dilapidated/unfit houses and structures.	X	X	X	X	X	County	TBD	Local Funds
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.	X	X	X	X	X	County	TBD	Local Funds
Work with cities to establish a Land Bank Authority.		X	X			County and Cities	TBD	Local Funds
Intergovernmental								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Explore the feasibility billing and collecting property taxes through the Tax Commissioners Office for all cities.	X	X				County	\$60,000	Additional Collection Fees
Assist and support the Chamber of Commerce in developing and expanding its services.		X	X	X	X	County	Staff Time	Local Funds
Assist and support the Chamber of Commerce with holding events and activities.		X	X	X	X	County	Staff Time	Local Funds

Jefferson County

Intergovernmental								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Work with the Chamber of Commerce to conduct a business category inventory in the County and each city. Identify major missing business categories. Provide findings to the public. Use findings to target and recruit new business in missing sectors.		X				County	\$20,000	Local Funds
Work with Jefferson Hospital to promote local health care and medical services.	X	X	X	X	X	County	Staff Time	Local Funds
Broadband								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Work with Spectrum SE to assist with broadband deployment.	X	X	X	X	X	County, Spectrum	\$10M	State ARPA



City of Avera

Economic Development								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Research feasibility of installing Electronic Vehicle charging station.	X					City	Staff Time	Grants, Local funds
Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Make improvements to the city storm water drainage system.				X		City	TBD	State and Federal Grants
Contact RC about feasibility of applying for grants to install new water tank.			X			City, RC	Staff Time, RC	State and Federal Grants
Install speed bumps within City limits.	X					City	TBD	TBD
Update storm water drainage system.				X		City	TBD	State and Federal Grants

Town of Bartow

Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Locate and map blighted areas of the Town for potential rehabilitation or redevelopment.	X	X				City	Staff Time	City Funds
Research feasibility of installing Electronic Vehicle charging station.	X					City	Staff Time	Grant Funds
Economic Development								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Sidewalk Improvements.	X					City	\$100,000	City Funds
Offer grants to encourage facade improvements for downtown businesses.		X				City	TBD	TBD
Develop strategic plan for downtown revitalization.			X			City	TBD	TBD
Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Sediment Pond Improvements.	X	X				City	\$15,000	City Funds



Town of Bartow

Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Lead Service line survey/replace-ment.		X	X			City	\$150,000	City Funds
Water System Upgrade.			X	X		City	\$2M	City Funds
Purchase police car.		X				City	\$60,000	City Funds
Purchase fire truck.			X			City	\$120,000	City Funds
Purchase zero turn mower.		X				City	\$17,000	City Funds
Purchase trash/dump truck.			X			City	\$50,000	City Funds
Purchase small pickup.		X				City	\$25,000	City Funds
Purchase side by side utility vehicle.			X			City	\$12,000	City Funds

Economic Development								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Research feasibility of installing Electronic Vehicle charging station.	X					City	Staff Time	Grant Funds
Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.	X	X	X	X	X	City, RC	Staff Time	Local funds, Grants, DCA
Administer 2022 CHIP to build 3 new houses.	X	X				City, RC	\$600,000	CHIP
Land Use								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.	X	X				City	Staff Time	Local Funds, DCA
Update the digital version of the zoning map.	X	X				City, RC	Staff Time	Local Funds, DCA



City of Louisville

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Wastewater treatment plant projects.	X	X	X	X	X	City	\$768,000	City Funds, SPLOST, State and Federal Grants
Water system improvements.	X	X	X	X	X	City	\$9.1M	City Funds, SPLOST, State and Federal Grants
Water treatment plant equipment.	X	X	X	X	X	City	\$766,500	City Funds, State and Federal Grants
Surface Hodges Jackson Road.		X	X			City	\$300,000	LMIG, Local Funds
Resurface Pine Street.			X			City	\$300,000	LMIG, Local Funds
Purchase 6 patrol cars.	X	X	X	X	X	City	\$300,000	LMIG, Local Funds
Replace bullet proof vests.	X	X	X	X	X	City	\$10,000	Federal for State Grant
Resurface 7th Street from Peachtree to Mulberry.			X			City	\$150,000	LMIG, Local Funds
Purchase taker truck.		X				City	\$350,000	SPLOST

Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Purchase Air Packs.	X	X	X	X	X	City	\$10K annually	General Fund
Purchase Turn Out gear.	X	X	X	X	X	City	\$10K annually	General Fund
In conjunction with the Jefferson County Board of Education and Jefferson County, construct a natural gas filling station.					X	City, County, BOE	\$350,000	Local Funds, Municipal Gas Authority of Georgia
Purchase Squad truck.					X	City	\$125,000	SPLOST
Construct a four lane Bypass.	X					GDOT	TBD	TSPLOST
Seek funding for the development of center city recreational opportunities that link downtown to Revolutionary War cemetery and the creek.	X	X				City, County	Staff Time	Grants, Local Funds
Maintenance equipment.	X	X	X	X	X	City	\$218,000	TBD
Resurface 7th Street from Peachtree to Mulberry.				X		City	\$150,000	TBD
Connect Green Street and Grange water systems.			X	X	X	City	\$1M	SPLOST, State and Federal Grants



City of Stapleton

Economic Development

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Explore funding options to fill in old factory lot to add additional parking for City park.			X			City	Staff Time	TBD
Research feasibility of installing Electronic Vehicle charging station.	X					City	Staff Time	Grants

Natural and Cultural Resources

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Explore cost to demolish city owned gym.		X				City	Staff Time	TBD

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Resurface West Sheppard Street.	X	X				City	\$52,000	LMIG, City Funds
Purchase 12 Air Pacs for Fire station.	X	X	X			City	\$40,000	City Funds

Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Make EPA requested updates to drainage system.	X	X	X	X	X	City	TBD	TBD
Install rails at restroom facilities at City park.	X					City	TBD	Staff Time

Economic Development

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Transition the Fire department from volunteer to paid service.	X	X	X	X	X	City	\$200,000	Local Funds, FEMA, Grants
Design and develop a centrally located Green Space with stage for concerts, theater performances, and community gatherings.			X	X		City	\$75,000	Local Funds, Grant
Provide incentives and support for local businesses to open new retail and restaurants in downtown.	X	X	X			City, RC	Staff Time	Local Funds
Implement a comprehensive downtown revitalization plan that improves infrastructure, pedestrian-friendly streets, and public spaces.		X				City, RC	\$35,000, Staff Time	Local Funds
Develop rail-themed tourist attractions, museums, and events to celebrate the towns unique history.		X	X			City	Staff Time	Local Funds
Research feasibility of installing Electronic Vehicle charging station.	X					City	Staff Time	Grants

Housing

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Apply for CHIP and/ or CDBG funds to rehab housing units in targeted areas.	X	X	X			City, RC	Staff Time	Local Funds, Grants, DCA

Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Collaborate with developers and government agencies to construct affordable housing units to cater to low to moderate-income.	X	X	X	X	X	City	Staff Time	Local funds
Implement programs to assist residents with home-ownership, down payment assistance, and rental support.	X	X	X	X	X	City	Staff Time	Local funds, Grants
Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Replace fire hydrants and corroded galvanized water lines with PVC and/or ductile iron line on the following streets but not limited to: Burton St, Cooper St, Forbes St, Hawkins St, Hinkins St, Jordan St, N. Main St, Sargent St, Spann St, Stevens St, and W. Smith St.	X	X	X	X	X	City, RC	\$750,000	Local Funds, Grants
Complete drainage and road improvements along MLK and Butts Streets.	X	X				City	\$100,000	TE Grant
Purchase an aerial Fire Truck.			X			City	\$120,000	Local and Private Funds
Conduct a comprehensive storm water drainage study to identify vulnerable areas and developments.		X				City	\$15,000	Local, Grant



City of Wadley

Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Renovate Police station to accommodate modern equipment, technology, and administrative needs.					X	City	\$100,000	Local, State, Federal Funds
Update Police station security features to protect sensitive information.		X				City	\$50,000	Local Funds
Install and maintain storm water retention and detention facilities to manage runoff.		X	X	X	X	City	\$100,000	Local, State, Federal Funds
Repair and rehabilitate aging water pipes and infrastructure to reduce water leaks and improve water distribution efficiency.	X	X	X			City	\$250,000	Local, Grant
Establish new water wells to increase the City's water supply and ensure water security.	X	X	X			City	\$1.5M	Local, Loan, Grant
Upgrade and modernize the existing wastewater treatment system and improve water infrastructure to ensure sustainable and efficient operations.	X	X	X			City	\$8M	Local, USDA
Install a splash pad, sports field, and walking trails within Hoke Williams Park.		X	X	X	X	City	\$250,000	Local, Grant
Conduct a feasibility study and needs assessment, for Natural Gas expansion to Wadley. Develop vendor partnerships, identify funding, develop plan for infrastructure and implementation.	X	X	X	X	X	City	\$2M	State and Federal Grants

Natural and Cultural Resources

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Create pedestrian-friendly connections between Hoke Williams park, downtown area, and other existing trails in the city.			X	X	X	City	\$100,000	Local, Grant
Conduct an energy audit for current consumption and identify opportunities for efficiency.			X			City	\$10,000	Local Funds

Land Use

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Draft a downtown master plan.	X	X	X			City, RC, Private Sector	\$60,000	Local Funds, DCA
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.	X	X				City, County, RC	Staff Time	Local Funds, DCA



City of Wrens

Housing								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Market an available 15 acre tract to a developer for a residential subdivision.	X	X	X			City	Staff Time	Local Funds
Apply for CHIP, CDBG, or other funds to rehab housing units in targeted areas.	X	X				City, RC	Staff Time	Local Funds, Grants, DCA
Land Use								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Collaborate with Jefferson County on zoning update for parcels along the outside of city limits for mixed use options.	X	X				City, County, RC	Staff Time	Local Funds, DCA
Update the digital version of the zoning map.	X	X				City, RC	Staff Time	Local Funds, DCA

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Purchase and installation of new well.	X	X				City	\$6000,000	City Funds
Chemical tanks and concrete containment for wastewater.			X			City	\$250,000	City Funds
Purchase 24 SCBAs for Wrens Fire Department.	X					City	\$224,000	Grants
Conduct water/sewer improvements throughout the city.		X		X		City, County	\$300,000	SPLOST
Pavement rehabilitation, fencing for a fuel farm at airport.		X	X	X		City	TBD	Local Funds, Grants, TSPLOST
Purchase JCB tool carrier.	X					City	\$100,000	City Funds
Develop a preventative maintenance program on 4 water tanks for operational maintenance, cleaning, washing, and painting.	X	X	X	X	X	City	\$91,000 annually	City Funds, Grants
Purchase new SCADA System.	X					City	\$200,000	City Funds
Purchase 1-ton dump truck.			X			City	\$85, 000	City Funds
Purchase single axle dump truck.		X				City	\$105,000	City Funds
Purchase backhoe with cab.			X			City	\$150,000	City Funds



Community Facilities								
Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Purchase Jet Vac machine.	X					City	\$74,500	City Funds
Meter replacement, water and gas, approx 100 meters.				X		City	\$750,000	City Funds
Purchase 10 Flack Cameras for police department.	X	X	X	X	X	City	\$25,000 per year	City Funds
Replace body-cams/Add in car cams.	X	X	X	X	X	City	\$35,000 per year	City Funds
Purchase two patrol cars.	X	X	X	X	X	City	\$100,000 per year	City Funds
Purchase ballistic vests.			X			City	\$17,000	City Funds
Purchase fire engine.			X			City	\$375,000	City Funds

Community Facilities

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
Wastewater plant upgrades.	X	X	X	X	X	City	\$110,000	Local Funds, Grants
Purchase Police Chief's vehicle.		X				City	\$40,000	Local Funds, Grants
Purchase Fire Chief's truck.					X	City	\$60,000	Local funds, Grants
Purchase brush truck.		X				City	\$35,000	Local Funds, Grants
Purchase bunker gear, fire hose, and rescue tools for fire department.	X	X	X	X	X	City	\$17,500 per year	Local Funds, Grants

Natural and Cultural Resources

Project	Time frame					Responsible Party	Cost Estimate	Funding Source(s)
	2023-24	2024-25	2025-26	2026-27	2027-28			
The Johnson Lake facility at Memorial Lake will be upgraded.	X	X	X			City	TBD	Local Funds, Grants



Appendix



Public Participation

The stakeholder committee met several times over the course of the plan creation process and actively participated in facilitated discussions and group exercises to define community needs, establish community goals, and create community work program activities. One key item created during the exercises was the SWOT analysis (strengths, opportunities, weaknesses, and threats) of the county. Combined with data collected by Regional Commission staff and county staff, the SWOT analysis directly informed the crafting of the county needs and opportunities. It also provided support for long-term goals developed further along in the process.

Stakeholder Committee Members

Mitchell McGraw, Chairman, Jefferson County Board of Commission
Wayne Davis, Commissioner, Jefferson County Board of Commission
Sam Dasher, Superintendent, Jefferson Count Board of Education
Lil Easterlin, Executive Administrative Director, Development Authority
Greg Sellers, Executive Director, Development Authority
Avery Berry, President, Chamber of Commerce
Tommy Sheppard, Mayor City of Avera
Amy Hadden, Clerk, City of Avera
Jeffrey White, Mayor, City of Bartow
Brittany Kurtz, Clerk, City of Bartow
Jenny Smith, Mayor, City of Louisville
Ricky Sapp, Administrator, City of Louisville
Lisa Cranford, Mayor, City of Stapleton
Kimberly Poss, Clerk, City of Stapleton
Howard Moore, Mayor, City of Wrens
Dwayne Flowers, Administrator, City of Wadley
John Rabun, Mayor, City of Wrens
Arty Thrift, Administrator, City of Wrens
Leigh Davis, County Nurse Manager, Health Department
Robert Strickland, Environmental Health, Health Department
Wendy Martin, Hospital Administrator, Jefferson Hospital
Jim Harrison, Hospital CFO
Chris Dillard, CEO, Jefferson EMC
Gary Hutchins, Sheriff, Sheriff's Office
Tim Moore, Chief Deputy, Sheriff's Office
Jerry Coalson, Administrator, Jefferson County
Johnny Davis, Commissioner, Jefferson County
Gonice Davis, Commissioner, Jefferson County
William Toulson, Commissioner, Jefferson County



Stakeholder Committee Meetings

Stakeholder meetings were held on the following dates to provide information, review data, and gain community perspective.

- March 6, 2023
- May 18, 2023
- June 29, 2023

Jefferson County Joint Comprehensive Plan Stakeholder Meeting March 6, 2023 10am Armory Building, 1841 Hwy 24 W, Louisville, GA		
Name	Email	Affiliation (City Department Name, Organization Name, or Resident)
Brittany Kurtz	bartowclerk@outlook.com	Town of Bartow Town Manager
Robert St. Clair	robert.stclair@doh.ga.gov	County Environmentalist
Jerry Carlson	jcarlson@jeffersoncountygov	Jefferson County
Lil Easterlin	leasterlin@jeffersoncountygov	Development Auth.
Avery Berry	aberry@jeffersoncountygov	Chamber of Commerce
Greg Sellars	gsellars@jeffersoncountygov	Development Auth.
Wendy Martin	wmartin@jeffersonhosp.com	Hospital
Jim Harrison	jharrison@jeffersonhosp.com	Hospital
ATHEL		Wrens
Johnny Barber		Wrens

Jefferson County Joint Comprehensive Plan Stakeholder Meeting March 6, 2023 10am Armory Building, 1841 Hwy 24 W, Louisville, GA		
Name	Email	Affiliation (City Department Name, Organization Name, or Resident)
Ricky Sapp	rsapp@louisvillega.gov	City of Louisville
Jenny Smith	msjonesmith@louisvillega.gov	City of Louisville
SK Hutchins	chutchins@jeffersoncountygov	Sheriff's Office
Tim Moore	tmoores@jeffersoncountygov	Sheriff's Office
Stacy Arnold	sarnold@jefferson.k12.ga.us	JC BOE
Samuel Dasher	sdashers@jefferson.k12.ga.us	JC BOE
Mitchell McGraw	mitchellmcgraw@jefferson.k12.ga.us	JC BOE
D. Flowers	dflowers@wadleyga.gov	WADLEY
H. Moore	Hmoore@wadleyga.gov	WADLEY

Jefferson County Joint Comprehensive Plan
Stakeholder Meeting #2

May 18, 2023 | 6:00 pm | Armory Building, 1841 Hwy 24 W, Louisville, GA



Name	Email	Affiliation (City Department Name, Organization Name, or Resident)
Samuel Doherty	dohertys@jefferson.k12.ga.us	BOE
Teris Lambert	lambertt@jefferson.k12.ga.us	BOE
Lil Easterlin	leasterlin@jeffersoncounty.org	Dev. Auth
Richard Stop	rstop@louisvillega.gov	City of Louisville
Chris Dillard	cdillard@jee.cep	Jefferson Energy
Jerry Coalsen	jcoalsen@jefferson-county.ga.gov	Jefferson County
Andy Thirsk	None	City of Jones
Dwayne Flowers	dflowers@wadleyga.gov	WADLEY
Teresa Brinks	teresa.brinks@bellsouth.net	BOE
Samuel Doherty	None	None

Jefferson County Joint Comprehensive Plan
Stakeholder Meeting #2

May 18, 2023 | 6:00 pm | Armory Building, 1841 Hwy 24 W, Louisville, GA



Name	Email	Affiliation (City Department Name, Organization Name, or Resident)
M. Leach	mitche@myleachga.com	Jefferson County
Wanda Davis	wadavis@e-mail.com	SCBOE
Jim Anderson	janderson@jeffersoncountyga.gov	Jefferson Co EMA-OHS

Jefferson County Joint Comprehensive Plan
Stakeholder Meeting

June 29, 2023 | 6pm | Armory Building, 1841 Hwy 24 W, Louisville, GA



Name	Email	Affiliation (City Department Name, Organization Name, or Resident)
Jerry Coalsen	jcoalsen@jeffersoncountyga.com	Jefferson County
Lil Easterlin	leasterlin@jeffersoncountyga.org	DAJC
Chris Whipple	CWhipple92@gmail.com	City Council Stakeholder
Parish Howard	phoward1@gannett.com	News & Farmer
Ken Smith	ibuybags@yahoo.com	Bartow
Tommy Sheppard	Mayor	TRACER
Andy Thirsk	Andy	Dress
Richie Stop	Louisville	None
Dwayne Flowers	City of Wadley	D. Flowers

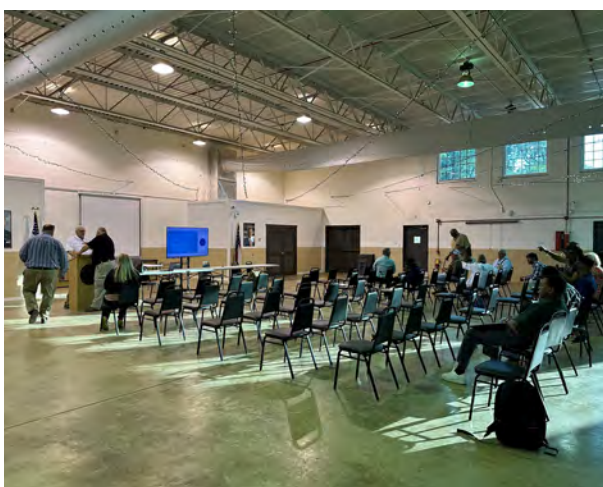
Jefferson County Joint Comprehensive Plan

First public hearing April 20, 2023
Second public hearing August 17, 2023

PO Box 631697 Cincinnati, OH 45263-1697

Page 1 of 2

Armory Building | 1841 Hwy 24 W | Louisville | Georgia | 30434



Jefferson County Joint Comprehensive Plan			
Public Hearing 1 April 20, 2023 6:30 pm		SIGN IN SHEET	
NAME	ORGANIZATION	PHONE	EMAIL
Ricky Sapp	City of Louisville	478-625-3166	rsapp@louisville.ky.gov
WAYNE DAVIS	JEFF. Co. Comm.	786-699-0310	w.davis1955@gmail.com
STEVE NORTON	SCH. Bd.	706-833-3821	SNORTON48@AOL.COM
Ken Smith	Town of Barton	478-494-2508	ibayhogs@yahoo.com
Stacy Arnold	Jefferson Co BOC	478-625-7626	arnoldsj@jefferson.k12.ga.us
Wanda B. Darisaw	Jefferson Co BOC	478-625-7626	darisaww@jefferson.k12.ga.us
Samya Dasher	Jefferson Co BOC	478-625-7626	dasher@sjefferson.k12.ga.us
Eugene Washington		706-564-3053	eugene.washington1953@gmail.com
Jerry Coatsun	Jefferson County BOC	(478) 625-3332	jcoatsun@jefferson-county.ga.gov
Ruth Harrison		478-241-3021	vruthyem2@gmail.com
Vernon L	Mayor Louisville	478-371-0438	vjsun17452@bell.net
Charles Washington		706-517-7076	chazz1111@gmail.com

Public Hearings

4A | THURSDAY, JULY 27, 2023 | THE NEWS AND FARMER | THE JEFFERSON REPORTER.

Louisville, GA 30424

Wadley Community Complex
134 W College Avenue
Wadley, GA 30477

Rabun Community Center (next to City Hall)
101 McNair Street
Wrens, GA 30833

Polls will be open from 7:30 A.M. until 6:00 P.M.
The Board of Directors is comprised of one-third low-income representatives, one-third public officials or their designees, and one-third private sector representatives.

CSRA EOA, Inc. is a private non-profit corporation whose primary mission is leveraging resources, empowering people, and advocating to alleviate poverty in the CSRA. CSRA EOA, Inc. operates a wide variety of programs, which provide vital support to the citizens of the CSRA, including Weatherization, Permanent Supportive Housing, Supportive Services for Veteran Families, Homeless Prevention, Home Ownership Planning and Education, Head Start & Early Head Start and Energy Assistance.

AG-38844819

Public Hearing Notice Jefferson County Joint Comprehensive Plan 2023-2028

Jefferson County and the jurisdictions of the City of Avera, Town of Bartow, City of Louisville, City of Stapleton, City of Wadley and the City of Wrens will hold a joint public hearing on Thursday, August 17, 2023, at 6:00p.m. at the Armory Building, 1841 Hwy 24, Louisville, Georgia. The purpose of this hearing is to brief the community on the contents of the Jefferson County Joint Comprehensive Plan 2023-2028 DRAFT and notify residents of when the plan will be submitted for review. Residents wishing to comment or make suggestions should be in attendance.

The draft plan is available digitally on the CSRA Regional Commission's website (<https://csrarc.ga.gov/planning-documents>) and in hard copy at the Jefferson County Board of Commissioners office located at 217 E. Broad St. in Louisville, GA.

For more information,

Contact: Jerry Coalson, Jefferson County Administrator, Phone: (478) 625-3332

All Jefferson County local government jurisdictions are committed to providing all persons with equal access to its services, programs, activities, education, and employment regardless of race, color, national origin, religion, sex, familial status, disability, or age. For a reasonable accommodation or if you need an alternative format or language, please call Jerry Coalson, County Administrator at 478-625-3332 at least two business days prior to the public hearing during the following hours: 8:00 a.m. – 5:00 p.m. Monday-Friday except holidays. Persons with hearing disabilities can contact the Georgia Relay Service, at (TDD) 1-800-255-0056, (Voice) 1-800-255-0135, 7-1-1.

from the fort last week also came with an update on the new logo for the Cyber Center of Excellence to go with the new name. In the spring, the Cyber Center launched a competition for the new logo and now it has been finalized. The winner was Sgt. 1st Class Jason Spencer, who formerly served at the Cyber Center and is now an artist for the Army at Fort Belvoir in Virginia.

The new name for the fort was approved last fall on the recommendation of a Congressional commission tasked with identifying military assets that commemorate the Confederacy or those who served in the Confederacy and suggesting new names.

Jefferson County Joint Comprehensive Plan

Public Hearing 2 | August 17, 2023 | 6:00 pm

SIGN IN SHEET

NAME	ORGANIZATION	PHONE	EMAIL
Wayne Dean	Commissioner		
Lee A. Davis	Citizen		
Steve Norton	School Board		
Michael Allen	Jefferson County		
Brittany Hurtz	Town of Bartow		
Ricky Sapp	City of Louisville		
John Thibe	Wrens		
Johnny Davis	Commissioner		
Sam Dasher	JC Board of Ed.		
Wesley Davis	SCPD	478-625-7626	
Larry Alford	Avera GA	478-377-0461	
Lisa Cooper	Stapleton	706-830-2570	

Jefferson County Public Hearing

Jefferson County Joint Comprehensive Plan:
2023-2028

August 17, 2023 | 6:00PM

Agenda

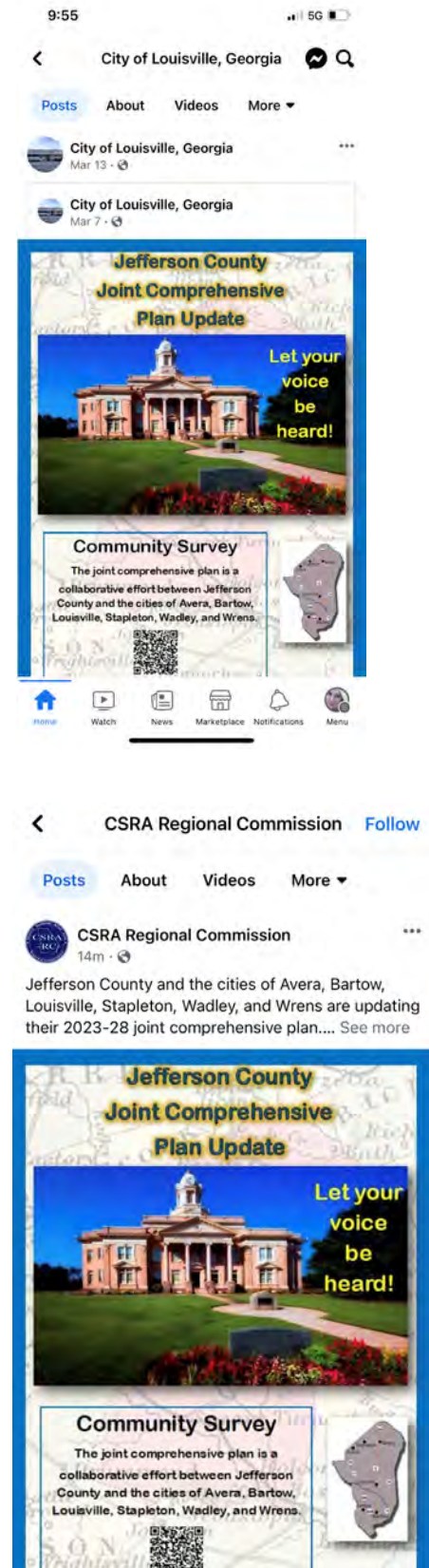
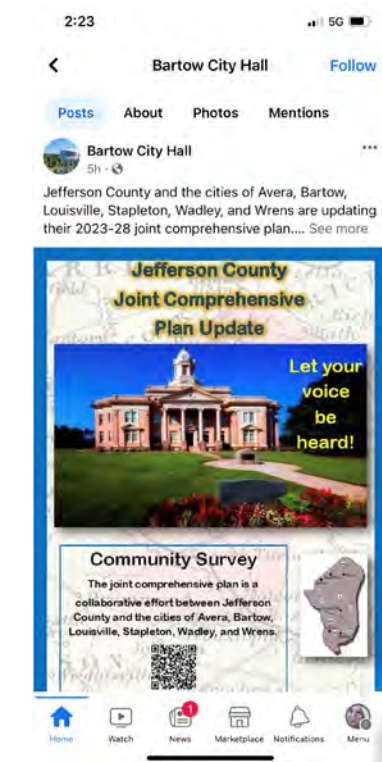
1. Call to order
2. Purpose of the hearing
3. Information on the draft comprehensive plan and submittal process
4. Public comment period
5. Adjourn



Armory Building | 1841 Hwy 24 W | Louisville | Georgia | 30434

Social Media and Web

During the planning process, Jefferson County and the CSRA Regional Commission was able to use social media to encourage public participation.



Jefferson County Joint Comprehensive Plan

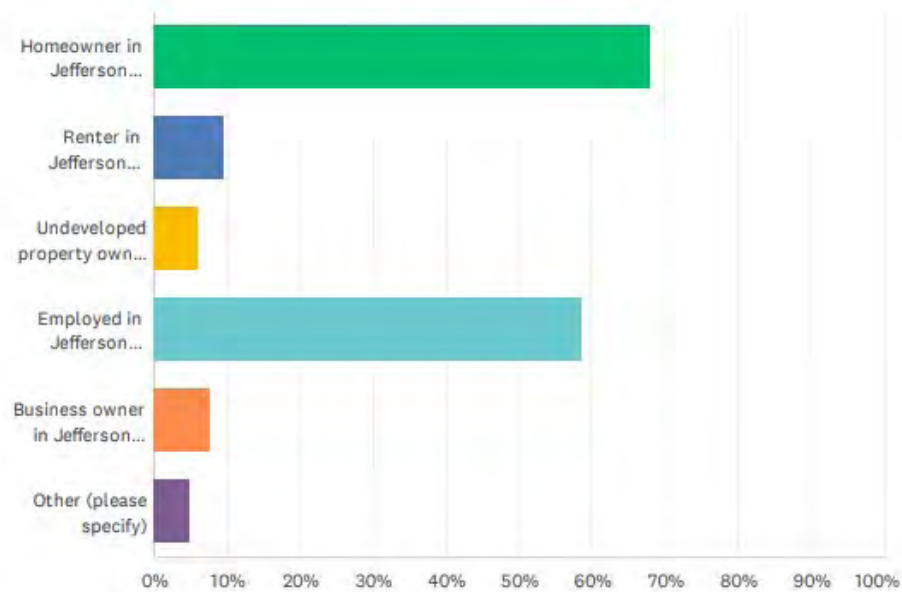
Community Survey

The following are summary response charts of select questions from the community survey. Open-ended questions are not included herein, but those questions are covered areas such as SWOT and Needs and Opportunities. The local government officials have retained copies of open-ended responses, including redevelopment ideas and general comments for future use.

Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q1 Which of the following categories currently describes you? Check all that apply.

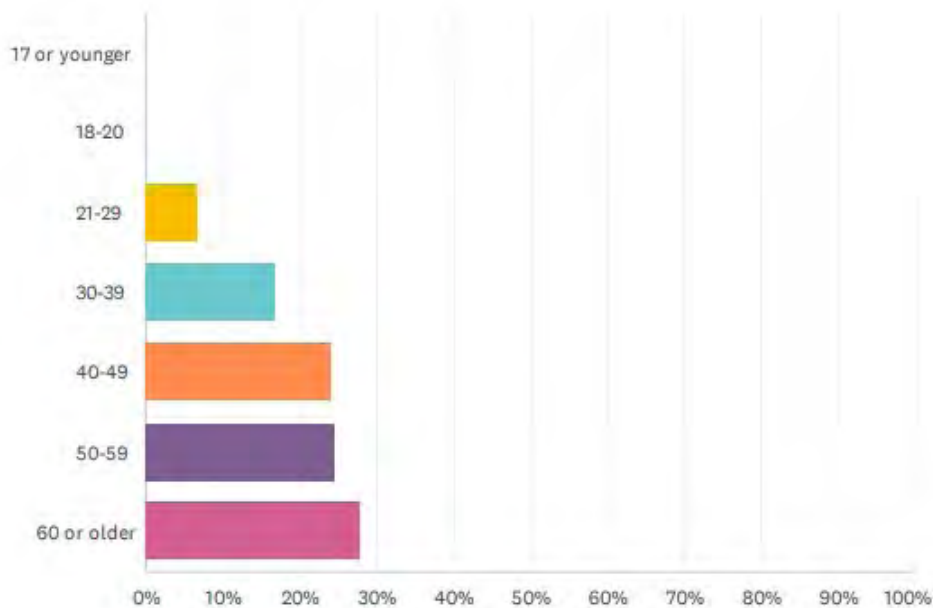
Answered: 220 Skipped: 0



ANSWER CHOICES	RESPONSES	
Homeowner in Jefferson County	67.73%	149
Renter in Jefferson County	9.55%	21
Undeveloped property owner in Jefferson County	5.91%	13
Employed in Jefferson County	58.64%	129
Business owner in Jefferson County	7.73%	17
Other (please specify)	5.00%	11
Total Respondents: 220		

Q2 What is your age?

Answered: 220 Skipped: 0



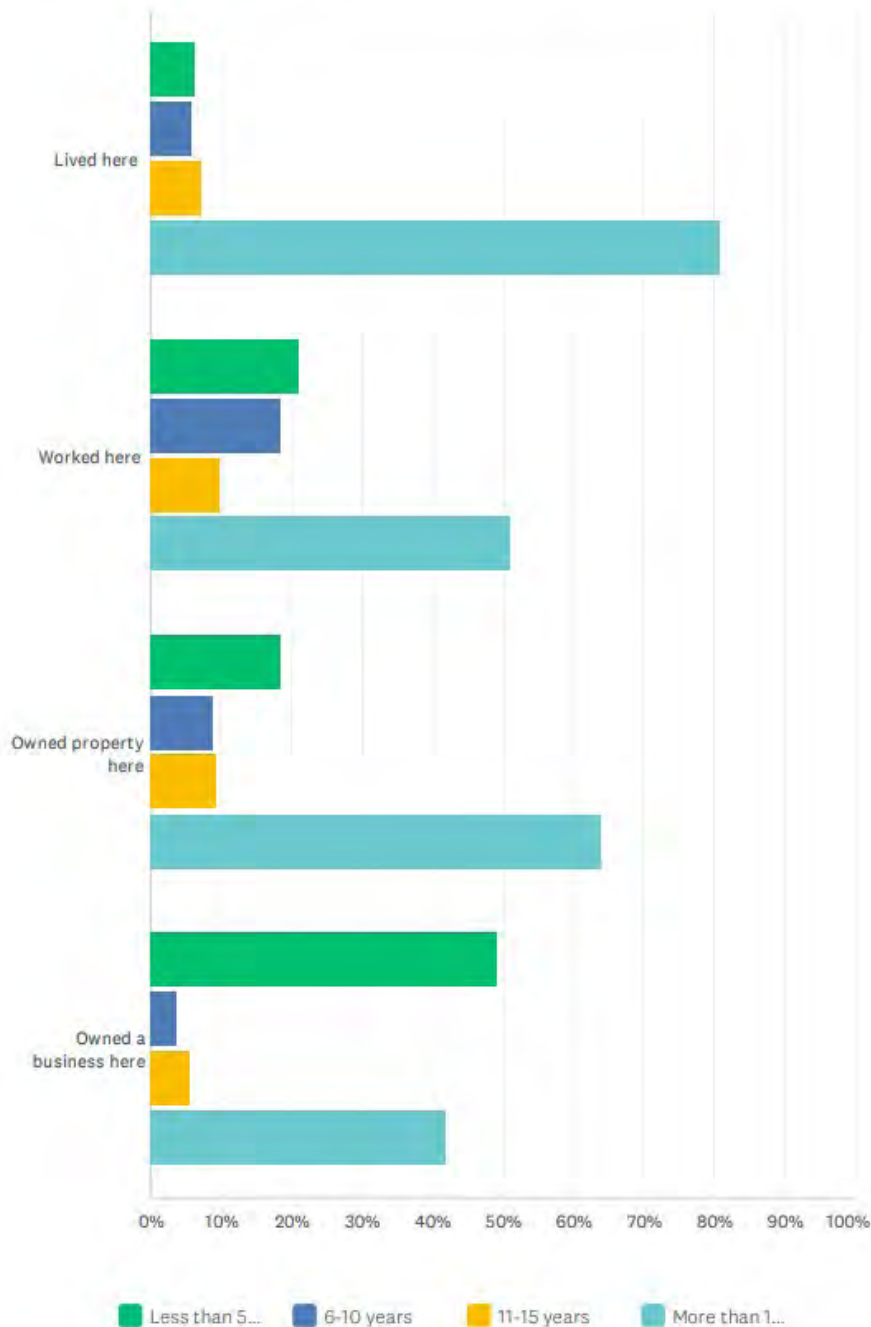
ANSWER CHOICES	RESPONSES	
17 or younger	0.00%	0
18-20	0.00%	0
21-29	6.82%	15
30-39	16.82%	37
40-49	24.09%	53
50-59	24.55%	54
60 or older	27.73%	61
TOTAL		220



Q3 How long have you lived, worked, or owned property in our community?

Answered: 220 Skipped: 0

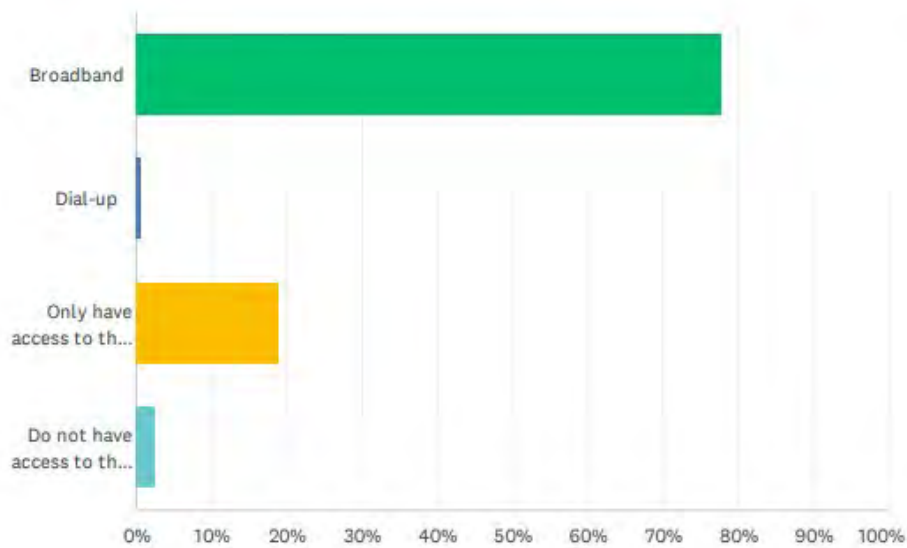
Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey



Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q8 What type of internet access do you have at home?

Answered: 158 Skipped: 62



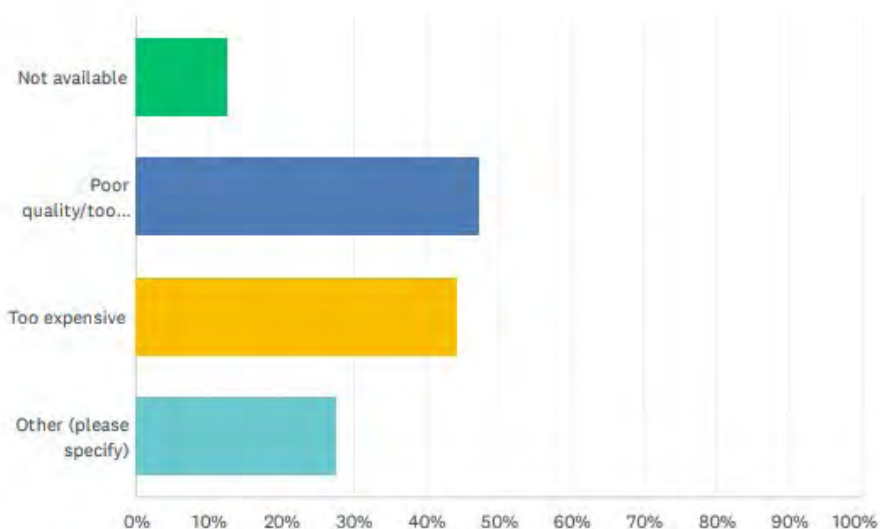
ANSWER CHOICES	RESPONSES	
Broadband	77.85%	123
Dial-up	0.63%	1
Only have access to the internet on my cell phone	18.99%	30
Do not have access to the internet	2.53%	4
TOTAL		158



Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q9 What issues do you have with internet at home? Check all that apply.

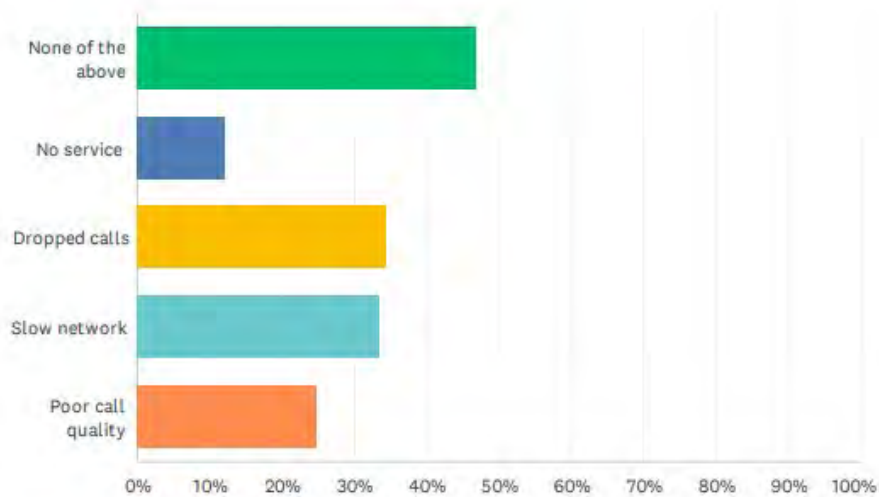
Answered: 135 Skipped: 85



ANSWER CHOICES	RESPONSES	
Not available	12.59%	17
Poor quality/too slow	47.41%	64
Too expensive	44.44%	60
Other (please specify)	27.41%	37
Total Respondents: 135		

Q10 What issues do you have with cell phone service at home? Check all that apply.

Answered: 149 Skipped: 71



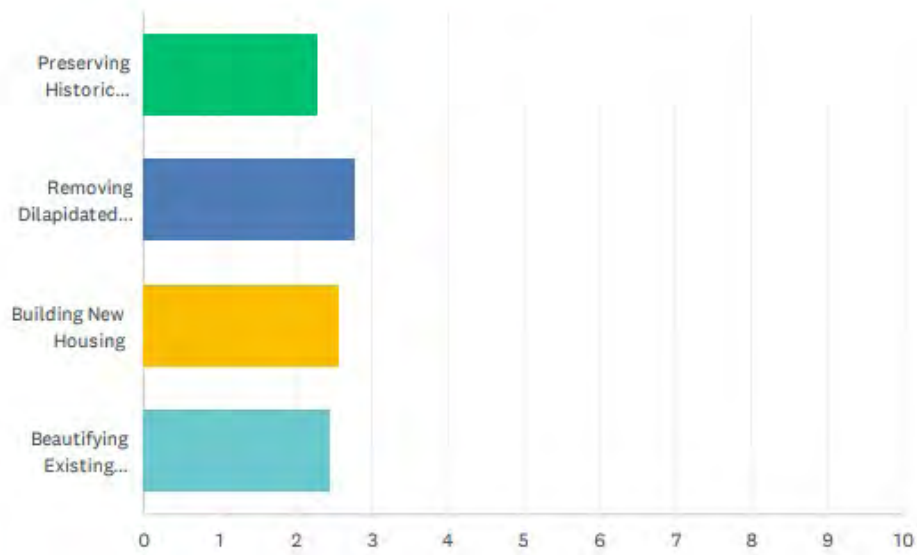
ANSWER CHOICES	RESPONSES	
None of the above	46.98%	70
No service	12.08%	18
Dropped calls	34.23%	51
Slow network	33.56%	50
Poor call quality	24.83%	37
Total Respondents: 149		



Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q11 Please rank the following housing topics based on their importance to you from 1 to 4 (with 1 being most important). Each answer option does require a number rank, and each number can only be used once.

Answered: 147 Skipped: 73

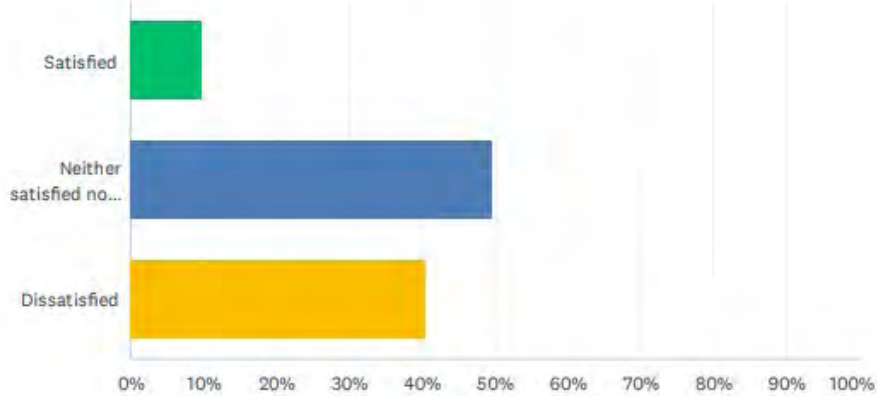


	1	2	3	4	TOTAL	SCORE
Preserving Historic Character	23.94% 34	19.01% 27	19.01% 27	38.03% 54	142	2.29
Removing Dilapidated Buildings	28.99% 40	32.61% 45	25.36% 35	13.04% 18	138	2.78
Building New Housing	35.51% 49	17.39% 24	18.12% 25	28.99% 40	138	2.59
Beautifying Existing Neighborhoods	16.43% 23	30.71% 43	34.29% 48	18.57% 26	140	2.45

Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q12 How satisfied are you with the variety of housing in our community?

Answered: 153 Skipped: 67



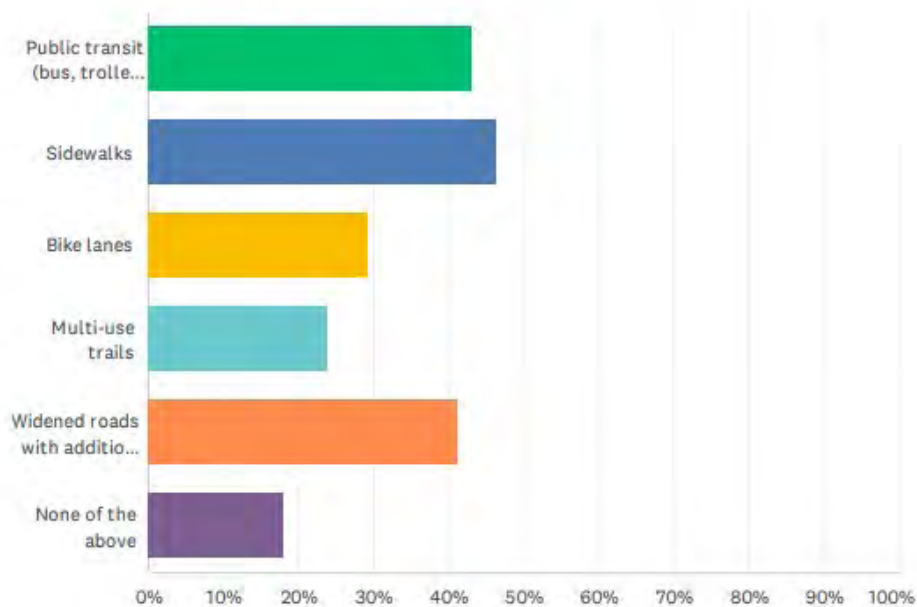
ANSWER CHOICES	RESPONSES	
Satisfied	9.80%	15
Neither satisfied nor dissatisfied	49.67%	76
Dissatisfied	40.52%	62
TOTAL		153



Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q13 Which transportation improvements would you like to see more of in our community? Check all that apply.

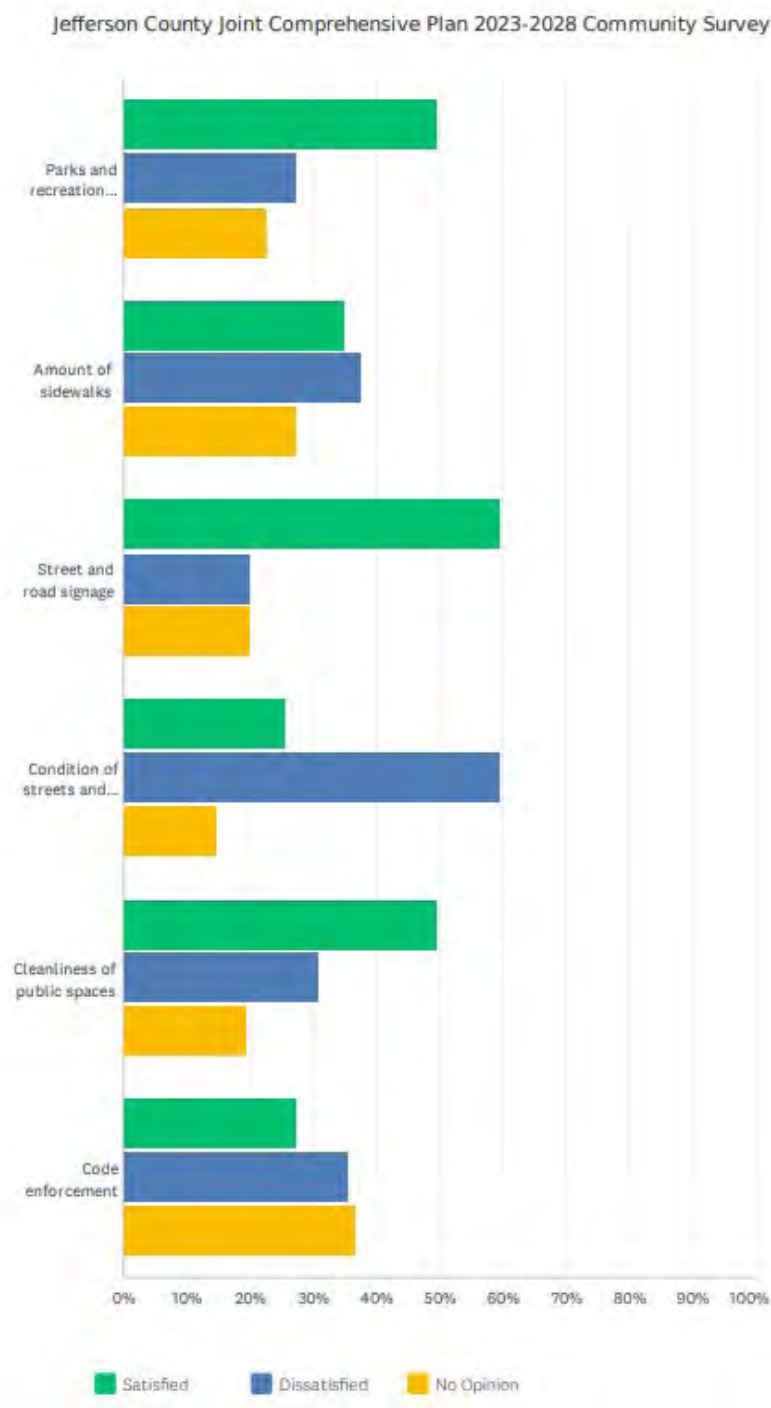
Answered: 151 Skipped: 69



ANSWER CHOICES	RESPONSES	
Public transit (bus, trolley, etc)	43.05%	65
Sidewalks	46.36%	70
Bike lanes	29.14%	44
Multi-use trails	23.84%	36
Widened roads with additional lanes	41.06%	62
None of the above	17.88%	27
Total Respondents: 151		

Q14 Please rate your level of satisfaction with each of the following public services or facilities.

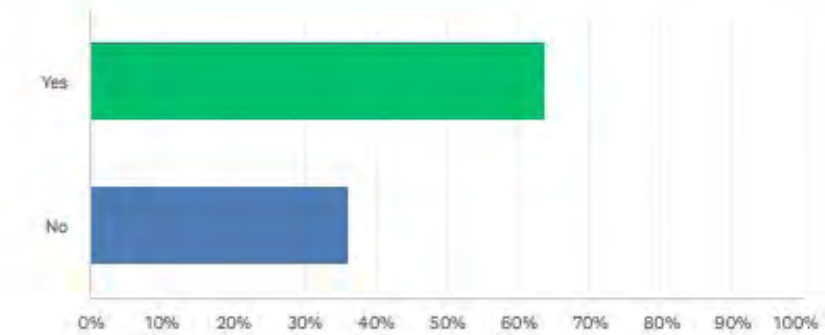
Answered: 149 Skipped: 71



Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q16 Do you use public facilities such as parks, trails, and ball fields?

Answered: 149 Skipped: 71

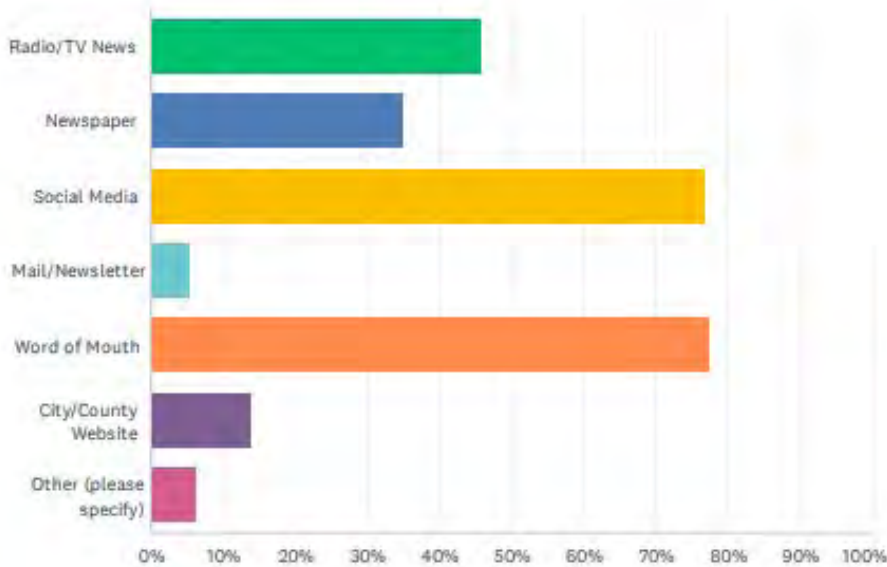


ANSWER CHOICES	RESPONSES	
Yes	63.76%	95
No	36.24%	54
TOTAL		149

Jefferson County Joint Comprehensive Plan 2023-2028 Community Survey

Q20 How do you typically find out about what's happening in our community? Check all that apply.

Answered: 129 Skipped: 91



ANSWER CHOICES	RESPONSES	
Radio/TV News	45.74%	59
Newspaper	34.88%	45
Social Media	76.74%	99
Mail/Newsletter	5.43%	7
Word of Mouth	77.52%	100
City/County Website	13.95%	18
Other (please specify)	6.20%	8
Total Respondents: 129		

Survey identifies area's strengths, weaknesses, opportunities

Parish Howard

Augusta Chronicle | USA TODAY NETWORK

Around 220 area residents helped direct county and city officials in planning their goals for the next five years by filling out a recent online survey asking them to identify what is working and what needs work across Jefferson County.

Jefferson County Administrator Jerry Coalson said the survey is one part of the county and area cities' strategic planning process required by the state every five years. The community was requested to fill out a 21-question survey they could access from their phone or computer.

April Young with the CSRA Regional Commission, the agency assisting the county and cities in compiling their data and writing their joint comprehensive plan, recently provided area leaders with the results of the survey.

Of the 220 people who responded to the survey, 67.73 percent said they are homeowners in Jefferson County and 58.64 percent said they were employed in the county, 9.55 percent said they were renters in the county and 7.73 said they were business owners in the county.

Respondents tended to be older, with 168 of them over the age of 40. Of the total 220, 61 were over age 60, 54 were in their 50s, 53 between ages 40 and 49, 37 were in their 30s and 15 were between 21 and 29 years of age.

Among those responding to the survey, 77.85 percent said they had access to broadband internet services. 18.99 percent said they only had access via their cell phone and 2.53 percent said they had no access to the internet at all. Some 47.41 percent said their internet service are of a poor quality or too slow, while another 44.44 percent said they thought the service was too expensive.

Some 34.23 percent of respondents said that their cell phone drops calls when using it at home and 33.56 percent said they have a slow network there. Another 12.08 percent of respondents said that they have no cell service at home.

Concerns about housing were fairly evenly distributed between the four options given on the survey. Some 35.51 percent ranked building new housing as the first priority, 28.99 percent ranked removing dilapidated buildings first, 23.94 percent ranked preserving historic character first and 16.43 percent ranked beautifying existing neighborhoods as the first priority.

A majority of survey takers listed transportation improvements in the following order: sidewalks, public transit, widened roads with additional lanes, bike lanes and then multi-use trails.

A majority of those taking the survey said that they were satisfied with government supplied parks and recreation facilities, street and road signage and the cleanliness of public spaces. Overall, respondents said that they were dissatisfied with the condition of streets, code enforcement and the amount of sidewalks.

Individual responses to specific questions were kept anonymous.

Greatest strengths

By far, survey takers identified people, family and the area's community atmosphere as the area's greatest strength. They wrote comments like: "friendly environment," "small town feel," "our people, their diversity and their many connections to each other." Others commented on the strengths inherent in being a "close knit community," such as "everyone knows everyone and are willing to help others." They talked about how the community unites in times of crisis and how, for the most part, the different parts of the same community all share similar values, a sense of family and are "hard-working folks."

The second most reference strength was the area's location, it's proximity to larger, faster growing areas like Augusta, Fort Gordon and Columbia County. These respondents referenced there being "room to breathe" and "lots of green space," mild traffic and "room for growth and expansion."

The third most referenced quality was the area's relatively low crime rate compared to surrounding counties. Once respondent said, "I generally feel safe where I go."

A lot of people talked about the diversity of industry available here, the cooperation between local governments and a strong school system that coordinates with area technical schools.

Greatest weaknesses

A majority of survey respondents cited a lack of opportunities for career growth as Jefferson County's number one weakness. They talked about there not being enough jobs to keep residents in the county and referenced a lack of high paying jobs, low-income potential and there not being enough career advancement opportunities in the area.

A close second, as the major weakness for the area, was a lack of specific services. Respondents pointed to a lack of variety in shopping and dining opportunities and having to travel to surrounding areas for these services.

The next most frequently commented weakness regarded a lack of unity and engagement between Jefferson County communities. Commenters referenced tension between the county's largest cities, too much separation and racial inequality.

Nearly as many respondents pointed to a lack of sufficient workforce housing or apartments as one of the county's primary weaknesses. Others talked about there being "nothing to do here," "not enough things for families and children to participate in," a lack of community events and "activities for your other than sports."

Greatest opportunities

The survey also asked for citizens to point out what they believe are the area's greatest opportunities.

A majority of respondents talked about their desire for leaders to focus on economic development, recruiting new businesses both for employment and to increase the variety of services and service providers throughout the area.

The second most referred to opportunity involved

local schools. Respondents talked about the need to focus resources on education to improve the workforce and encourage more dual enrollment and other partnerships between area high schools and area tech schools.

Many survey respondents referenced the area's geographic location, growth potential and relatively inexpensive property and how that property could be better marketed to attract the growth seen in nearby Augusta, Fort Gordon and Columbia County.

External threats

The survey also asked residents to identify what they saw as the primary external threats that are impacting life in Jefferson County.

The one threat that was mentioned the most was gang activity and crime. During the months that this survey was in circulation, there were a number of shootings in Jefferson County, two of which resulted in deaths.

The second most often referenced external threat was the competition for jobs in surrounding counties. Respondents talked about citizens leaving the county looking for better pay or better opportunities than are available locally.

Other threats mentioned are a national economic instability, the area's pervasive poverty, a lack of activities for youth and lack of community services.

Activities they would like to see

The survey asked citizens to list activities they would like to take part in within Jefferson County, but for whatever reason have not been able to.

The most common response was a request for more public social activities. Citizens mentioned things like a public swimming pool, fishing areas, bowling, musical venues or concerts, community movie nights and more festivals or carnivals.

A lot of people said they would like to see more "sit-down" restaurant options as well as a larger variety of goods and services selling items like clothing or shoes.

A number mentioned more out-door public area facilities, such as parks, walking trails, bike lanes, basketball courts, as well as more afterschool programs for children and teenagers.

In other areas of the survey, citizens pointed to specific areas, such as downtown areas or specific streets where they would like to see the city and county government focus revitalization efforts.

Jefferson County Administrator Jerry Coalson said that over the next several weeks, the cities and the county will be reviewing the results of this survey and putting together a list of projects they plan to implement and issues they plan to address over the next five years. Those plans, and how the cities, county and other resources can work together to address these issues, will be part of the joint comprehensive plan which will be submitted to the Regional Commission for consolidation before October.

Citizens should expect to see the county and cities working on these plans over the next couple of months, Coalson said.



Central Savannah River Area

Regional Commission



Area Labor Profile

Updated: Sep 2024

Super Sector Industries - Quarterly Comparison

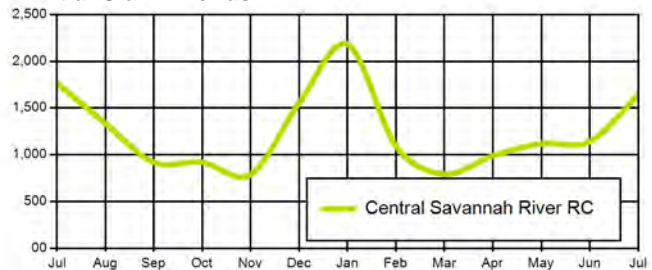
	Establishments			Employment			Weekly Wage		
	2023	2024	% Change	2023	2024	% Change	2023	2024	% Change
Construction	899	953	6.0%	10,473	8,234	-21.4%	1,548	1,133	-26.8%
Education and Health Services	1,364	1,419	4.0%	29,157	28,767	-1.3%	1,107	1,085	-2.0%
Financial Activities	890	945	6.2%	5,260	4,978	-5.4%	1,374	1,441	4.9%
Information	104	133	27.9%	1,422	1,412	-0.7%	1,156	1,200	3.8%
Leisure and Hospitality	1,080	1,114	3.1%	19,838	20,001	0.8%	431	441	2.3%
Manufacturing	359	374	4.2%	16,911	16,468	-2.6%	1,317	1,384	5.1%
Natural Resources, Mining, and Agriculture	175	174	-0.6%	1,915	1,864	-2.7%	1,127	1,169	3.7%
Other Services	707	773	9.3%	4,921	5,225	6.2%	773	795	2.8%
Professional and Business Services	1,568	1,734	10.6%	19,968	20,701	3.7%	1,034	1,074	3.9%
Trade, Transportation and Utilities	2,184	2,256	3.3%	32,650	32,083	-1.7%	1,045	1,113	6.5%
Unclassified	1,385	1,049	-24.3%	699	477	-31.8%	1,195	1,111	-7.0%
Government	543	546	0.6%	37,341	38,301	2.6%	1,177	1,249	6.1%
Total	11,258	11,470	1.9%	180,559	178,508	-1.1%	1,073	1,085	1.1%

Note: All figures are 1st Quarter of 2023 and 2024.

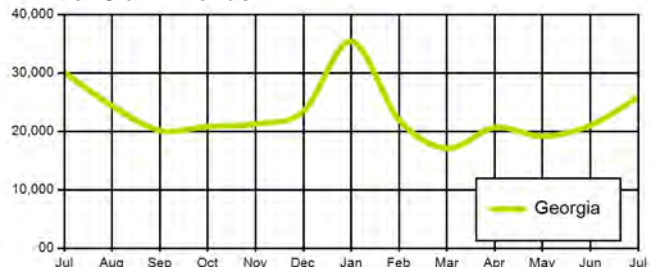
Initial Claims Activity

	July 2024	June 2024	May 2024	Total
Burke	133	90	114	337
Columbia	260	164	206	630
Glascock	5	2	0	7
Hancock	27	14	17	58
Jefferson	59	56	53	168
Jenkins	19	26	22	67
Lincoln	17	11	13	41
McDuffie	105	50	84	239
Richmond	923	642	531	2,096
Taliaferro	3	0	3	6
Warren	30	18	39	87
Washington	22	58	27	107
Wilkes	40	12	13	65
Central Savannah River RC	1,643	1,143	1,122	3,908

Initial Claim Trends



Initial Claim Trends



Source: Georgia Department of Labor; U.S. Bureau of Labor Statistics.

Labor Force Activity

ANNUAL AVERAGES

	Labor Force			Employed			Unemployed			Rate		
	2022	2023	% Change	2022	2023	% Change	2022	2023	% Change	2022	2023	% Change
Burke	8,999	9,003	0.0%	8,516	8,506	-0.1%	483	497	2.9%	5.4%	5.5%	1.9%
Columbia	75,689	76,003	0.4%	73,484	73,722	0.3%	2,205	2,281	3.4%	2.9%	3.0%	3.4%
Glascocock	1,248	1,237	-0.9%	1,208	1,195	-1.1%	40	42	5.0%	3.2%	3.4%	6.3%
Hancock	2,499	2,450	-2.0%	2,372	2,316	-2.4%	127	134	5.5%	5.1%	5.5%	7.8%
Jefferson	6,556	6,686	2.0%	6,283	6,418	2.1%	273	268	-1.8%	4.2%	4.0%	-4.8%
Jenkins	3,286	3,335	1.5%	3,141	3,169	0.9%	145	166	14.5%	4.4%	5.0%	13.6%
Lincoln	3,500	3,496	-0.1%	3,374	3,363	-0.3%	126	133	5.6%	3.6%	3.8%	5.6%
McDuffie	8,389	8,436	0.6%	8,005	8,026	0.3%	384	410	6.8%	4.6%	4.9%	6.5%
Richmond	82,486	82,954	0.6%	78,895	79,146	0.3%	3,591	3,808	6.0%	4.4%	4.6%	4.5%
Taliaferro	542	554	2.2%	519	533	2.7%	23	21	-8.7%	4.2%	3.8%	-9.5%
Warren	2,693	2,764	2.6%	2,587	2,651	2.5%	106	113	6.6%	3.9%	4.1%	5.1%
Washington	6,927	7,078	2.2%	6,646	6,782	2.0%	281	296	5.3%	4.1%	4.2%	2.4%
Wilkes	3,710	3,781	1.9%	3,556	3,640	2.4%	154	141	-8.4%	4.2%	3.7%	-11.9%
Central Savannah River RC	206,524	207,777	0.6%	198,586	199,467	0.4%	7,938	8,310	4.7%	3.8%	4.0%	5.3%
Georgia	5,222,263	5,305,623	1.6%	5,058,165	5,135,833	1.5%	164,098	169,790	3.5%	3.1%	3.2%	3.2%
United States	164,287,000	167,116,000	1.7%	158,291,000	161,037,000	1.7%	5,996,000	6,080,000	1.4%	3.6%	3.6%	0.0%

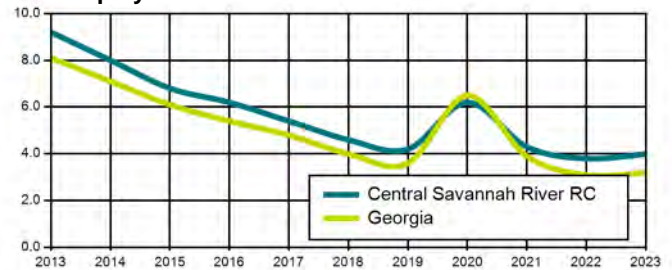
Note: This series reflects the latest information available. Labor Force includes residents of the county who are employed or actively seeking employment.

Source: Georgia Department of Labor; U.S. Bureau of Labor Statistics.

Central Savannah River RC Employment Trends



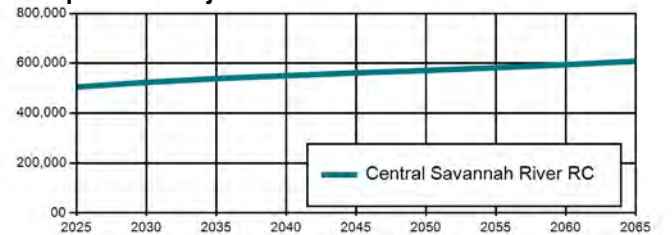
Unemployment Rate Trends



Population Activity

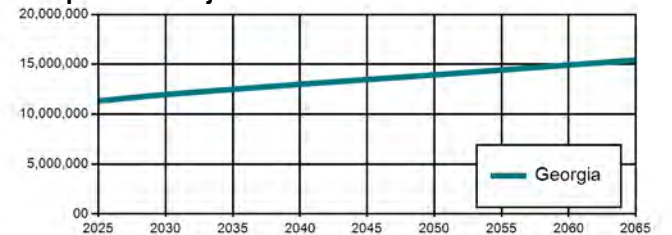
	Annual 2023	Annual 2022	Difference
Burke	24,438	24,388	50
Columbia	165,162	162,419	2,743
Glascocock	2,954	2,939	15
Hancock	8,676	8,387	289
Jefferson	15,183	15,314	-131
Jenkins	8,627	8,689	-62
Lincoln	7,879	7,841	38
McDuffie	21,799	21,713	86
Richmond	205,414	206,640	-1,226
Taliaferro	1,609	1,600	9
Warren	5,106	5,155	-49
Washington	19,820	19,738	82
Wilkes	9,518	9,599	-81
Central Savannah River RC	496,185	494,422	1,763
Georgia	11,029,227	10,912,876	116,351
United States	334,914,895	333,287,557	1,627,338

Population Projections



Source: Governor's Office of Planning and Budget

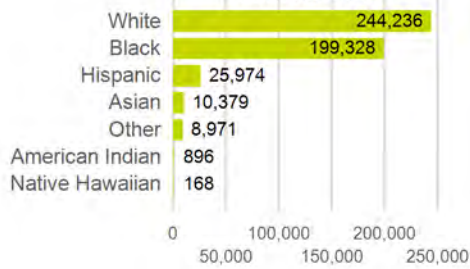
Population Projections



Source: Governor's Office of Planning and Budget

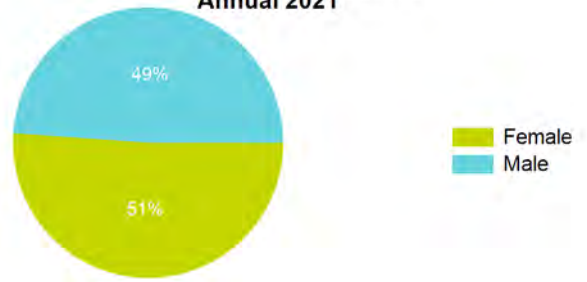
Source: Georgia Department of Labor; U.S. Census Bureau.

Population by Ethnicity Central Savannah River RC Annual 2021



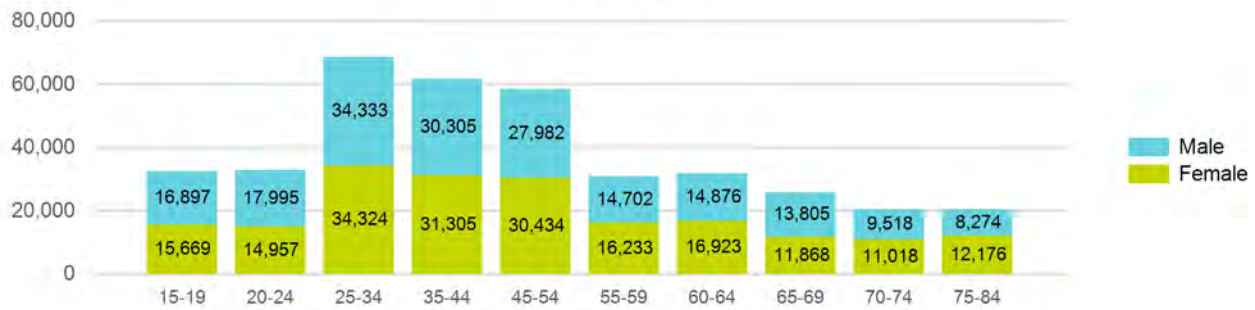
Source: U.S. Census Bureau - 2021 - ACS 5-Year Estimates

Population by Gender Central Savannah River RC Annual 2021



Source: U.S. Census Bureau - 2021 - ACS 5-Year Estimates

Gender Population by Age Group Central Savannah River RC Annual 2021



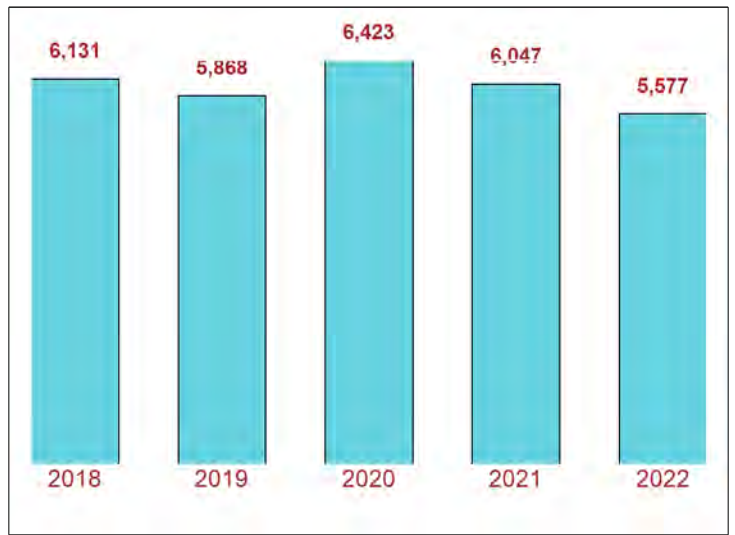
Central Savannah River RC Per Capita Income

Source: U.S. Bureau of Economic Analysis



Central Savannah River RC Poverty

Source: U.S. Census Bureau



Industry Mix - 1st Quarter of 2024

	Number OF Firms	Employment		WEEKLY WAGE
		NUMBER	PERCENT	
Goods-Producing	1,501	26,566	14.9	1,291
Agriculture, Forestry, Fishing and Hunting	142	1,016	0.6	929
Mining, Quarrying, and Oil and Gas Extraction	32	848	0.5	1,457
Construction	953	8,234	4.6	1,133
Manufacturing	374	16,468	9.2	1,384
Apparel	4	308	0.2	864
Beverage and Tobacco Product	8	175	0.1	1,013
Chemical	32	915	0.5	2,218
Computer and Electronic Product	10	31	0.0	958
Electrical Equipment, Appliance, and Component	7	426	0.2	1,499
Fabricated Metal Product	50	1,321	0.7	1,108
Food	32	2,780	1.6	1,088
Furniture and Related Product	21	204	0.1	878
Machinery	26	1,075	0.6	1,705
Miscellaneous	31	494	0.3	1,178
Nonmetallic Mineral Product	27	1,263	0.7	1,386
Paper	13	951	0.5	2,096
Petroleum and Coal Products	1	*	*	*
Plastics and Rubber Products	9	570	0.3	1,209
Primary Metal	3	152	0.1	1,320
Printing and Related Support Activities	21	102	0.1	693
Textile Mills	4	*	*	*
Textile Product Mills	8	*	*	*
Transportation Equipment	26	3,279	1.8	1,563
Wood Product	41	1,554	0.9	1,265
Service-Providing	8,374	113,167	63.4	981
Utilities	27	2,472	1.4	4,201
Wholesale Trade	390	4,250	2.4	1,433
Retail Trade	1,555	20,928	11.7	689
Transportation and Warehousing	284	4,433	2.5	1,084
Information	133	1,412	0.8	1,200
Finance and Insurance	504	2,757	1.5	1,687
Real Estate and Rental and Leasing	441	2,221	1.2	1,137
Professional, Scientific, and Technical Services	1,022	8,176	4.6	1,527
Management of Companies and Enterprises	42	834	0.5	1,619
Administrative and Support and Waste Management and Remediation Services	670	11,691	6.5	718
Educational Services	122	2,120	1.2	720
Health Care and Social Assistance	1,297	26,647	14.9	1,114
Arts, Entertainment, and Recreation	110	2,195	1.2	695
Accommodation and Food Services	1,004	17,806	10.0	410
Other Services (except Public Administration)	773	5,225	2.9	795
Unclassified - industry not assigned	1,049	477	0.3	1,110
Total - Private Sector	10,924	140,209	78.5	1,040
Total - Government	546	38,299	21.5	1,249
Federal Government	104	8,959	5.0	1,660
State Government	163	9,681	5.4	1,428
Local Government	279	19,659	11.0	974
ALL INDUSTRIES	11,470	178,508	100.0	1,085

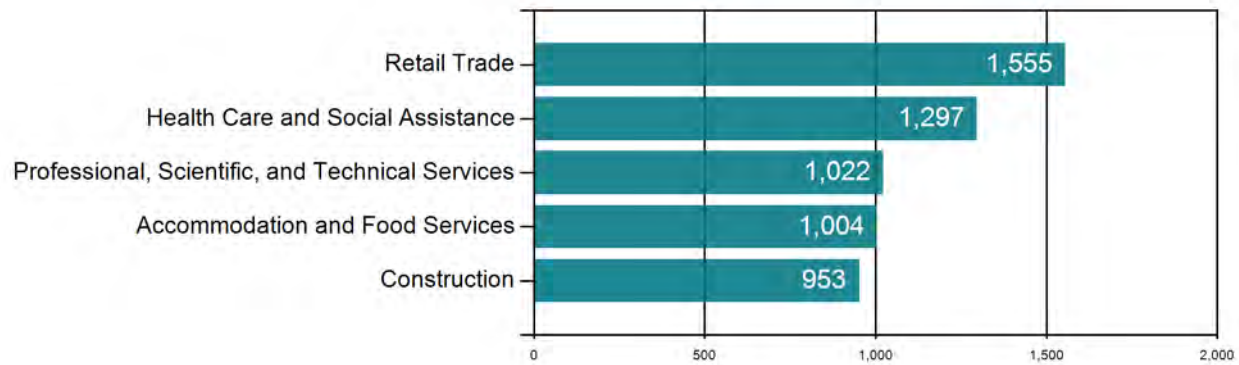
Note: *Denotes confidential data relating to individual employers and cannot be released. These data use the North American Industrial Classification System (NAICS) categories. Average weekly wage is derived by dividing gross payroll dollars paid to all employees - both hourly and salaried - by the average number of employees who had earnings; average earnings are then divided by the number of weeks in a reporting period to obtain weekly figures. Figures in other columns may not sum accurately due to rounding. All figures are 1st Quarter of 2024.

Source: Georgia Department of Labor. These data represent jobs that are covered by unemployment insurance laws.

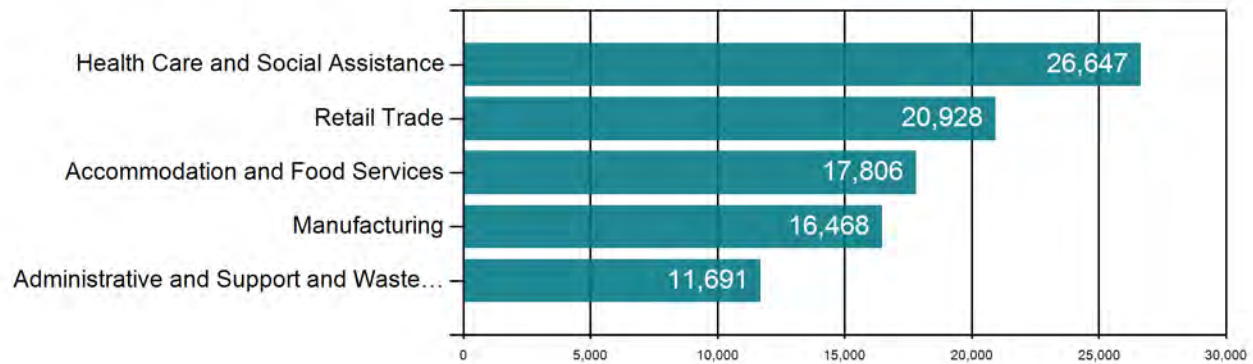
Top Industries - 1st Quarter of 2024

Central Savannah River RC

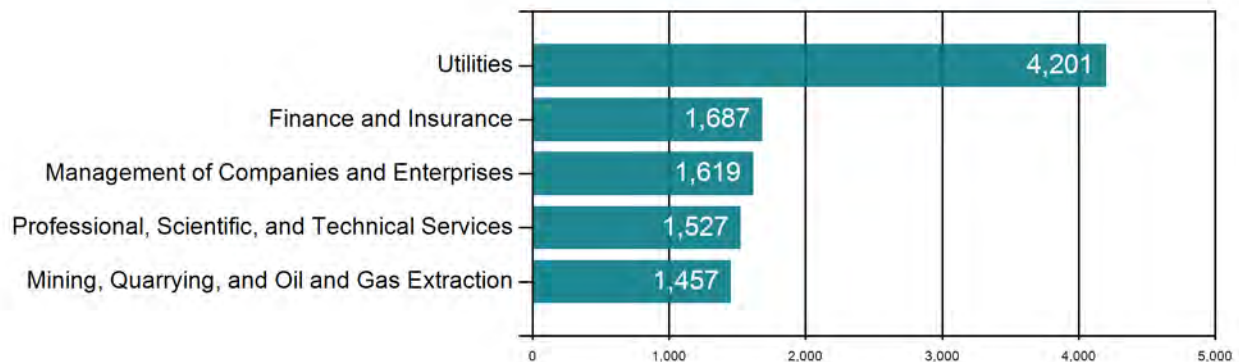
Top Industries by Firms



Top Industries by Employment



Top Industries by Weekly Wages



Source: Georgia Department of Labor. These data represent jobs that are covered by unemployment insurance laws.

Technical College Certificate Graduates - 2023

PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2021	2022	2023	2021-2022	2022-2023
Welding Technology/Welder	436	376	358	-13.8	-4.8
Electrician	166	99	214	-40.4	116.2
Truck and Bus Driver/Commercial Vehicle Operator and Instructor	108	105	150	-2.8	42.9
Computer and Information Systems Security/Information Assurance	146	103	145	-29.5	40.8
Cosmetology/Cosmetologist, General	56	72	118	28.6	63.9
Child Care Provider/Assistant	80	62	87	-22.5	40.3
Automobile/Automotive Mechanics Technology/Technician	138	85	77	-38.4	-9.4
Computer Installation and Repair Technology/Technician	78	40	73	-48.7	82.5
Nursing Assistant/Aide and Patient Care Assistant/Aide	121	85	69	-29.8	-18.8
Data Processing and Data Processing Technology/Technician	79	38	61	-51.9	60.5

Source: Technical College System of Georgia

Note: Please visit TCSG website for any college configuration changes.

Technical College Diploma Graduates - 2023

PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2021	2022	2023	2021-2022	2022-2023
Cosmetology/Cosmetologist, General	46	45	66	-2.2	46.7
Welding Technology/Welder	58	73	52	25.9	-28.8
Licensed Practical/Vocational Nurse Training	38	40	47	5.3	17.5
Business Administration and Management, General	36	23	31	-36.1	34.8
Electrician	37	22	28	-40.5	27.3
Medical/Clinical Assistant	46	29	24	-37.0	-17.2
Early Childhood Education and Teaching	27	20	18	-25.9	-10.0
Automobile/Automotive Mechanics Technology/Technician	46	16	16	-65.2	0.0
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology/	17	18	15	5.9	-16.7
Accounting Technology/Technician and Bookkeeping	15	17	14	13.3	-17.6

Source: Technical College System of Georgia

Note: Please visit TCSG website for any college configuration changes.

Technical College Degree Graduates - 2023

PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2021	2022	2023	2021-2022	2022-2023
Business Administration and Management, General	48	32	43	-33.3	34.4
Registered Nursing/Registered Nurse	24	10	23	-58.3	130.0
Early Childhood Education and Teaching	17	19	21	11.8	10.5
Occupational Therapist Assistant	14	15	18	7.1	20.0
Criminal Justice/Safety Studies	16	14	16	-12.5	14.3
Accounting Technology/Technician and Bookkeeping	29	20	16	-31.0	-20.0
Nuclear Engineering Technology/Technician	9	7	16	-22.2	128.6
Radiologic Technology/Science - Radiographer	22	19	16	-13.6	-15.8
Design and Visual Communications, General	13	12	14	-7.7	16.7
Mechanical Engineering/Mechanical Technology/Technician	7	7	13	0.0	85.7

Source: Technical College System of Georgia

Note: Please visit TCSG website for any college configuration changes.

Top Employers - 2024*

TEN LARGEST EMPLOYERS

Central Savannah River RC

ADP, Inc.
 AU Health System, Inc.
 Doctors Hospital of Augusta, LLC
 FPL Food, LLC
 Georgia Regents University
 MCG Health, Inc.
 Southern Nuclear Operating Co
 Textron Ezgo, LLC
 University Home Health in Augusta
 Walmart

*Note: Represents employment covered by unemployment insurance excluding all government agencies except correctional institutions, state and local hospitals, state colleges and universities. Data shown for the First Quarter of 2024. Employers are listed alphabetically by area, not by the number of employees.

Source: Georgia Department of Labor

SIZE CLASS

Employees	Establishments	Employment
0 - 4	6,656	8,218
5 - 9	1,781	12,018
10 - 19	1,383	18,819
20 - 49	965	28,987
50 - 99	415	28,417
100 - 249	208	30,875
250 - 499	38	12,322
500 - 999	12	9,097
1000 - and over	12	27,946
Total	11,470	176,699

Note: Data shown for the First Quarter of 2024.

Education of the Labor Force

Central Savannah River RC

PERCENT DISTRIBUTION BY AGE

	PERCENT OF TOTAL	18-24	25-34	35-44	45-64	65+
Elementary	3.5%	1.3%	2.3%	2.3%	2.8%	8.1%
Some High School	9.8%	14.7%	8.9%	7.3%	8.5%	11.9%
High School Grad/GED	32.5%	39.6%	28.7%	29.1%	33.7%	32.7%
Some College	22.4%	32.9%	24.0%	21.5%	20.4%	18.6%
College Grad 2 Yr	9.3%	5.3%	9.7%	12.3%	9.9%	7.8%
College Grad 4 Yr	14.0%	5.9%	18.2%	16.4%	14.7%	11.9%
Post Graduate Studies	8.5%	0.3%	8.3%	11.1%	10.1%	9.1%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Totals are based on the portion of the labor force between ages 18 - 65+. Some College category represents workers with some

Source: U.S. Census Bureau - 2021: ACS 5-Year Estimates.

Georgia Department of Labor Location(s)

Career Center(s)

601 Greene Street

Augusta, GA 30901

Phone: (706) 721 - 3131

Fax: (706) 721 - 7680

For copies of Area Labor Profiles, please visit our website at: <http://dol.georgia.gov> or contact Workforce Statistics Division, Georgia Department of Labor, 148 Andrew Young International Blvd N.E. Atlanta, GA. 30303-1751. Phone: 404-232-3875; Fax: 404-232-3888 or Email us at workforce_info@gdol.ga.gov

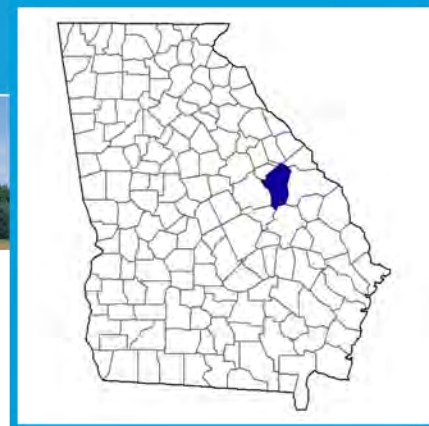
BRUCE THOMPSON - COMMISSIONER, GEORGIA DEPARTMENT OF LABOR
Equal Opportunity Employer/Program

Auxillary Aids and Services Available upon Request to Individuals with Disabilities

Workforce Statistics Division; E-mail: Workforce_Info@gdol.ga.gov Phone: (404) 232-3875



Jefferson County Georgia



Total and Per Farm Overview, 2022 and change since 2017

	2022	% change since 2017
Number of farms	309	-3
Land in farms (acres)	151,521	+21
Average size of farm (acres)	490	+25
Total	(\$)	
Market value of products sold	77,453,000	+32
Government payments	1,275,000	-47
Farm-related income	2,979,000	-39
Total farm production expenses	62,958,000	+26
Net cash farm income	18,749,000	+18
Per farm average	(\$)	
Market value of products sold	250,657	+36
Government payments ^a	15,181	-8
Farm-related income ^a	31,032	-36
Total farm production expenses	203,748	+30
Net cash farm income	60,677	+21

1 Percent of state agriculture sales

Share of Sales by Type (%)

Crops	85
Livestock, poultry, and products	15

Land in Farms by Use (acres)

Cropland	80,297
Pastureland	5,751
Woodland	50,163
Other	15,310

Acres irrigated: 29,720

20% of land in farms

Land Use Practices (% of farms)

No till	12
Reduced till	20
Intensive till	19
Cover crop	12

Farms by Value of Sales

	Number	Percent of Total ^b
Less than \$2,500	97	31
\$2,500 to \$4,999	28	9
\$5,000 to \$9,999	43	14
\$10,000 to \$24,999	33	11
\$25,000 to \$49,999	20	6
\$50,000 to \$99,999	22	7
\$100,000 or more	66	21

Farms by Size

	Number	Percent of Total ^b
1 to 9 acres	15	5
10 to 49 acres	41	13
50 to 179 acres	100	32
180 to 499 acres	69	22
500 to 999 acres	42	14
1,000+ acres	42	14

Market Value of Agricultural Products Sold

	Sales (\$1,000)	Rank in State ^c	Counties Producing Item	Rank in U.S. ^c	Counties Producing Item
Total	77,453	58	159	1,619	3,078
Crops	65,736	25	159	1,123	3,074
Grains, oilseeds, dry beans, dry peas	23,739	5	147	1,234	2,917
Tobacco	-	-	17	-	267
Cotton and cottonseed	23,458	16	92	76	647
Vegetables, melons, potatoes, sweet potatoes	(D)	34	155	(D)	2,831
Fruits, tree nuts, berries	3,337	30	157	301	2,711
Nursery, greenhouse, floriculture, sod	(D)	44	139	(D)	2,660
Cultivated Christmas trees, short rotation woody crops	-	-	49	-	1,274
Other crops and hay	11,935	24	152	284	3,035
Livestock, poultry, and products	11,717	85	159	2,080	3,076
Poultry and eggs	136	111	154	1,234	3,027
Cattle and calves	4,387	30	156	1,762	3,047
Milk from cows	(D)	13	66	(D)	1,770
Hogs and pigs	(D)	10	124	(D)	2,814
Sheep, goats, wool, mohair, milk	9	108	155	2,343	2,967
Horses, ponies, mules, burros, donkeys	45	58	140	1,886	2,907
Aquaculture	(D)	3	41	(D)	1,190
Other animals and animal products	1	101	143	1,949	2,909

Producers ^d	529	Percent of farms that:	Top Crops in Acres ^e	
Sex				
Male	356	Have internet access	Cotton, all	23,626
Female	173		Corn for grain	11,816
			Soybeans for beans	8,644
			Peanuts for nuts	8,497
			Wheat for grain, all	6,965
Age				
<35	46	Farm organically		
35 – 64	266			
65 and older	217			
Race				
American Indian/Alaska Native	-	Sell directly to consumers		
Asian	2			
Black or African American	6			
Native Hawaiian/Pacific Islander	-			
White	517	Hire farm labor		
More than one race	4			
Other characteristics				
Hispanic, Latino, Spanish origin	4	Are family farms		
With military service	62			
New and beginning farmers	194			
			Livestock Inventory (Dec 31, 2022)	
			Broilers and other meat-type chickens	147
			Cattle and calves	12,360
			Goats	128
			Hogs and pigs	(D)
			Horses and ponies	151
			Layers	454
			Pullets	133
			Sheep and lambs	(D)
			Turkeys	(D)

^a Average per farm receiving. ^b May not add to 100% due to rounding. ^c Among counties whose rank can be displayed. ^d Data collected for a maximum of four producers per farm. ^e Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. ^f Position below the line does not indicate rank. (D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

APPENDIX C

OTHER PLANNING DOCUMENTS



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



**Carl Vinson
Institute of Government**
UNIVERSITY OF GEORGIA

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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 Jefferson 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 Jefferson 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. Jefferson 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 Jefferson County were replaced with data derived from parcel and property assessment data obtained from Jefferson County. The county provided property assessment data was current as of November 2024 and the parcel data current as of October 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 Jefferson County is 99.7%. 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	0	0	\$0	\$0
Commercial	593	628	\$437,194,000	\$159,240,000
Education	21	46	\$38,118,000	\$140,250,000
Government	6	6	\$1,594,000	\$2,455,000
Industrial	262	309	\$409,493,000	\$189,910,000
Religious	174	187	\$107,858,000	\$60,848,000
Residential	7,391	7,751	\$850,270,000	\$804,013,000
Total	8,447	8,927	\$1,844,527,000	\$1,356,716,000

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

For Jefferson 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.

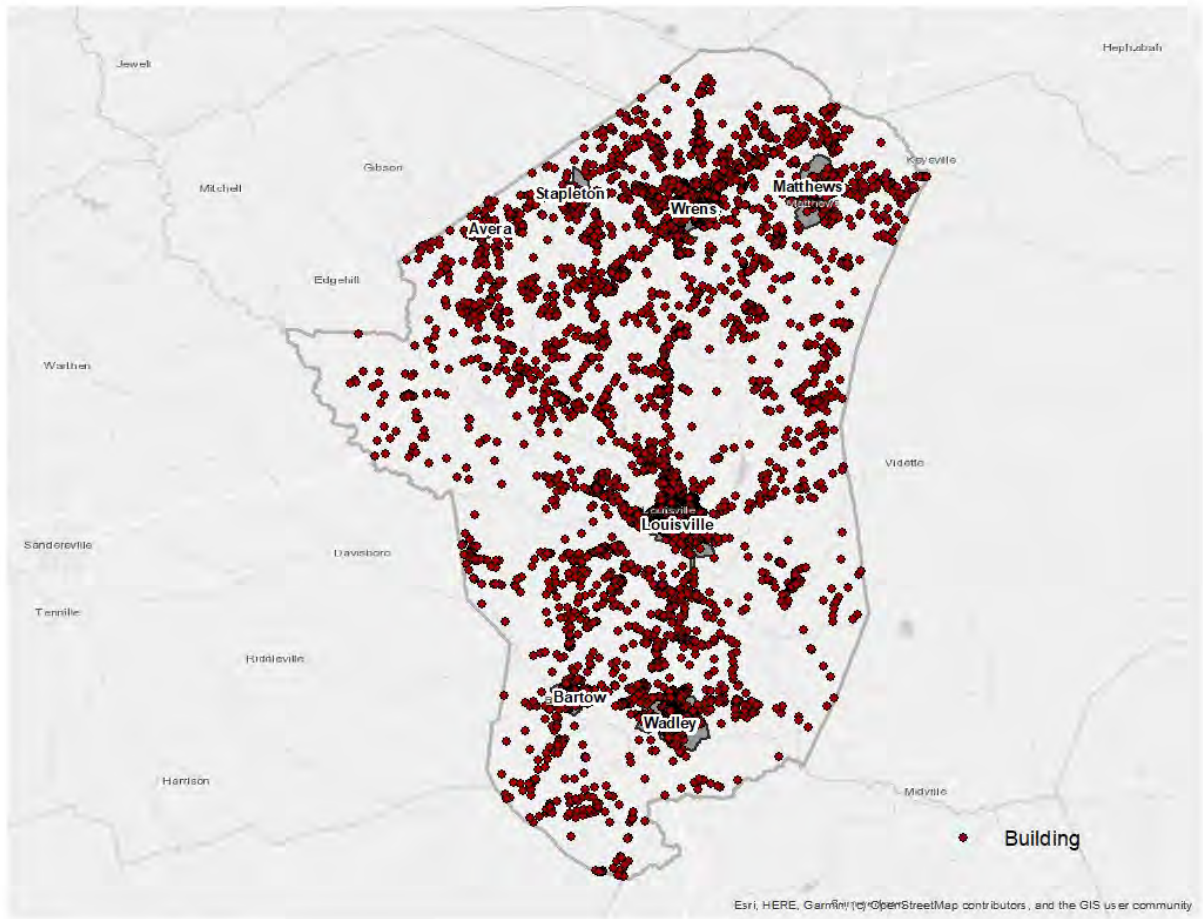


Figure 1: Jefferson County Overview

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 September 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
Avera		
EOC	0	\$0
Care	0	\$0
Fire	1	\$100,000
Police	0	\$0
School	0	\$0
Total	1	\$100,000
Bartow		
EOC	0	\$0
Care	0	\$0
Fire	1	\$330,000
Police	0	\$0
School	0	\$0
Total	1	\$330,000
Louisville		
EOC	0	\$0
Care	2	\$7,400,000
Fire	2	\$3,311,000
Police	2	\$8,392,000
School	2	\$30,500,000
Total	8	\$49,603,000
Matthews		
EOC	0	\$0
Care	0	\$0
Fire	1	\$2,561,000
Police	0	\$0
School	0	\$0
Total	1	\$2,561,000

Classification	Updated Count	Updated Exposure
Stapleton		
EOC	0	\$0
Care	0	\$0
Fire	1	\$394,000
Police	0	\$0
School	0	\$0
Total	1	\$394,000
Wadley		
EOC	0	\$0
Care	2	\$2,015,000
Fire	1	\$300,000
Police	1	\$900,000
School	1	\$12,750,000
Total	5	\$15,965,000
Wrens		
EOC	0	\$0
Care	2	\$1,890,000
Fire	1	\$23,000
Police	1	\$282,000
School	1	\$20,500,000
Total	5	\$22,695,000
Unincorporated Areas of Jefferson County		
EOC	1	\$2,380,000
Care	2	\$97,841,000
Fire	1	\$2,561,000
Police	1	\$5,261,000
School	4	\$60,855,000
Total	9	\$168,898,000

Assumptions and Exceptions

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

- The Jefferson 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 Jefferson County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Jefferson 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 1851, Jefferson County has had 25 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Jefferson County³

YEAR	DATE RANGE	NAME	MAX WIND(Knots)	MAX PRESSURE	MAX CAT
1851	August 16 - 27	UNNAMED	100	0	H3

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
1852	August 19 - 30	UNNAMED	100	961	H3
1856	August 25 - September 03	UNNAMED	100	969	H3
1877	September 21 - October 05	UNNAMED	100	0	H3
1886	June 17 - 24	UNNAMED	85	0	H2
1887	October 09 - 22	UNNAMED	75	0	H1
1898	August 30 - September 01	UNNAMED	75	0	H1
1901	September 09 - 19	UNNAMED	70	0	H1
1915	July 31 - August 05	UNNAMED	65	1003	H1
1928	August 03 - 13	UNNAMED	90	977	H2
1933	August 31 - September 07	UNNAMED	120	948	H4
1949	August 23 - September 01	UNNAMED	115	1002	H4
1959	May 28 - June 02	ARLENE	55	1002	TS
1964	August 20 - September 11	CLEO	130	1007	H4
1965	June 13 - 20	UNNAMED	50	1007	TS
1968	June 01 - 13	ABBY	65	1005	H1
1972	June 14 - 23	AGNES	75	1001	H1
1986	August 13 - 30	CHARLEY	70	1015	H1
1990	October 09 - 13	MARCO	55	1007	TS
2000	September 15 - 25	HELENE	60	1012	TS
2001	June 05 - 19	ALLISON	50	1012	TS
2003	July 25 - 27	UNNAMED	30	1022	TD
2018	October 06 - 15	MICHAEL	140	1006	H5
2019	October 17 - 21	NESTOR	50	1007	TS
2020	July 05 - 11	FAY	50	1014	TS

Category Definitions:

TS – Tropical storm

TD – Tropical depression

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

E – Extra-tropical cyclone

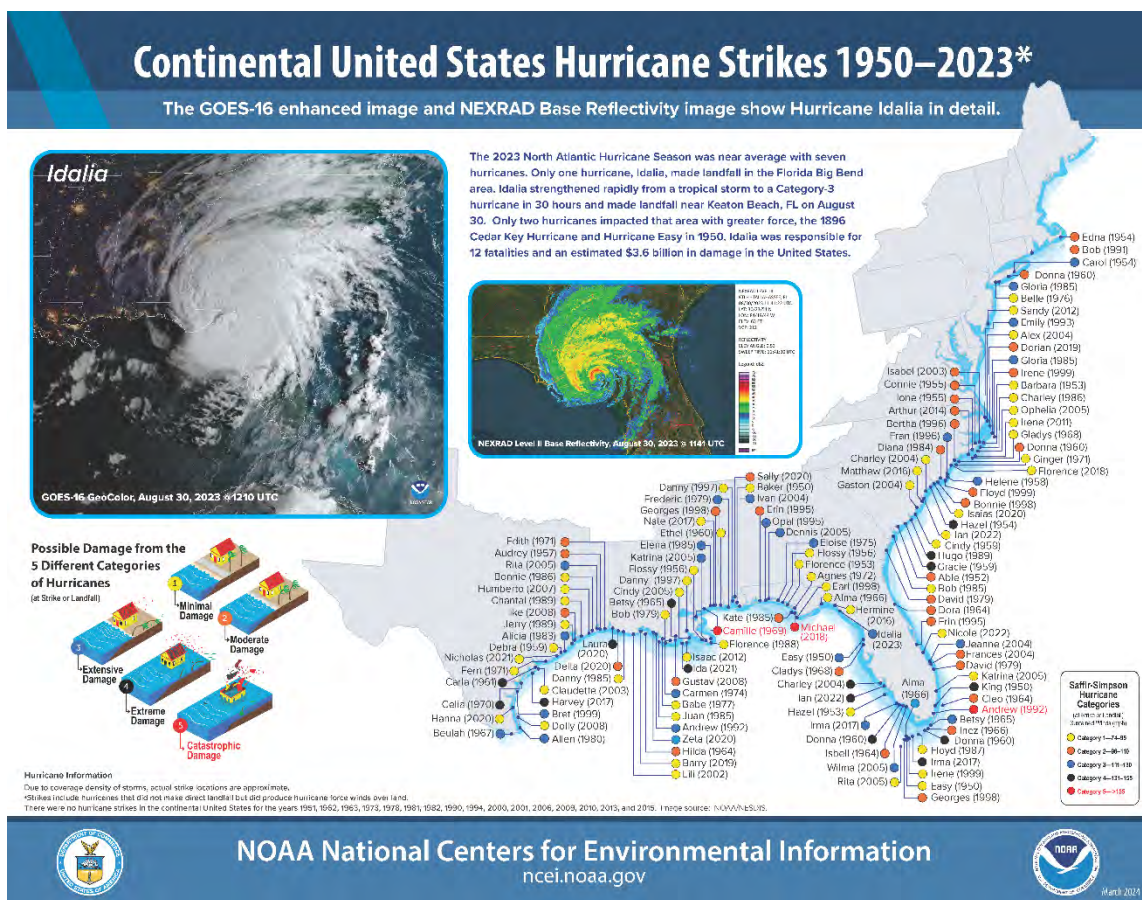


Figure 2: Continental United States Hurricane Strikes: 1950 to 2023⁴

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Category One storm with maximum winds of 76 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 Jefferson County. Wind losses were determined from probabilistic models run for the Category One storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled Category One storm.

⁴ Source: NOAA National Centers for Environmental Information

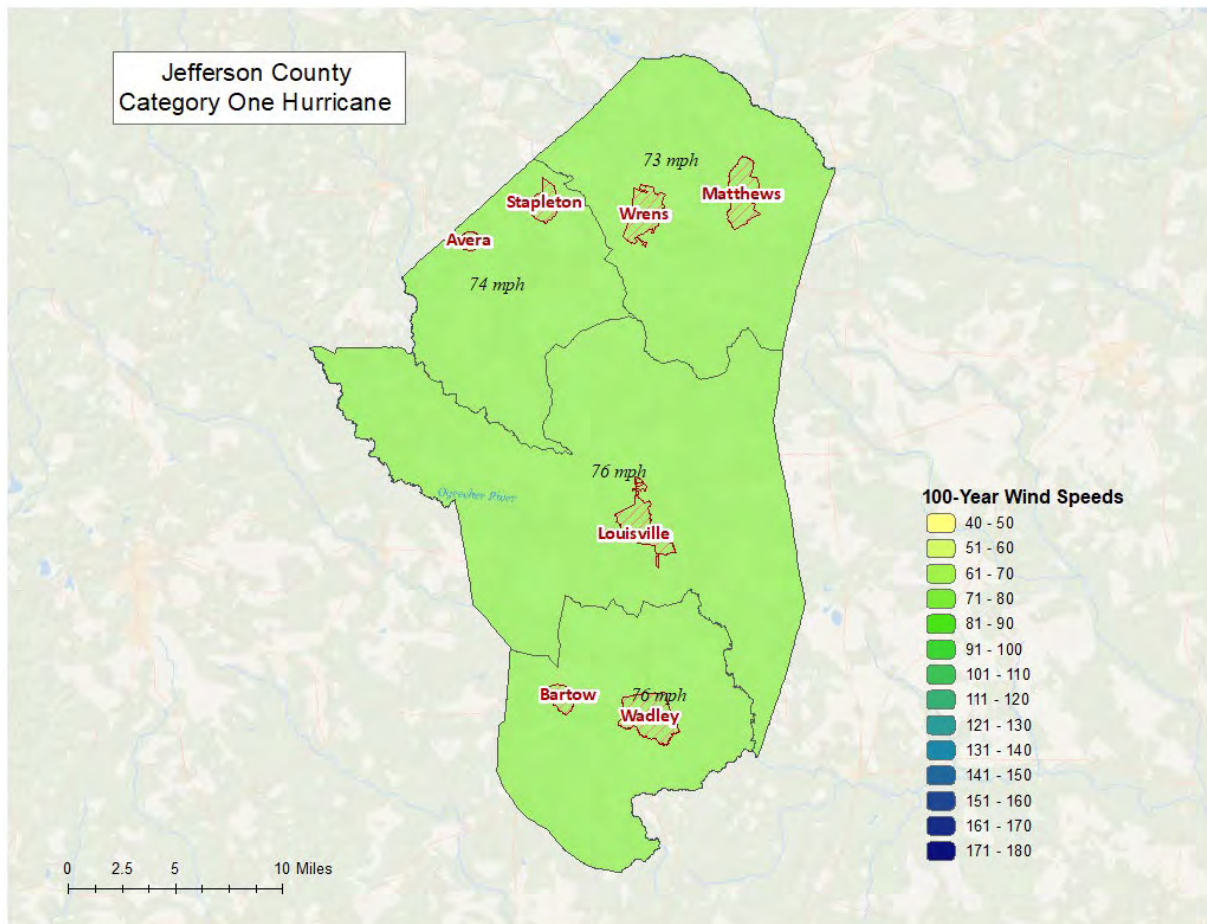


Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Jefferson 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 Jefferson County for the Category One (100 Year Event) storm. 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 Category One storm.

Table 5: Hurricane Wind Building Damage

Classification	Number of Buildings Damaged	Total Building Damage	Total Economic Loss ⁵	Loss Ratio
Category One	67	\$1,943,770	\$2,617,080	0.14%

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.

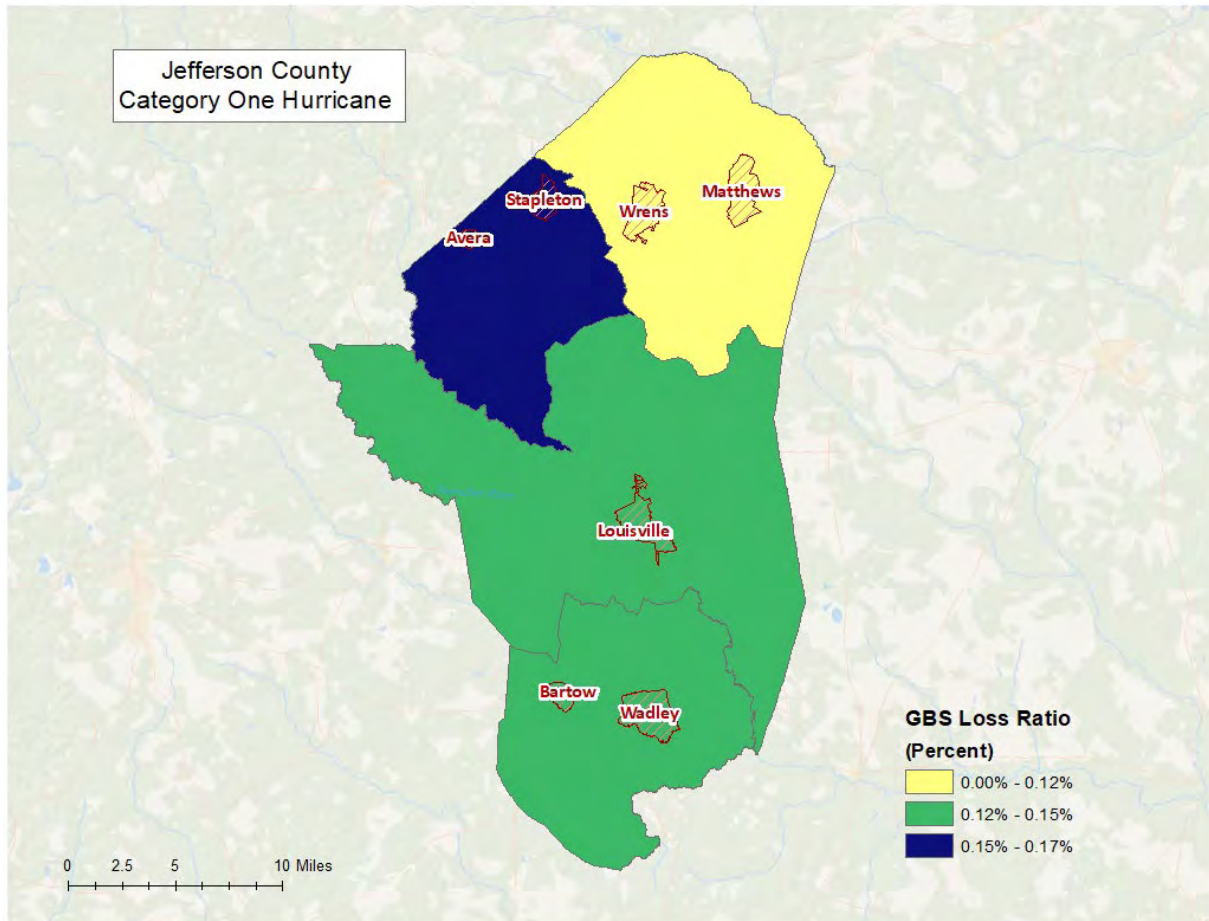


Figure 4: Hurricane Wind Building Loss Ratios

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 31 essential facilities in Jefferson County.

Classification	Number
EOCs	1
Fire Stations	9
Care Facilities	8
Police Stations	5
Schools	8

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)
Category One	0	0	31

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 Jefferson County is a Category One 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
Category One	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
Category One	219	0	2,037	48,790	51,046

Figure 5 shows the distribution of all wind related debris resulting from a Category One 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.

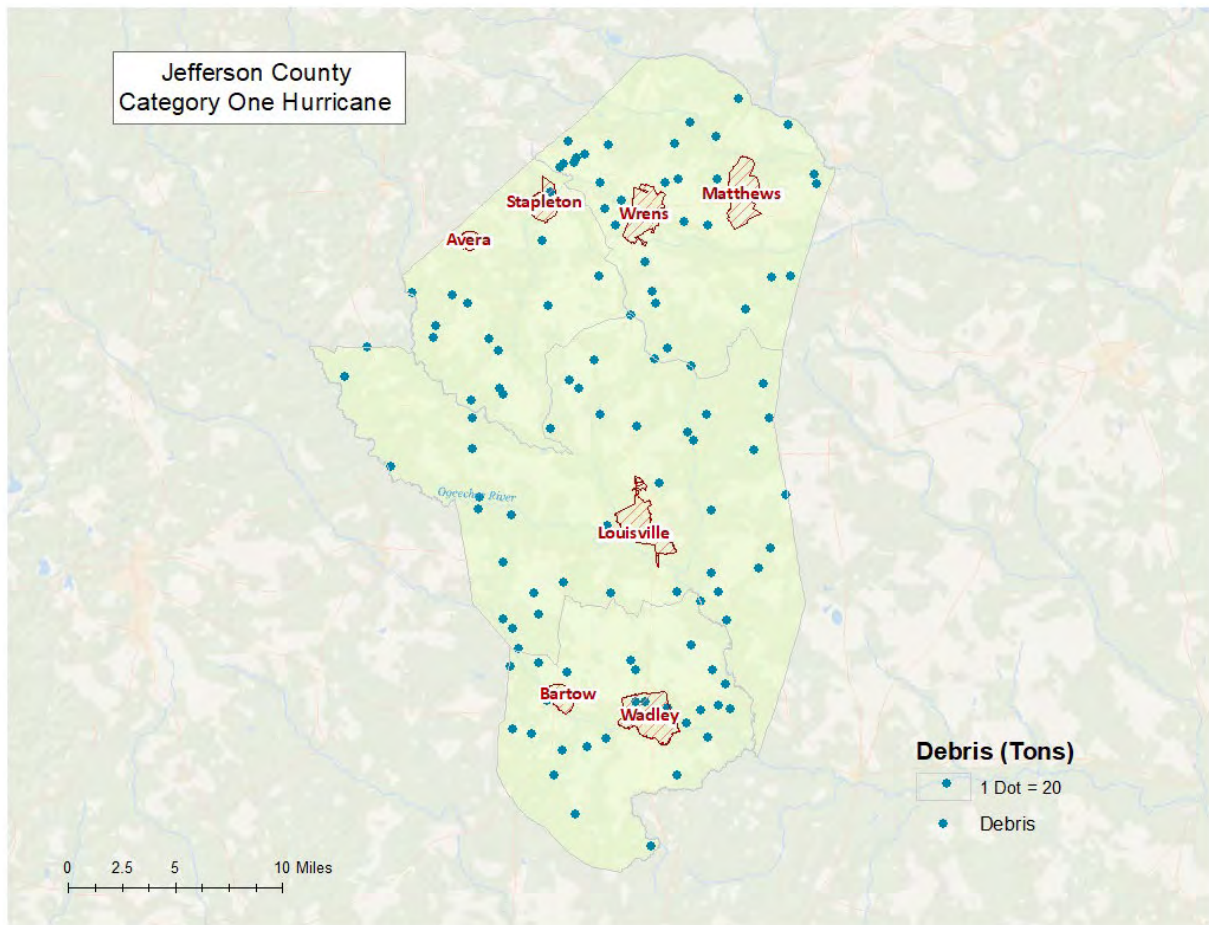


Figure 5: Wind-Related Debris Weight (Tons)

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 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 Jefferson County flood risk assessment analyzed at risk structures in the SFHA.

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.

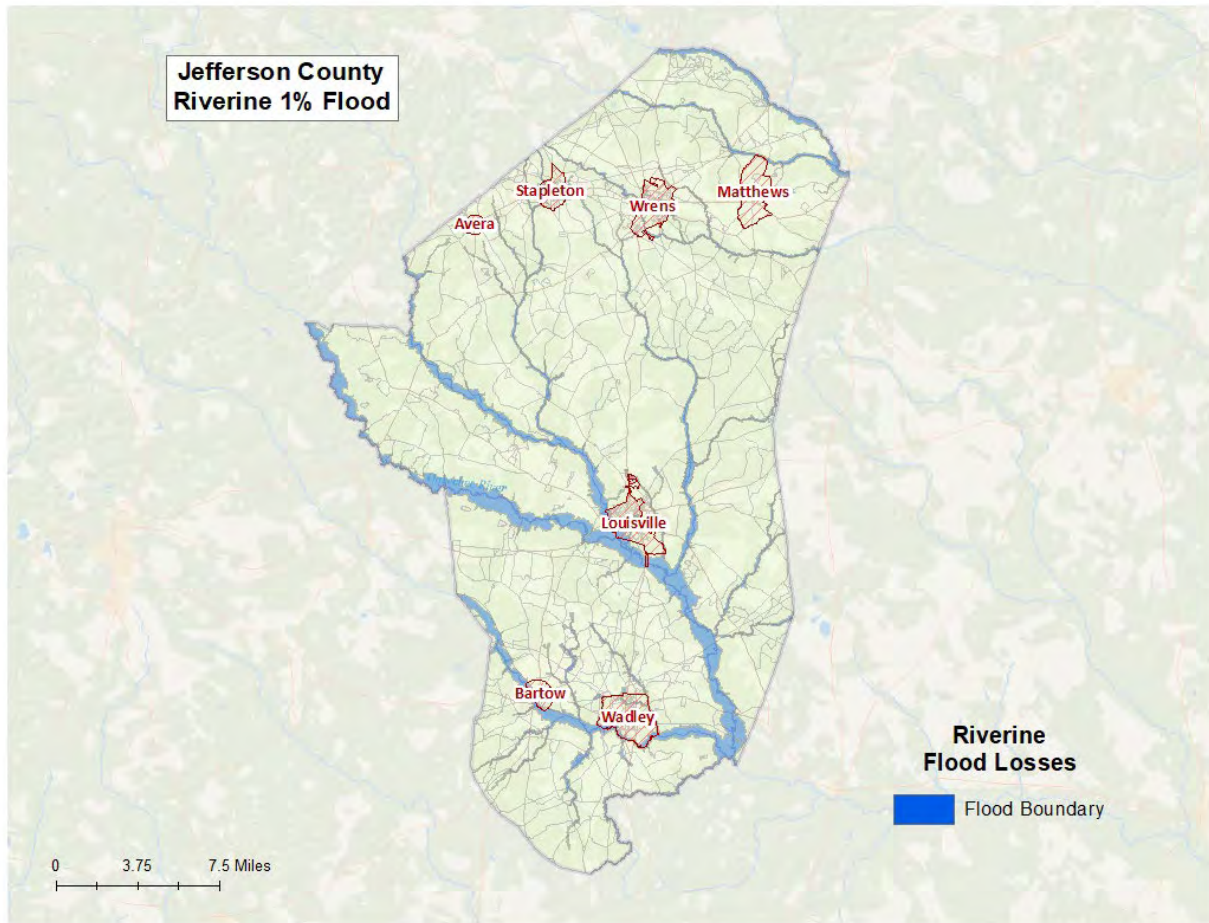


Figure 6: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Jefferson 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 Jefferson 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: Jefferson 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
Bartow					
Residential	131	2	\$15,746,501	\$54,999	0.35%
Louisville					
Residential	928	4	\$119,542,717	\$111,401	0.09%
Stapleton					
Commercial	15	1	\$1,671,942	\$18,238	1.09%
Residential	206	1	\$23,661,810	\$50,043	0.21%
Wadley					
Residential	856	8	\$89,204,716	\$203,482	0.23%
Wrens					
Industrial	50	1	\$24,594,320	\$125,797	0.51%
Commercial	170	1	\$42,835,976	\$9,514	0.02%
Residential	859	19	\$110,432,155	\$438,933	0.40%
Unincorporated					
Commercial	136	4	\$52,527,364	\$41,634	0.08%
Industrial	107	2	\$61,163,807	\$57,905	0.09%
Residential	4,553	56	\$426,350,839	\$1,444,609	0.34%
County Total					
	8,011	99	\$967,732,148	\$2,556,555	

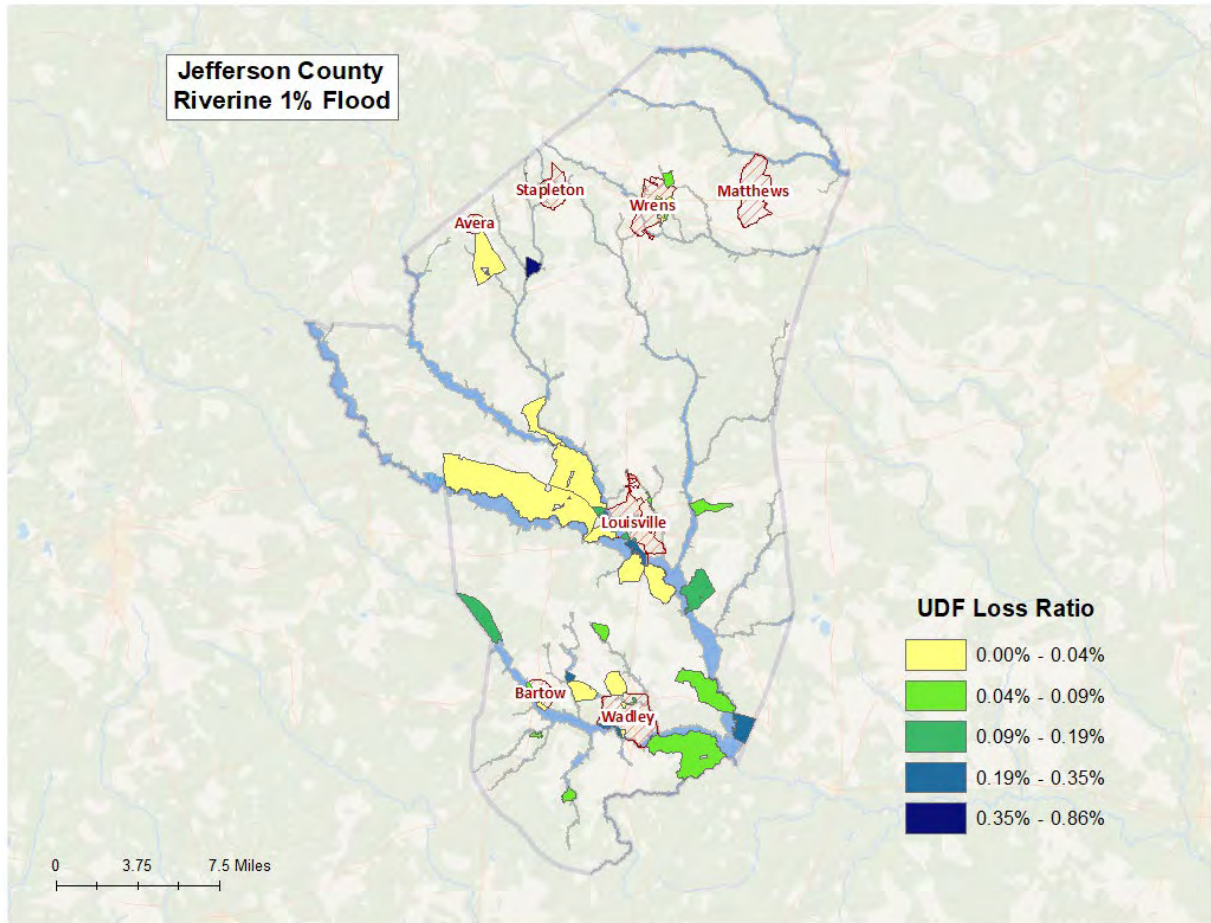


Figure 7: Jefferson County Potential Loss Ratios of Total Building Exposure to Losses Sustained to Buildings from the 1% Riverine Flood by 2010 Census Block

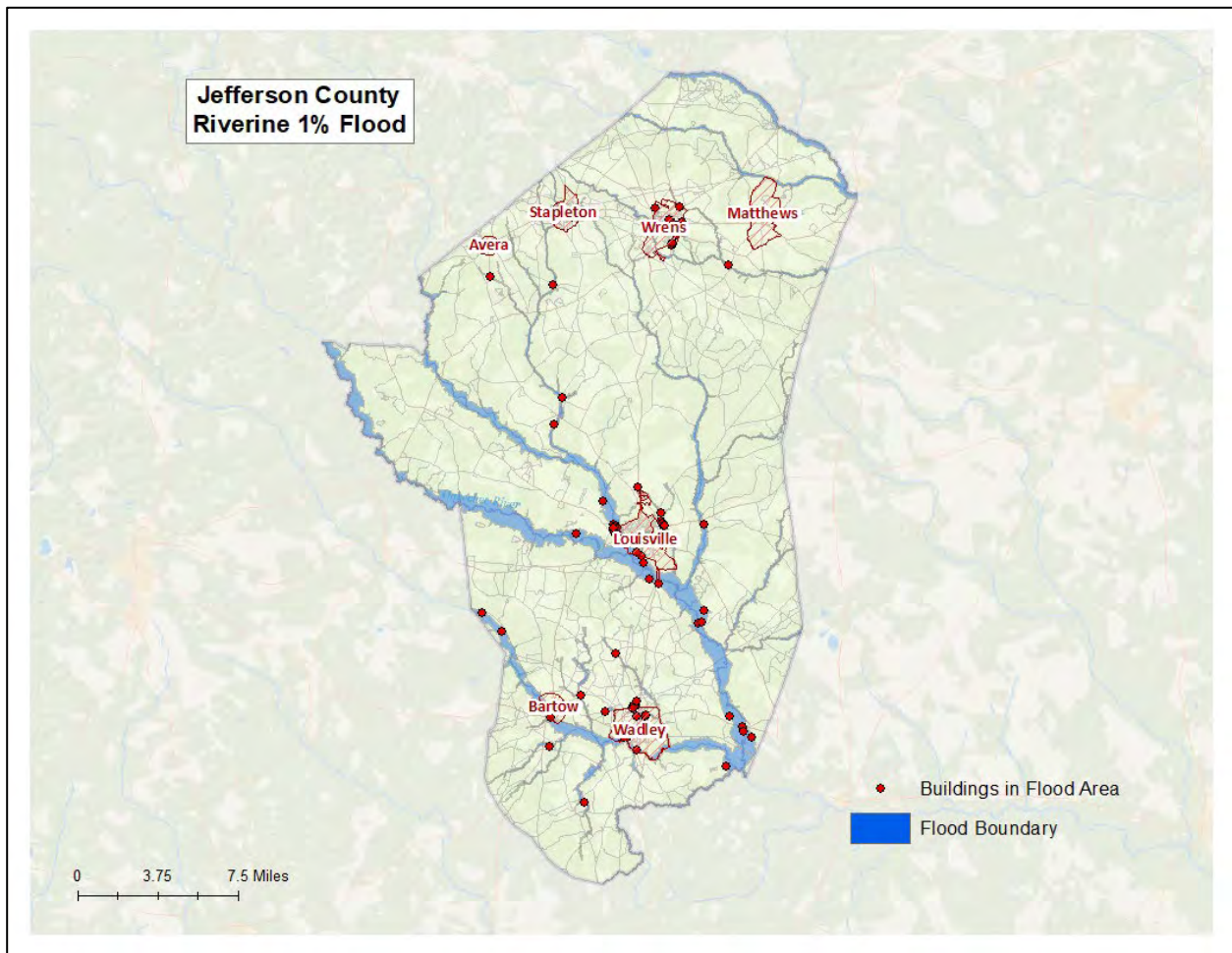


Figure 8: Jefferson County Damaged Buildings in Riverine Floodplain (1% Flood)

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 Jefferson 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 255 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 764 individuals, of which 207 may require short term publicly provided shelter. The results are mapped in Figure 9.

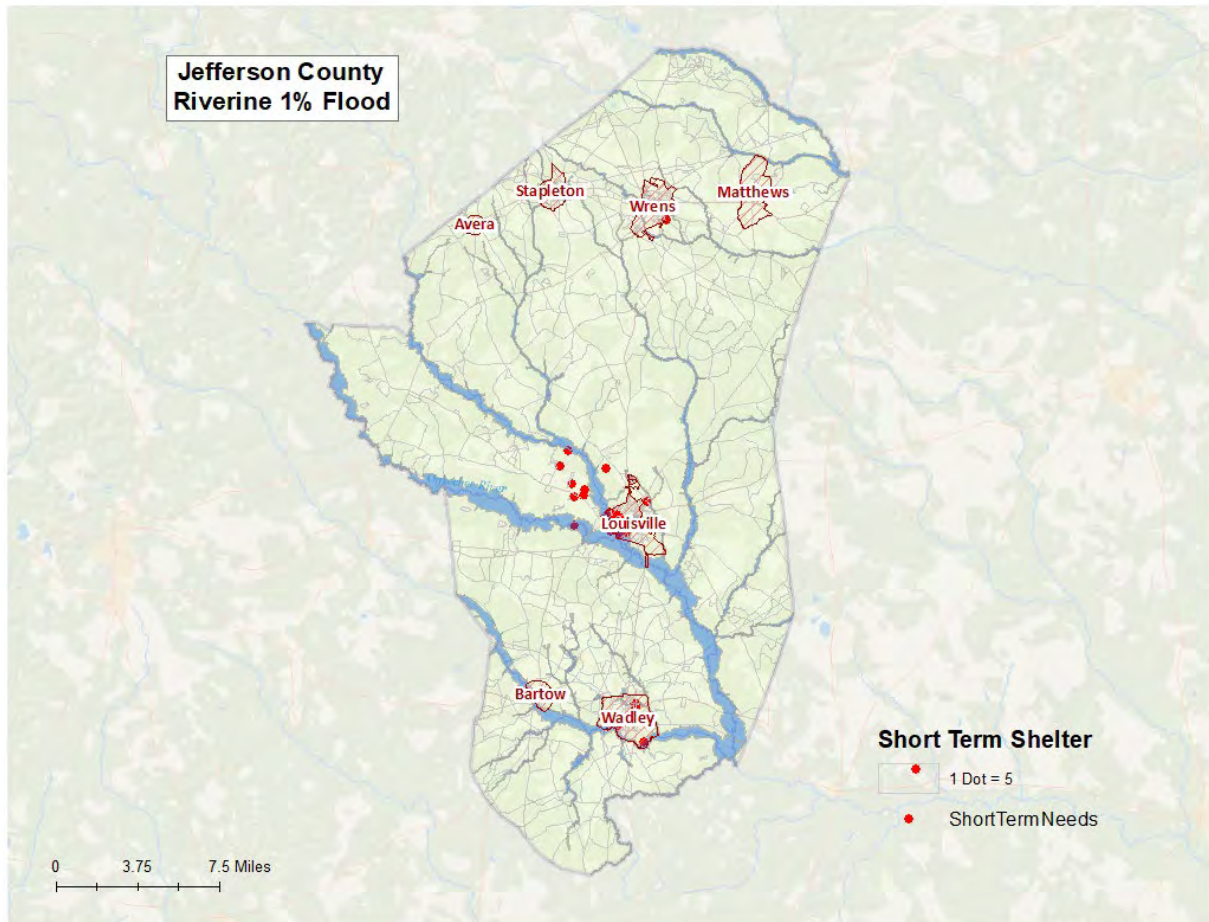


Figure 9: Riverine 1% Estimated Flood Shelter Requirements

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 7,446 tons of debris might be generated: 1) Finishes- 2,233 tons; 2) Structural – 2,371 tons; and 3) Foundations- 2,841 tons. The results are mapped in Figure 10.

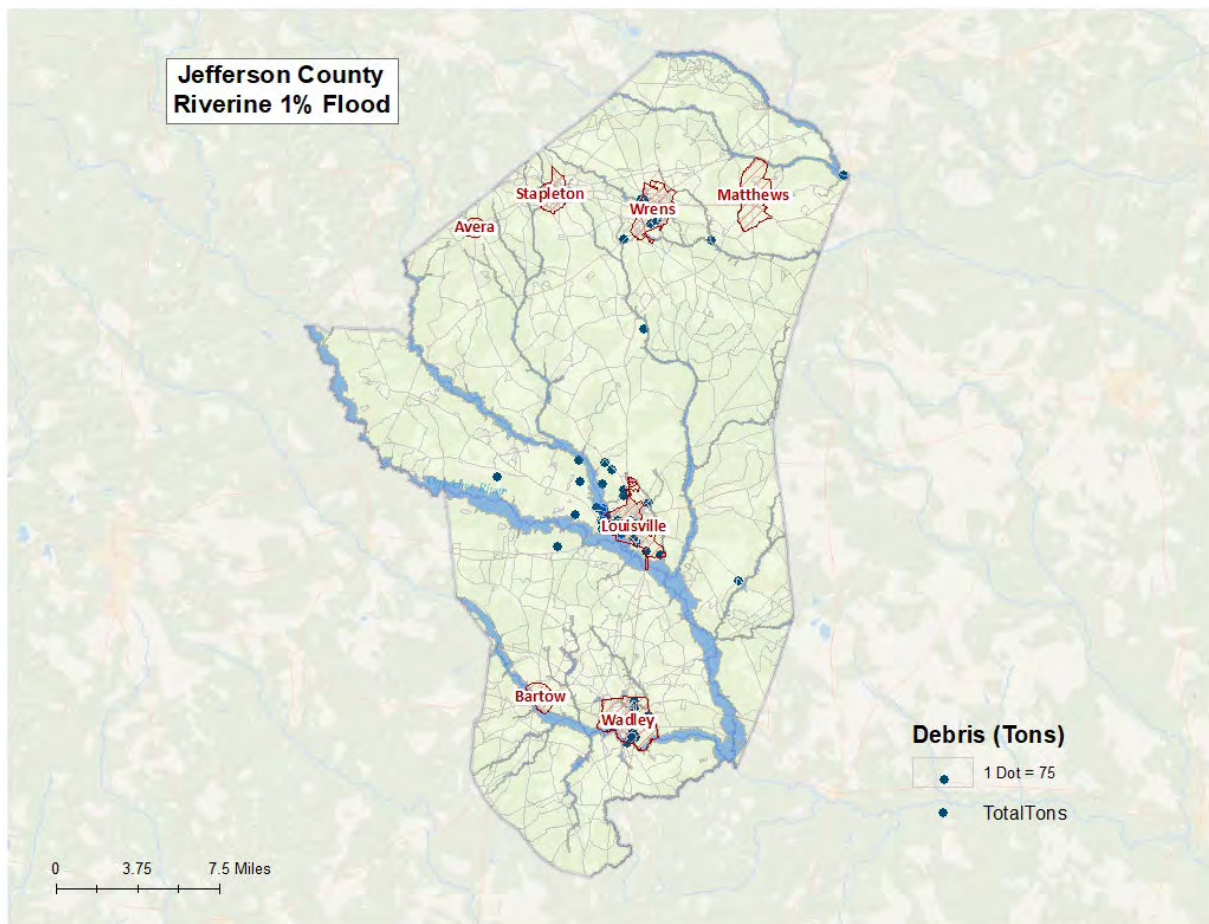


Figure 10: Riverine 1% Flood Debris Weight (Tons)

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 <i>Gale</i>	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 <i>Moderate</i>	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 <i>Significant</i>	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 <i>Severe</i>	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 <i>Devastating</i>	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 <i>Incredible</i>	> 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 Wrens. 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.

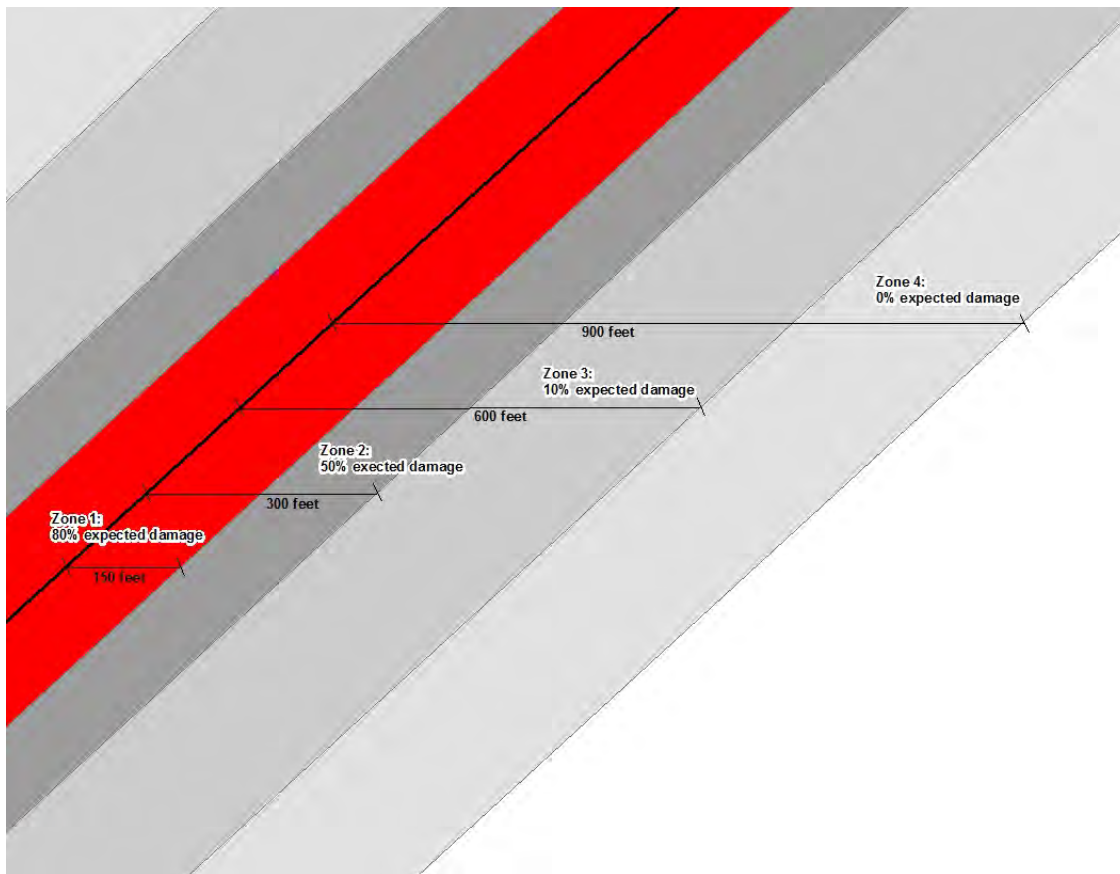


Figure 11: EF Scale Tornado Zones

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%

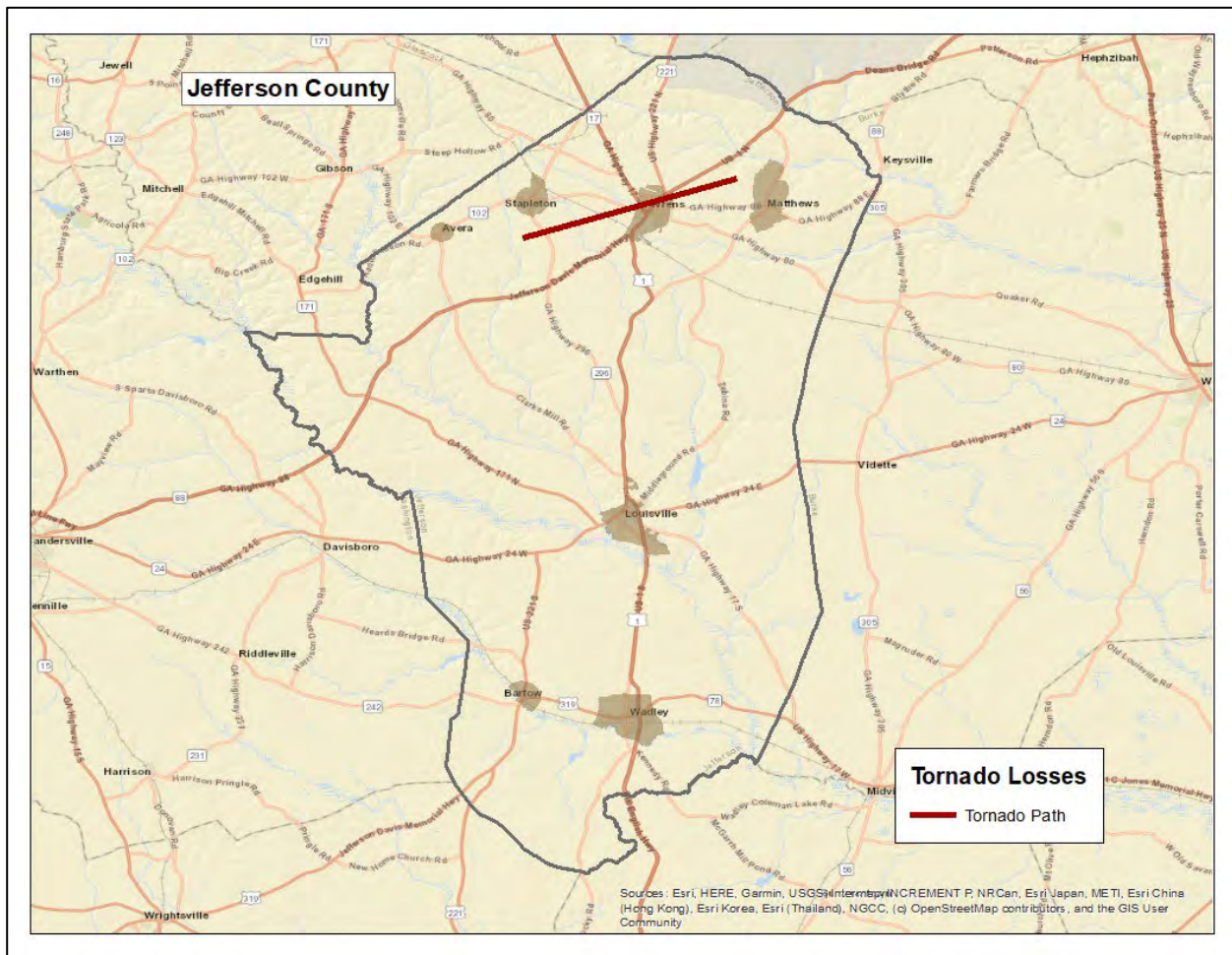


Figure 12: Hypothetical EF3 Tornado Path in Jefferson County

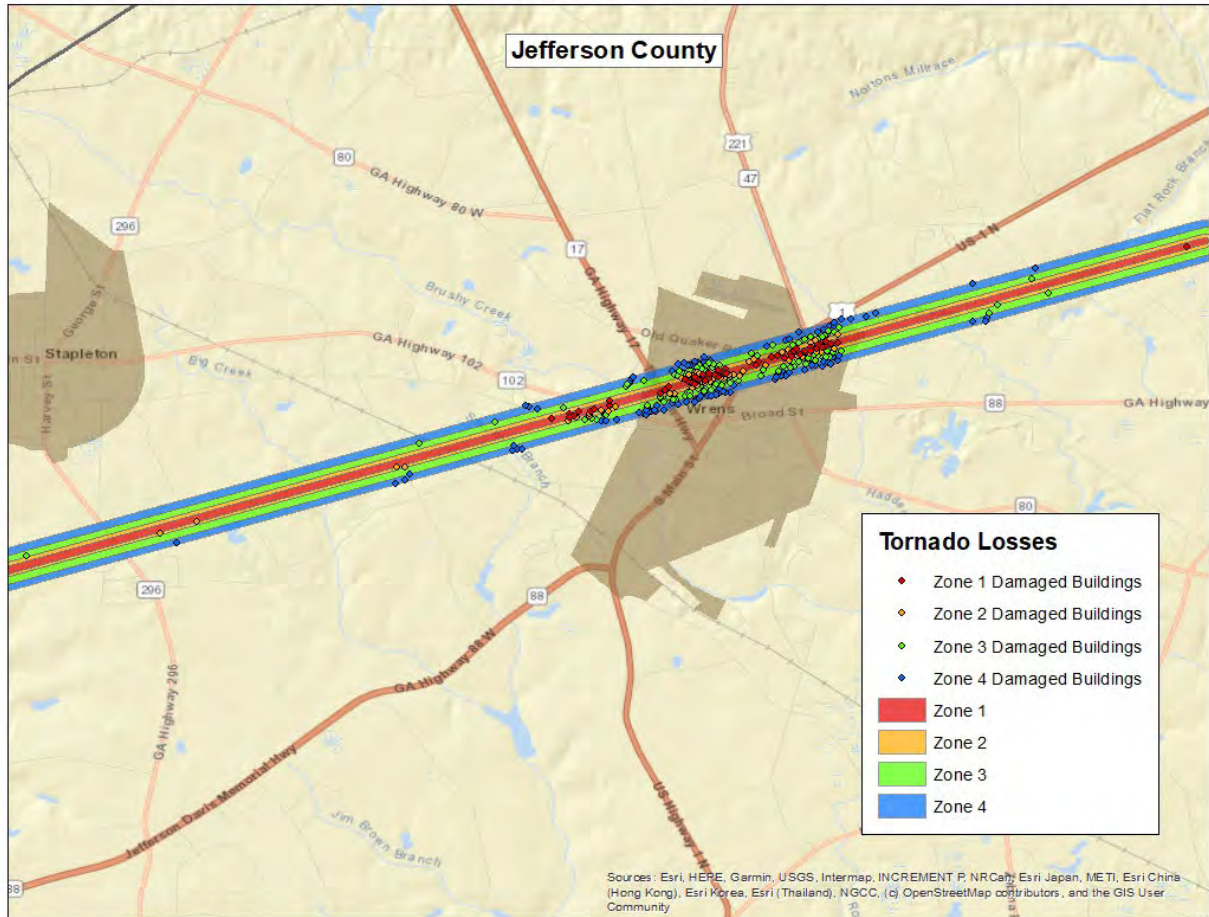


Figure 13: Modeled EF3 Tornado Damage Buffers in Jefferson County

EF3 Tornado Building Damages

The analysis estimated that approximately 358 buildings could be damaged, with estimated building losses of \$19 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 Jefferson 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	295	\$10,800,618
Commercial	39	\$1,139,745
Industrial	5	\$44,532
Religious	8	\$1,429,935
Education	11	\$5,818,882
Total	358	\$19,233,712

EF3 Tornado Essential Facility Damage

There were two essential facilities located in the tornado path – one 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
Wrens Elementary School	Minor Damage
Physicians Health Group Wrens	Minor Damage

According to the Georgia Department of Education, Wrens Elementary School's enrollment was approximately 406 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.

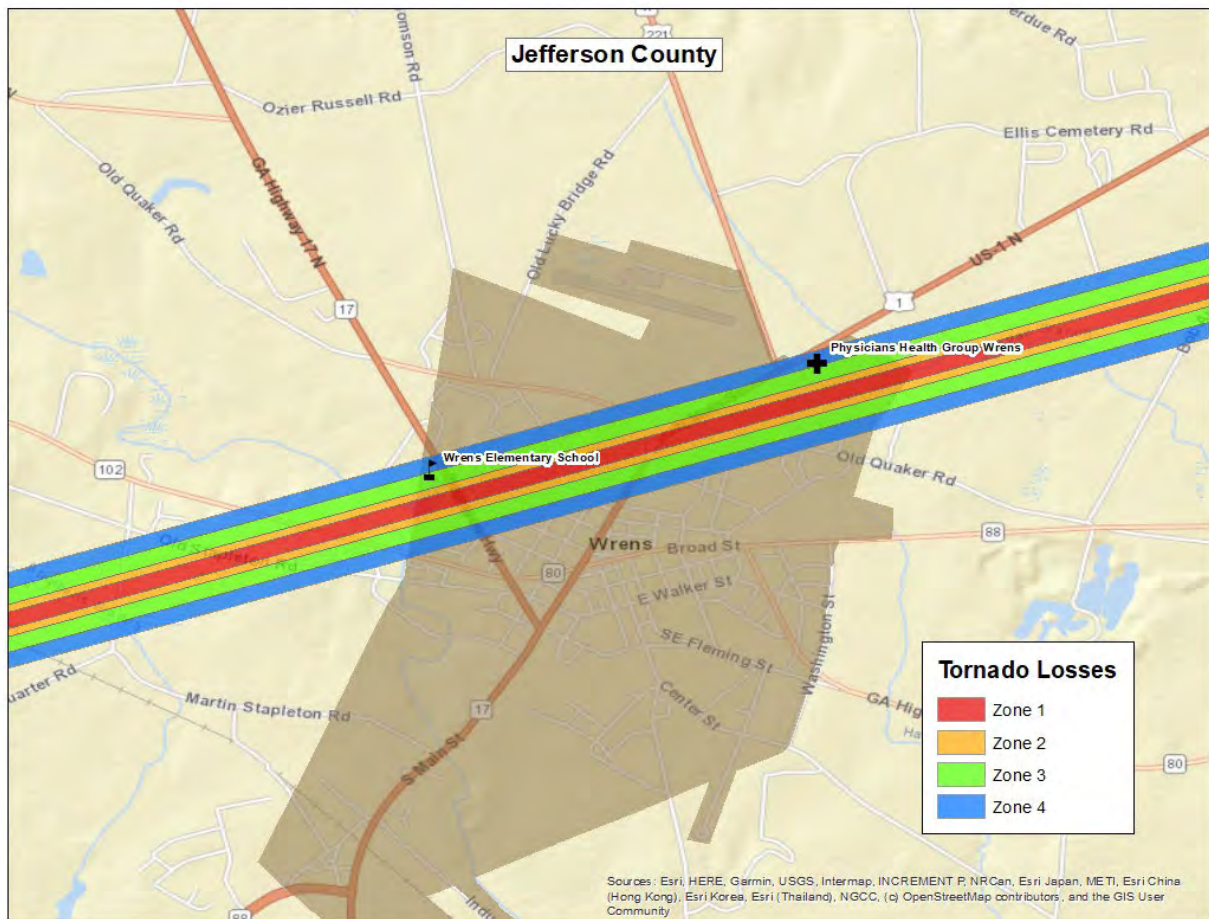


Figure 14: Modeled Essential Facility Damage in Jefferson County

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Jefferson 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 Jefferson County.

Updates to the Critical Facility data used in GMIS were provided by Jefferson County in September 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 Jefferson County.

Table 15: Essential Facility Updates

Site Class	Feature Class	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
EF	Care	\$69,146,000	8	\$109,146,000	8
EF	EOC	\$2,380,000	1	\$2,380,000	1
EF	Fire	\$2,716,000	6	\$9,580,000	9
EF	Police	\$15,944,000	6	\$14,835,000	5
EF	School	\$145,930,000	7	\$124,605,000	8

County Inventory Changes

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

General Building Stock Updates

The parcel boundaries and assessor records were obtained from Jefferson 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 Jefferson County was 99.7%.

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 Jefferson County records.

Table 16: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	338	4%
Construction Unknown	1,089	12%
Condition Unknown	298	3%
Foundation Unknown	773	9%
Year Built Unknown	2,368	27%
Total Buildings	8,927	11%

Approximately 11% 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 Jefferson 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	8,927	\$1,356,749,283
Riverine UDF	Structures Inside 1% Annual Chance Riverine Flood Area	114	\$22,382,993

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

SOUTHERN WILDFIRE RISK ASSESSMENT SUMMARY REPORT

Blank pages have been removed from this report to condense pdf



Jefferson County



Report was generated using
www.southernwildfirerisk.com

Report version: 5.0

Report generated: 9/20/2024

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Disclaimer

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Users should also note that property boundaries included in any product do not represent an on-the-ground survey suitable for legal, engineering, or surveying purposes. They represent only the approximate relative locations.

Introduction

Welcome to the Southern Wildfire Risk Assessment Summary Report.

This tool allows users of the Professional Viewer application of the Southern Wildfire Risk Assessment (SWRA) web Portal (SouthWRAP) to define a specific project area and summarize wildfire related information for this area. A detailed risk summary report is generated using a set of predefined map products developed by the Southern Wildfire Risk Assessment project which have been summarized explicitly for the user defined project area. The report is generated in MS WORD format.

The report has been designed so that information from the report can easily be copied and pasted into other specific plans, reports, or documents depending on user needs. Examples include, but are not limited to, Community Wildfire Protection Plans, Local Fire Plans, Fuels Mitigation Plans, Hazard Mitigation Plans, Homeowner Association Risk Assessments, and Forest Management or Stewardship Plans. Formats and standards for these types of reports vary from state to state across the South, and accordingly SouthWRAP provides the SWRA information in a generic risk report format to facilitate use in any type of external document. The SouthWRAP Risk Summary Report also stands alone as a viable depiction of current wildfire risk conditions for the user defined project area.

SouthWRAP provides a consistent, comparable set of scientific results to be used as a foundation for wildfire mitigation and prevention planning in the South.

Results of the assessment can be used to help prioritize areas in the state where mitigation treatments, community interaction and education, or tactical analyses might be necessary to reduce risk from wildfires.



The SouthWRAP products included in this report are designed to provide the information needed to support the following key priorities:

- Identify areas that are most prone to wildfire
- Identify areas that may require additional tactical planning, specifically related to mitigation projects and Community Wildfire Protection Planning
- Provide the information necessary to justify resource, budget and funding requests
- Allow agencies to work together to better define priorities and improve emergency response, particularly across jurisdictional boundaries
- Define wildland communities and identify the risk to those communities
- Increase communication and outreach with local residents and the public to create awareness and address community priorities and needs
- Plan for response and suppression resource needs
- Plan and prioritize hazardous fuel treatment programs

To learn more about the SWRA project or to create a custom summary report, go to www.southernwildfirerisk.com.

Map Products and Descriptions

Each map product in this Summary Report is accompanied by a general description, table, chart, or map. Please see the table below for a list of data layers available in the Summary Report.

Layer	Description
Burn Probability	Burn Probability is the likelihood of wildfire burning a specific location within one calendar year or wildfire season.
Wildfire Exposure Score	Wildfire Exposure Score combines wildfire likelihood (Burn Probability) and damage to homes (Damage Potential) for all areas regardless of whether a structure currently exists at that location.
Damage Potential	Damage Potential represents the possible damage from wildfire to a home or parcel considering both fire intensity and embers from nearby fuel.
Housing Unit Density	This layer displays housing unit density measured in housing units per square kilometer.
Housing Unit Impact	Housing Unit Impact represents the relative potential impact to housing units if a fire were to occur.
Housing Unit Risk	Housing Unit Risk represents the relative potential risk to housing units.
Sources of Ember Load to Buildings	This layer displays the potential for fuel to be a source of embers to buildings.
Functional Wildland Urban Interface	This dataset classifies the land near buildings into wildfire risk mitigation zones.
Characteristic Fire Intensity Scale	Quantifies the potential fire intensity by orders of magnitude as determined by fuel and a range of possible wind and weather conditions.
95th Percentile Fire Intensity Scale	95th Percentile (Average-Worst) Fire Intensity Scale quantifies fire intensity by orders of magnitude as determined by the worst five percent of wind and weather conditions.
Characteristic Flame Length	Flame length measures the height of flames as determined by fuel and a range of possible wind and weather conditions.
95th Percentile Flame Length	95th Percentile (Average-Worst) Flame Length measures the height of flames as determined by the worst five percent of wind and weather conditions.
Characteristic Rate of Spread	This layer represents the rate of spread (ROS) as determined by fuel and weather characteristics across a full range of possible wind and weather conditions.
95th Percentile Rate of Spread	95th Percentile (Average-Worst) Rate of Spread measures the rate of spread as determined by the worst five percent of wind and weather conditions.
Probability of Crown Fire	This layer shows the likelihood of experiencing at least mid-grade passive crown fire.

Layer	Description
Probability of Exceeding Manual Control	This layer shows the likelihood that flames at the head of the fire will exceed 4 feet, which is generally considered the limit for manual fire control.
Probability of Exceeding Mechanical Control	This layer shows the likelihood that flames at the head of the fire will exceed 8 feet, which is considered the limit for mechanical fire control in fire operations.
Probability of Extreme Fire Behavior	This layer shows the likelihood that flames at the head of the fire will exceed 11 feet, which is considered threshold for extreme fire behavior in fire operations.
Suppression Difficulty Index	Suppression Difficulty Index provides a rating of relative difficulty in performing wildfire control work considering factors like terrain, access, fuel, and fire behavior.
Wildfire Hazard Potential	Wildfire Hazard Potential maps challenges to wildfire control and includes information such as Burn Probability, small-fire ignition density, fire intensity measures, and fuel/vegetation type.
Conditional Ember Production Index	A relative index of the potential ember production if a fire were to occur.
Conditional Ember Load Index	A relative index of the potential for a location to receive embers from surrounding land if a fire were to occur.
Surface Fuels	Contains the parameters needed to compute surface fire behavior characteristics.
Percent Slope	Percent Slope measures the rate of change of elevation over a given horizontal distance, expressed as a percent.

Wildfire Hazard

The information in this section of the report describes the annual likelihood of wildfire based on fire modeling, and two integrated hazard layers characterizing wildfire risk to homes, including a measure of ember load from nearby fuel.

Contents:

[Burn Probability](#)

[Wildfire Exposure Score](#)

[Damage Potential](#)

Burn Probability

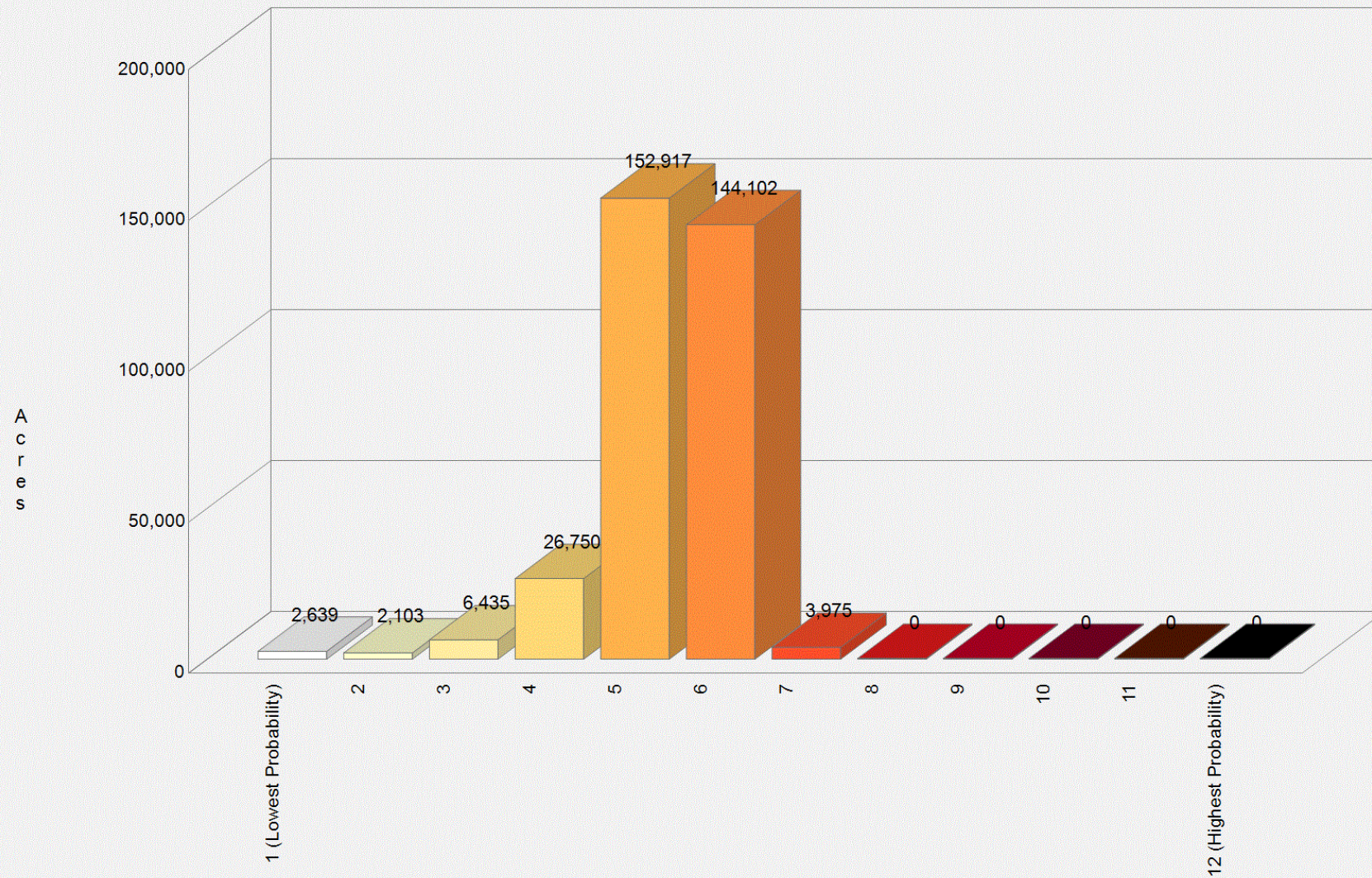
Burn probability is the likelihood of wildfire burning a specific location within a set time frame - commonly represented as the chance of burning during one calendar year or wildfire season.

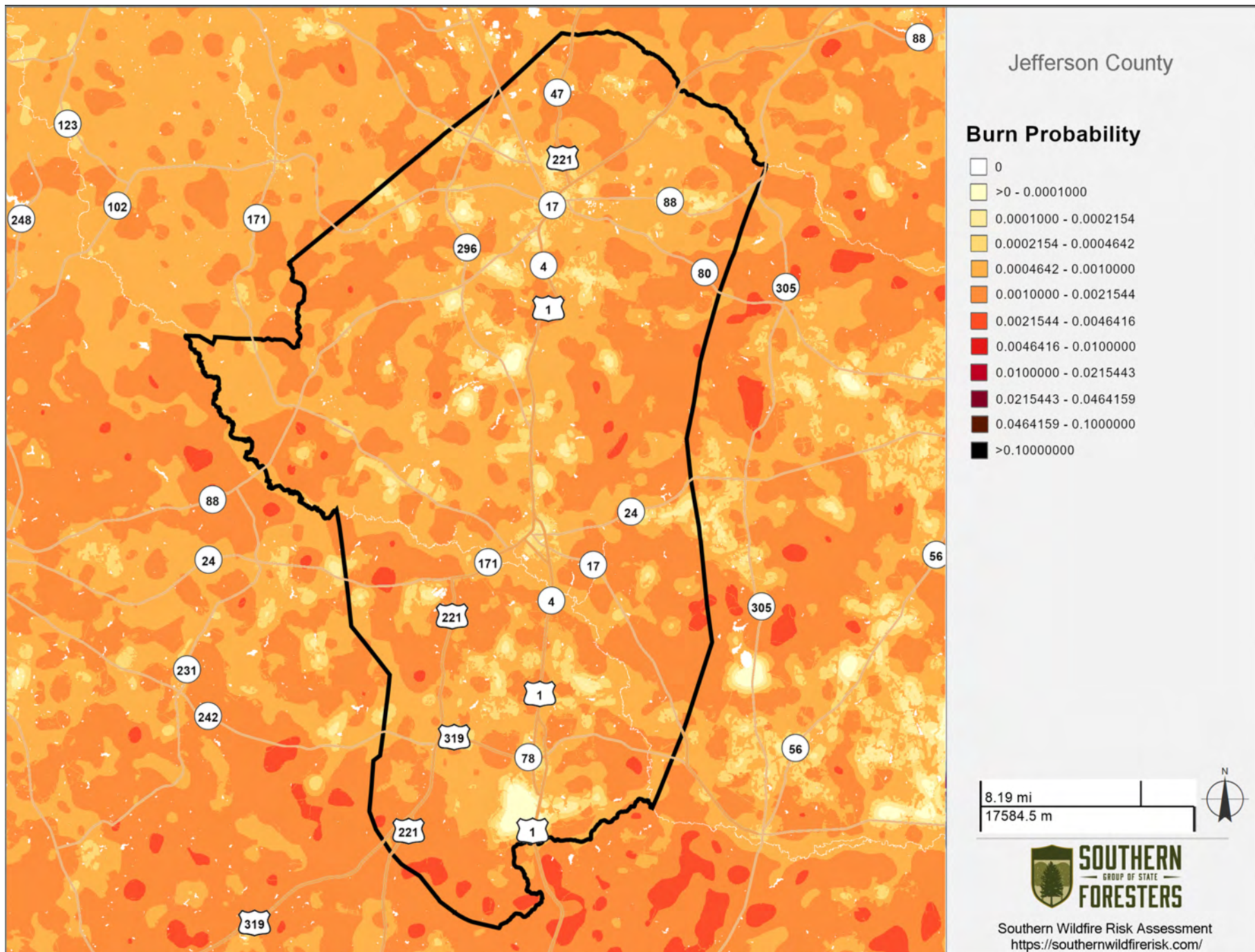
Burn Probability can be expressed as a fraction (ex. 0.005) or odds (1-in-200) and is based on fire behavior modeling across thousands of simulations of possible fire seasons. In each simulation, factors contributing to the probability of a fire occurring, including weather and ignition likelihood are 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.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Burn Probability Category	Acres	Percent
	0	2,639	0.8 %
	>0 - 0.0001000	2,103	0.6 %
	0.0001000 - 0.0002154	6,435	1.9 %
	0.0002154 - 0.0004642	26,750	7.9 %
	0.0004642 - 0.0010000	152,917	45.1 %
	0.0010000 - 0.0021544	144,102	42.5 %
	0.0021544 - 0.0046416	3,975	1.2 %
	0.0046416 - 0.0100000	0	0.0 %
	0.0100000 - 0.0215443	0	0.0 %
	0.0215443 - 0.0464159	0	0.0 %
	0.0464159 - 0.1000000	0	0.0 %
	>0.1000000	0	0.0 %
	Total	338,921	100.0 %

Jefferson County Burn Probability





Wildfire Exposure Score

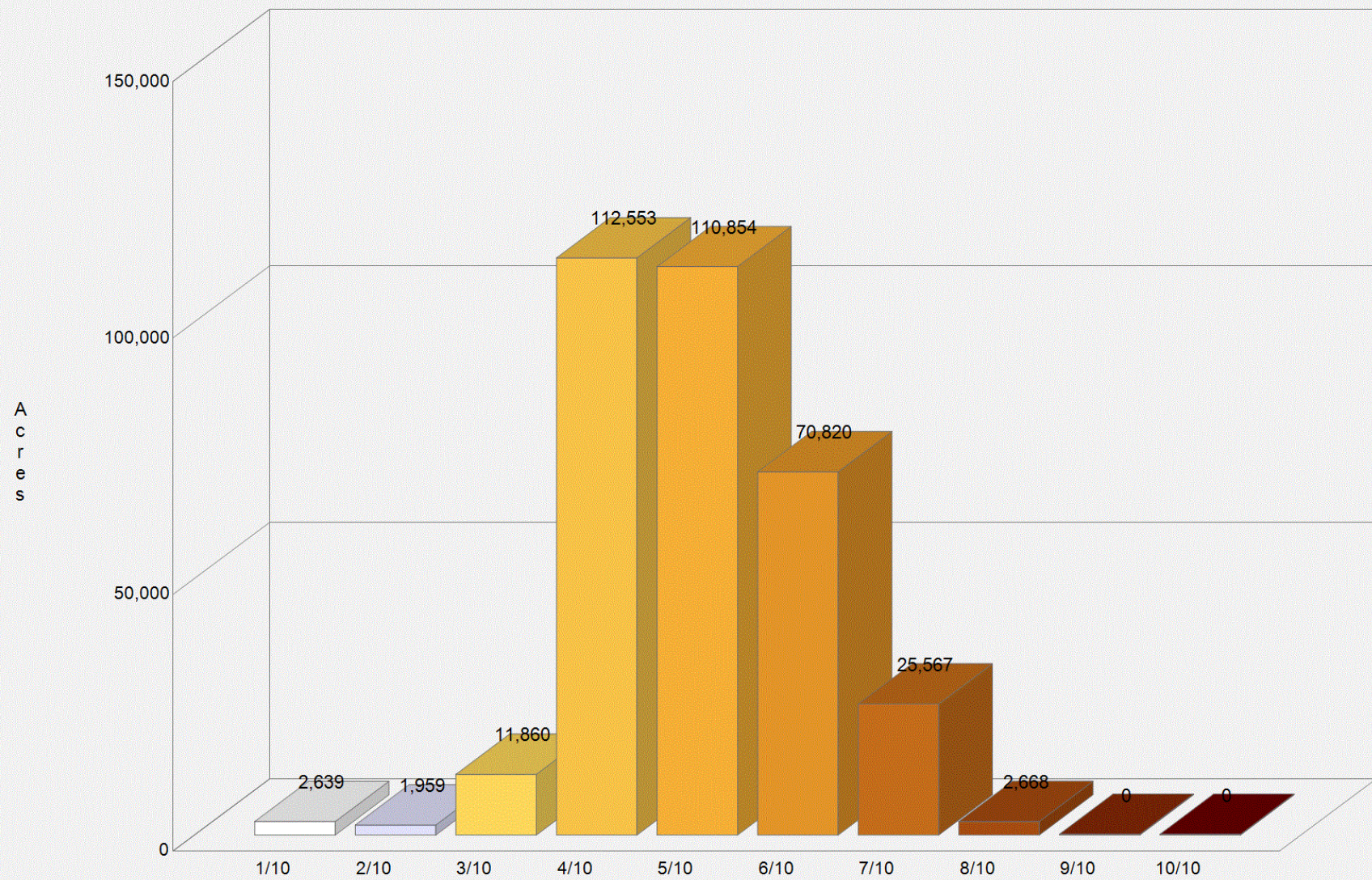
Wildfire Exposure Score combines two important wildfire factors related to structure exposure: the chance of wildfire (Burn Probability – defined as the likelihood of wildfire burning a specific location within a calendar year or wildfire season) and the potential damage to homes from wildfire (Damage Potential – defined as an estimate of damage that a wildfire could cause to homes considering both fire intensity and embers from nearby fuel).

Exposure scores are provided for all areas regardless of whether a structure currently exists at that location.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Wildfire Exposure Score Category	Acres	Percent
	1/10	2,639	0.8 %
	2/10	1,959	0.6 %
	3/10	11,860	3.5 %
	4/10	112,553	33.2 %
	5/10	110,854	32.7 %
	6/10	70,820	20.9 %
	7/10	25,567	7.5 %
	8/10	2,668	0.8 %
	9/10	0	0.0 %
	10/10	0	0.0 %
	Total	338,920	100.0 %

Jefferson County
Wildfire Exposure Score



Damage Potential

Damage Potential provides an index of potential damage to homes from wildfire. It considers factors like flame length and embers lofted from nearby fuel.

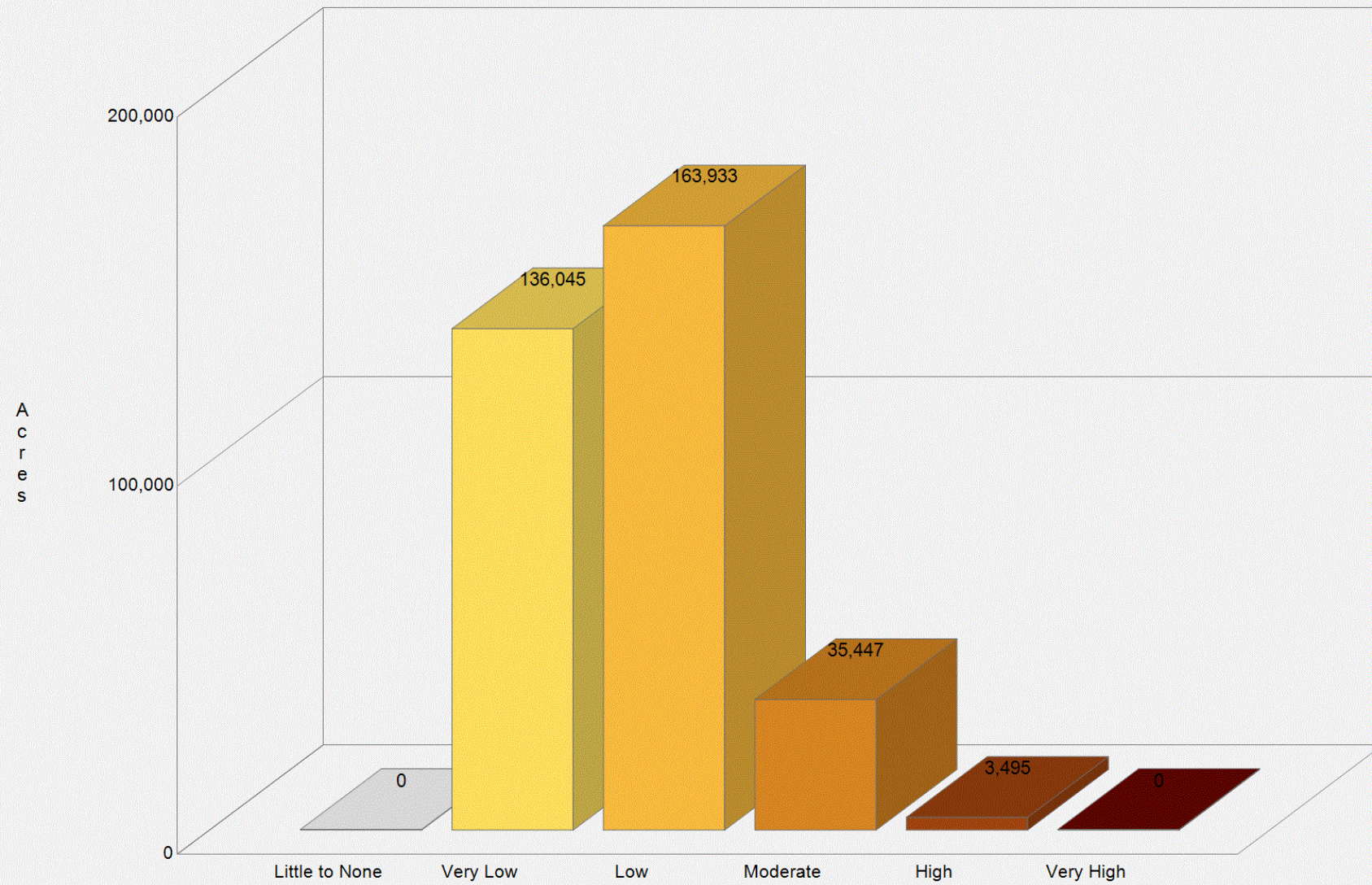
Damage Potential is a relative index (from low to high), that provides a broad measure of the possible damage from wildfire, based generally on the landscape, rather than specific characteristics of a home or parcel. For planning uses and broad applications, the index is calculated for all areas regardless of whether a structure currently exists at that location. This index does not incorporate a measure of wildfire likelihood.

Damage Potential is a fire-effects measure and includes flame-length estimates that reflect all spread directions (heading, backing, and flanking). Intensities from nonheading spread directions are considerably lower than those at the head of the fire.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Damage Potential Category	Acres	Percent
	Little to None	0	0.0 %
	Very Low	136,045	40.1 %
	Low	163,933	48.4 %
	Moderate	35,447	10.5 %
	High	3,495	1.0 %
	Very High	0	0.0 %
	Total	338,920	100.0 %

**Jefferson County
Damage Potential**



Risk to Homes and Communities

The information in this section provides useful information for communities to help prepare for and prevent wildfires.

Contents:

[Housing Unit Density](#)

[Housing Unit Impact](#)

[Housing Unit Risk](#)

[Sources of Ember Load to Buildings](#)

[Functional Wildland Urban Interface \(WUI\)](#)

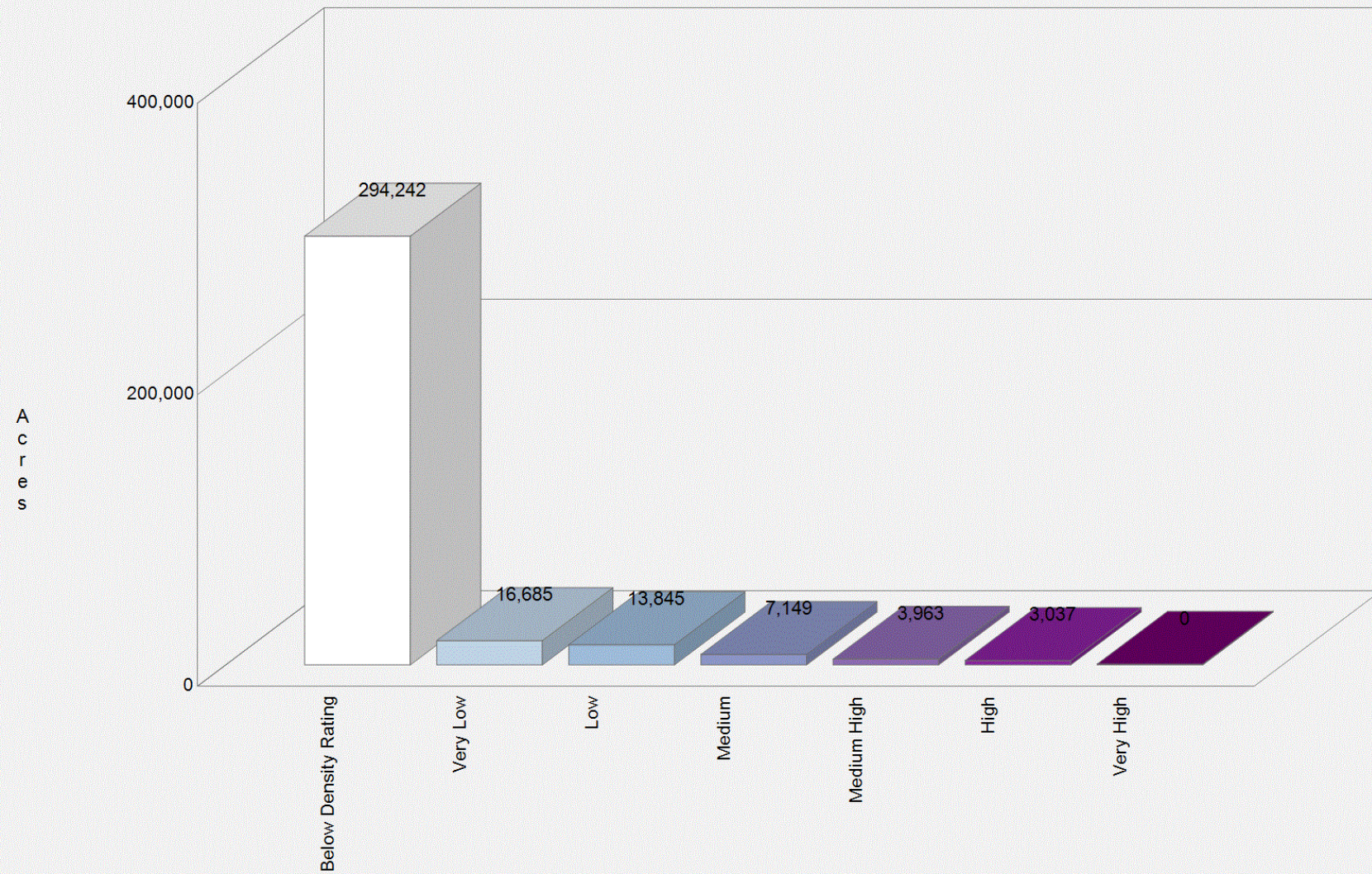
Housing Unit Density

This layer displays housing unit density measured in housing units per square kilometer and reflects 2020 estimates of housing unit counts from the U.S. Census Bureau, combined with building footprint data from Onegeo and USA Structures - both reflecting 2022 conditions.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Housing Unit Density Category	Acres	Percent
	Below Density Rating	294,242	86.8 %
	Very Low	16,685	4.9 %
	Low	13,845	4.1 %
	Medium	7,149	2.1 %
	Medium High	3,963	1.2 %
	High	3,037	0.9 %
	Very High	0	0.0 %
	Total	338,921	100.0 %

Jefferson County Housing Unit Density



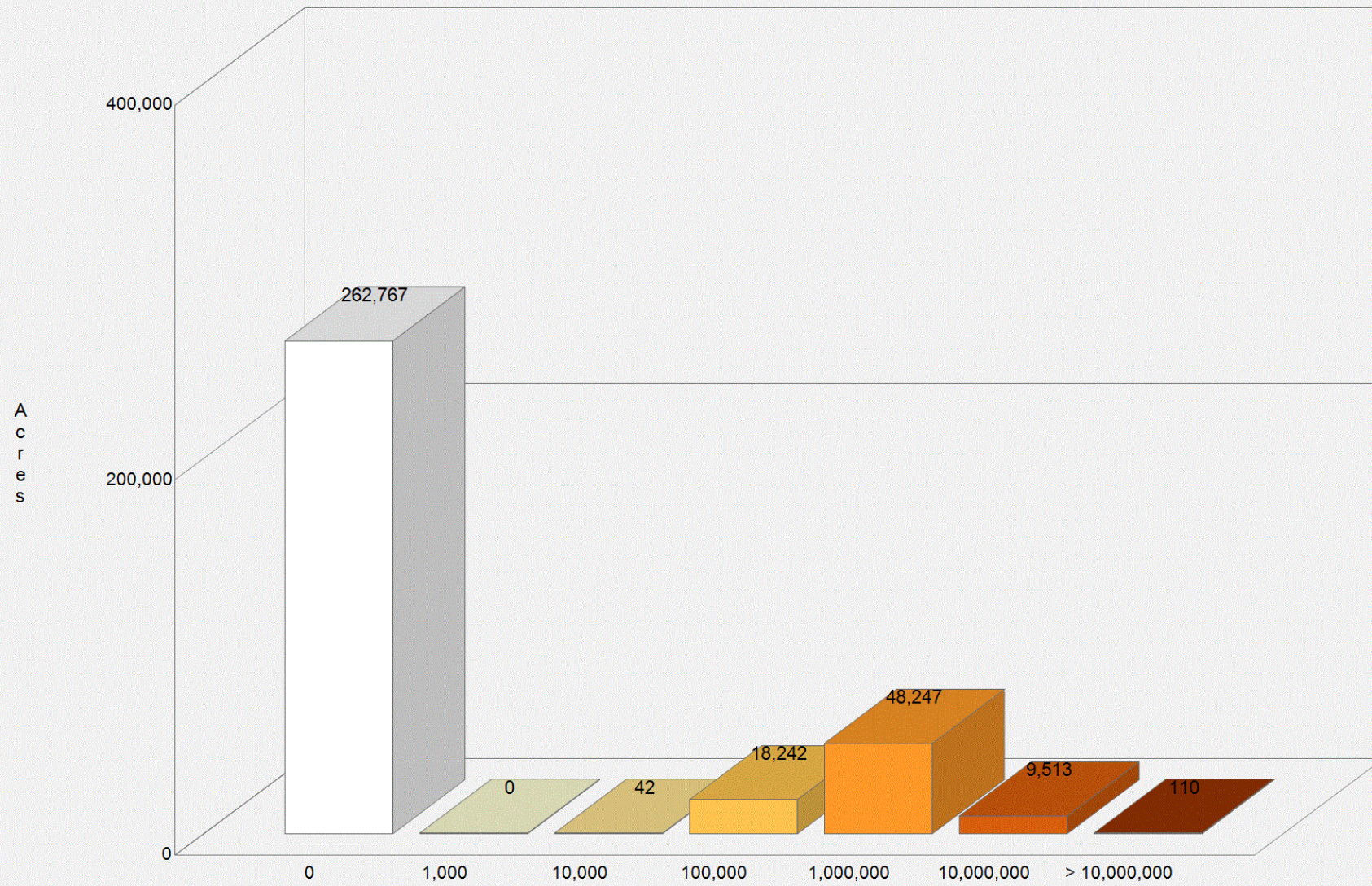
Housing Unit Impact

This dataset represents the relative potential impact to housing units if a fire were to occur. Housing Unit Impact (HUImpact) incorporates housing-unit counts with the general consequences of fire on a home as a function of fire intensity. HUImpact does not include fire likelihood and does not reflect individual structure mitigations that would influence susceptibility.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Housing Unit Impact Category	Acres	Percent
	0	262,767	77.5 %
	1,000	0	0.0 %
	10,000	42	0.0 %
	100,000	18,242	5.4 %
	1,000,000	48,247	14.2 %
	10,000,000	9,513	2.8 %
	> 10,000,000	110	0.0 %
	Total	338,921	100.0 %

Jefferson County
Housing Unit Impact



Housing Unit Risk

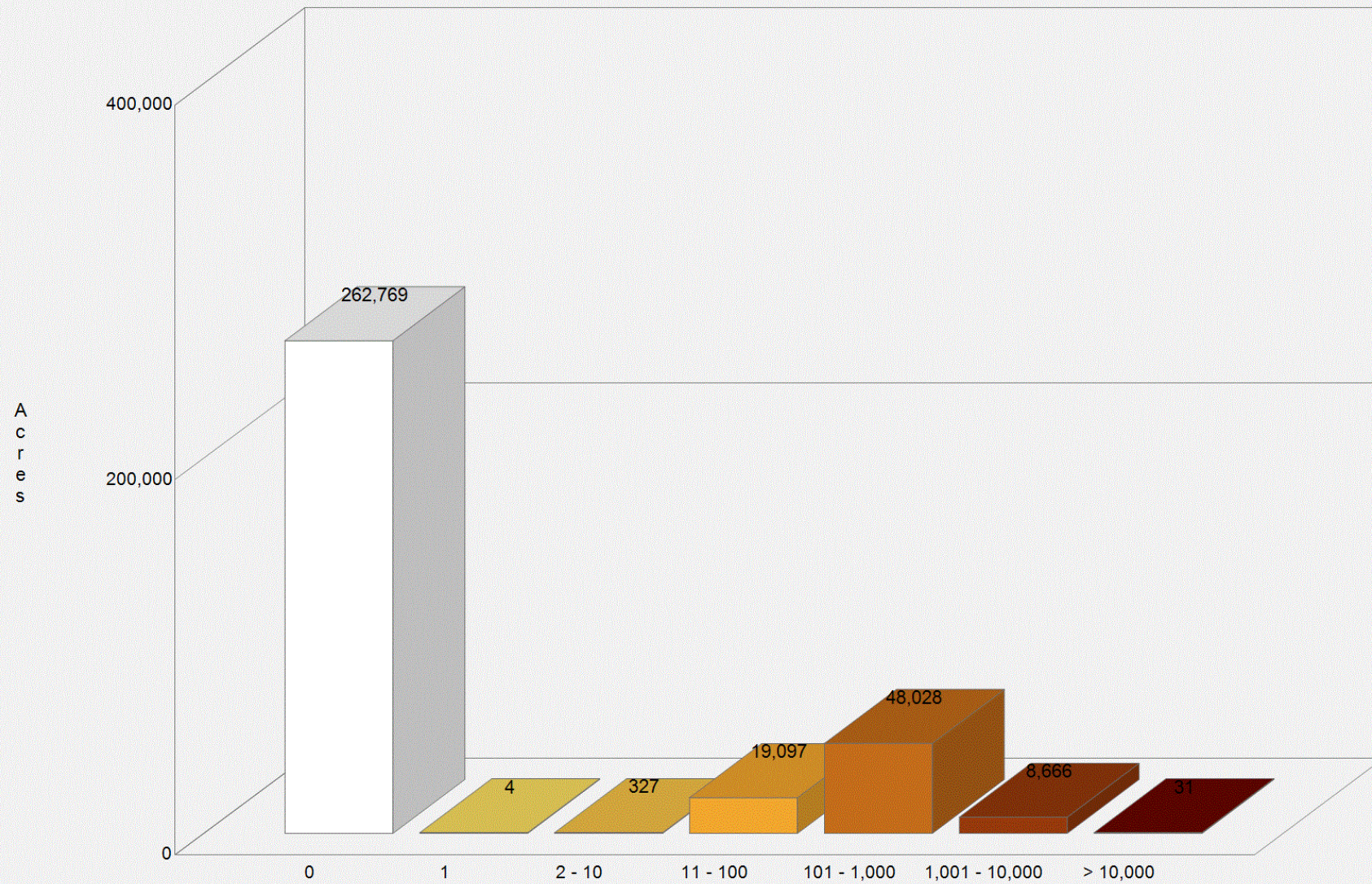
Housing Unit Risk (HURisk) represents the potential risk to housing units and incorporates both the general consequences of fire on a home as a function of fire intensity, and Burn Probability as a measure of wildfire likelihood. HURisk does not reflect individual structure mitigations that would influence susceptibility.

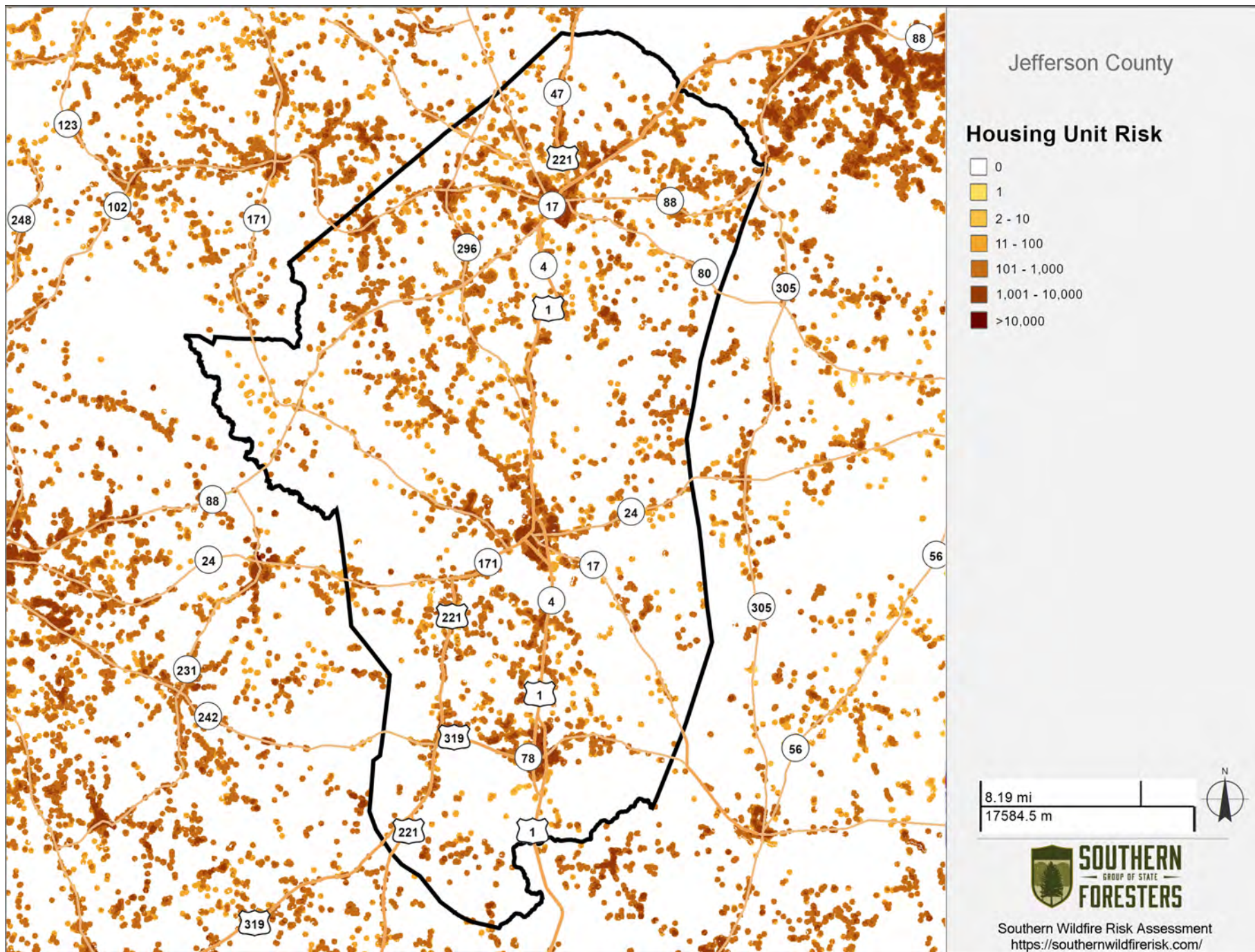
Housing Unit Risk integrates all four primary elements of wildfire risk - likelihood, intensity, susceptibility, and exposure - on pixels where housing unit density is greater than zero.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Housing Unit Risk Category	Acres	Percent
	0	262,769	77.5 %
	1	4	0.0 %
	2 - 10	327	0.1 %
	11 - 100	19,097	5.6 %
	101 - 1,000	48,028	14.2 %
	1,001 - 10,000	8,666	2.6 %
	> 10,000	31	0.0 %
	Total	338,922	100.0 %

Jefferson County
Housing Unit Risk





Sources of Ember Load to Buildings

Sources of Ember Load to Buildings (SELB) is a relative index of the potential for fuel to produce embers that land where buildings are located, given that a fire occurs.

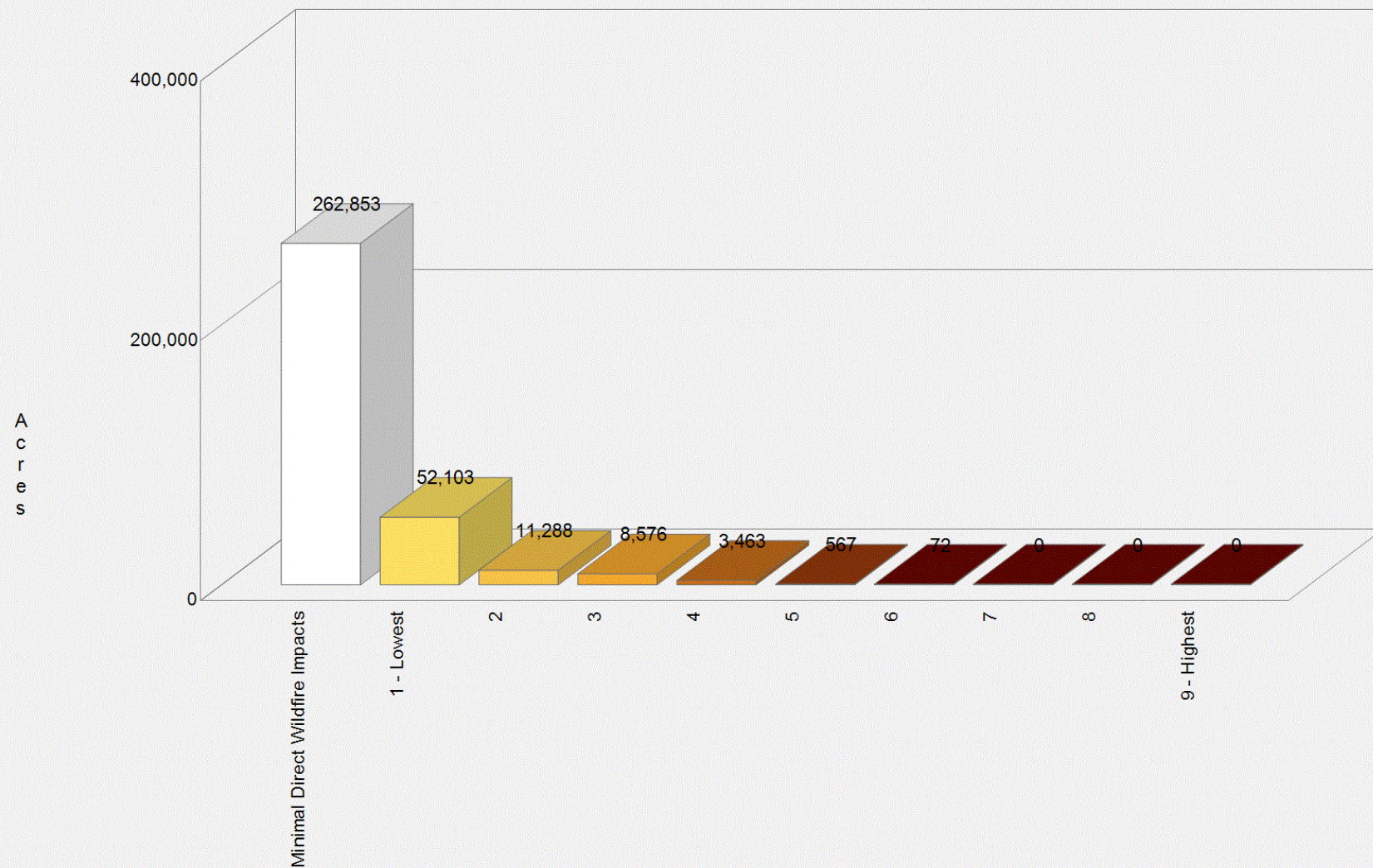
SELB identifies burnable land cover that produces embers capable of reaching nearby buildings. Units are an index of the relative number of embers rather than a count of embers produced. Ember production is a function of fire type and intensity; ember travel is a function of wind speed and direction. Ember modeling is based on fire modeling from WildEST, a process used to perform and combine multiple fire behavior simulations under a range of weather types (wind speed, wind direction, fuel moisture content). WildEST results reflect how often weather conditions occur and capture the influence of high-spread conditions. SELB is based on heading-only fire behavior and does not include the likelihood of wildfire.

The Sources of Ember Load to Buildings layer is useful for prioritizing mitigation actions to reduce the potential for ember damage to buildings.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Sources of Ember Load to Buildings Category	Acres	Percent
	Minimal Direct Wildfire Impacts	262,853	77.6 %
	1 - Lowest	52,103	15.4 %
	2	11,288	3.3 %
	3	8,576	2.5 %
	4	3,463	1.0 %
	5	567	0.2 %
	6	72	0.0 %
	7	0	0.0 %
	8	0	0.0 %
	9 - Highest	0	0.0 %
	Total	338,922	100.0 %

Jefferson County
Sources of Ember Load to Buildings



Functional Wildland Urban Interface (WUI)

Functional WUI represents a classification of the land near buildings* into zones that describe the wildfire risk mitigation activities appropriate for each zone.

1: Direct Exposure--Burnable land cover within 75 m of a building. Buildings in this zone are exposed to ignition from convective and radiative heat from a wildfire, embers, and adjacent burning structures/outbuildings.

2: Indirect Exposure--Nonburnable land cover within 75 m of a building and less than 1530 m from a 500-ha contiguous block of wildland fuel. Buildings in this zone are exposed to ignition from embers and/or adjacent burning structures

3: Little-to-no Exposure--Nonburnable land cover within 75 m of a building and more than 1530 m from a 500-ha contiguous block of wildland fuel. Buildings in this zone are relatively safe from ember ignition and building-to-building spread.

4: Critical Fireshed--the burnable land cover from which a wildfire can reach a significant number of buildings within a single burning period.

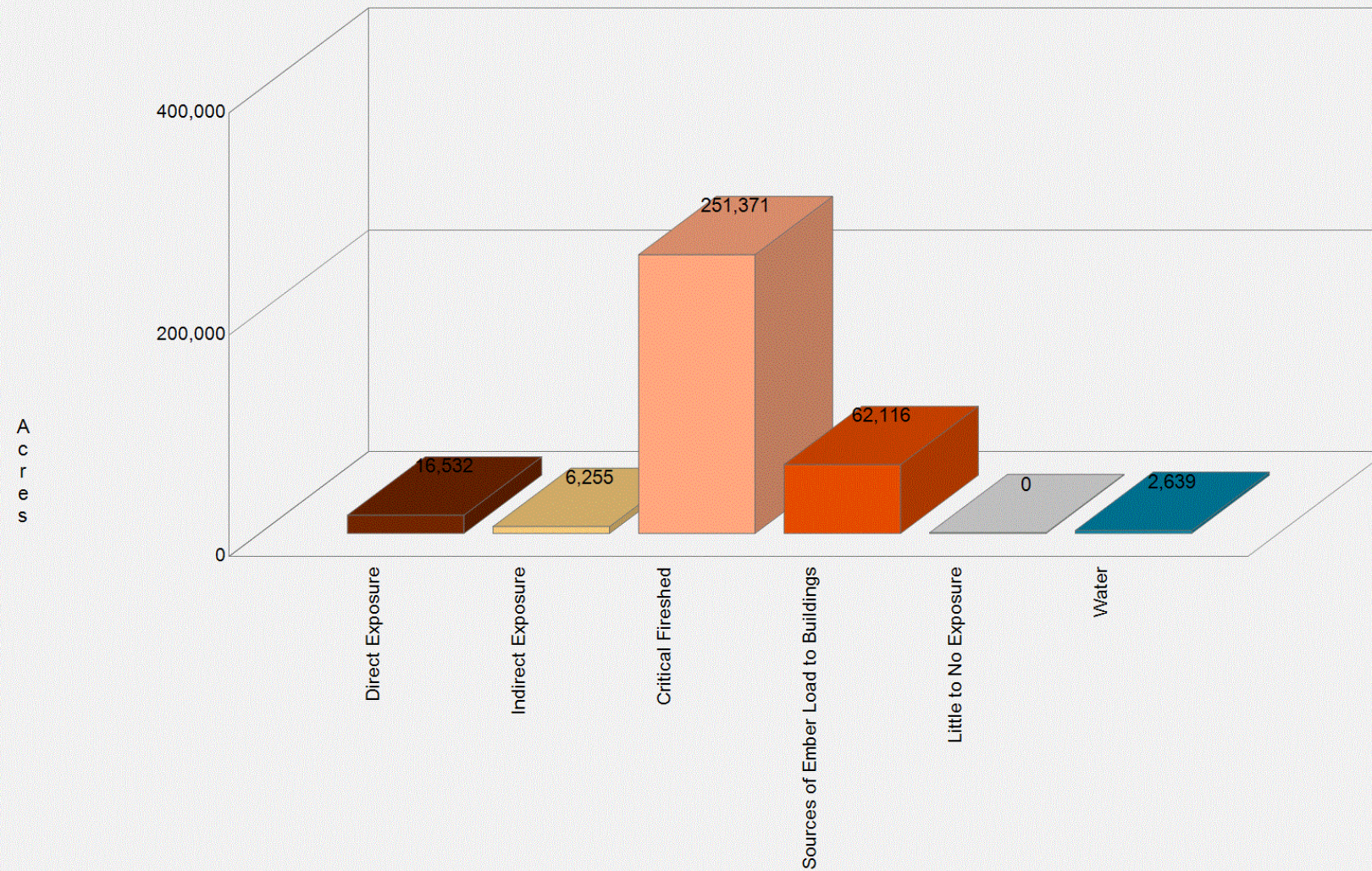
8: Sources of Ember Load to Buildings--Burnable land cover more than 75 m from a building that produces embers capable of reaching nearby buildings. Ember production is a function of fire type and intensity; ember travel is a function of wind speed and direction. Ember modeling is based on fire modeling based on gridded historical climatology.

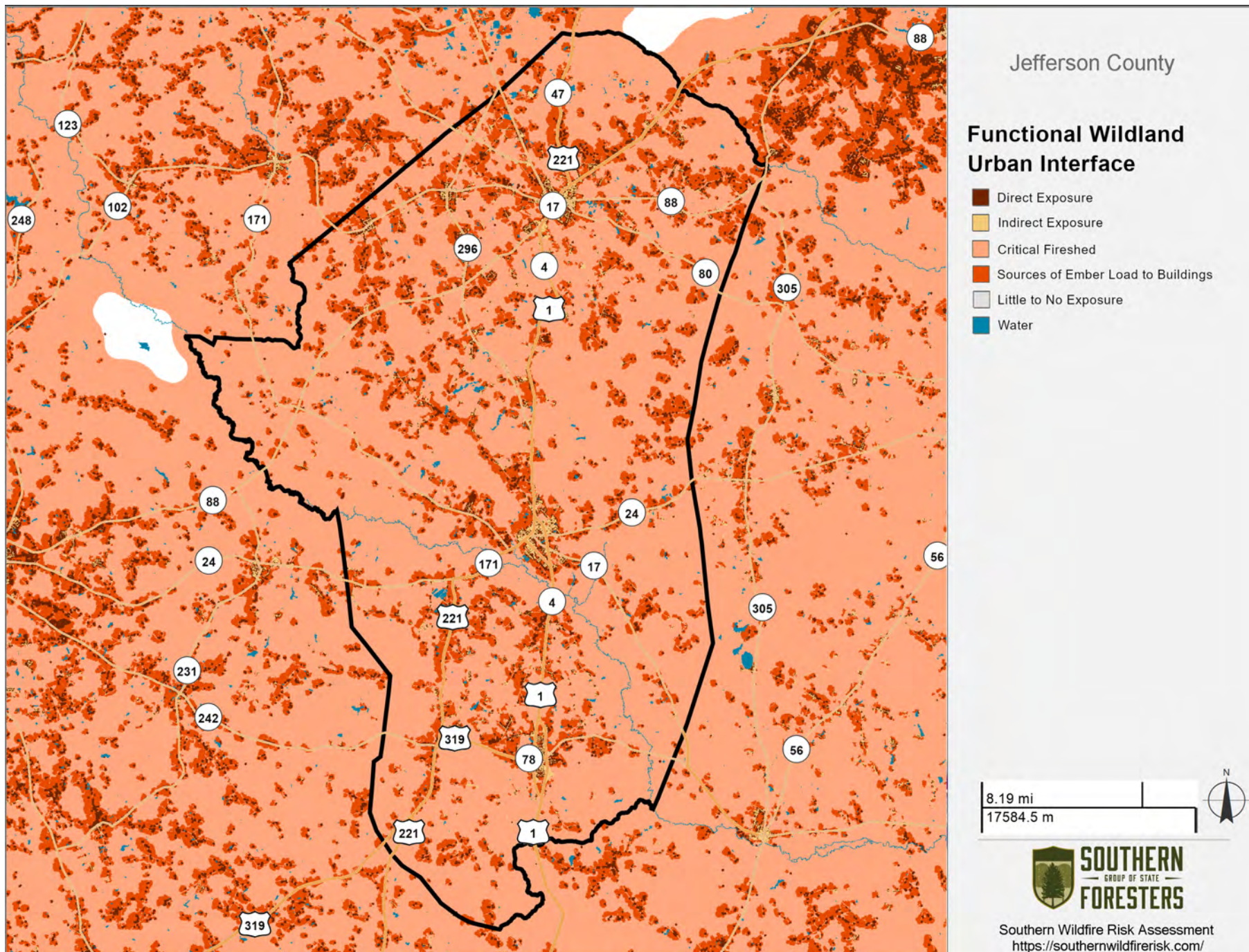
*Buildings used in producing Functional WUI are defined as greater than 40 m²

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Functional Wildland Urban Interface (WUI) Category	Acres	Percent
	Direct Exposure	16,532	4.9 %
	Indirect Exposure	6,255	1.8 %
	Critical Fireshed	251,371	74.2 %
	Sources of Ember Load to Buildings	62,116	18.3 %
	Little to No Exposure	0	0.0 %
	Water	2,639	0.8 %
	Total	338,913	100.0 %

Jefferson County
Functional Wildland Urban Interface (WUI)





Flame Front Characteristics

The information in this section of the report describes fire behavior characteristics at the flaming front of the fire.

Contents:

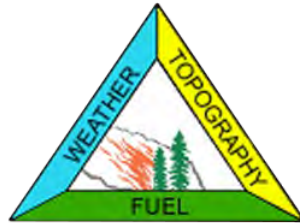
- [Characteristic Fire Intensity Scale](#)
- [95th Percentile Fire Intensity Scale](#)
- [Characteristic Flame Length](#)
- [95th Percentile Flame Length](#)
- [Characteristic Rate of Spread](#)
- [95th Percentile Rate of Spread](#)
- [Probability of Crown Fire](#)

Fire Behavior Overview

Description

Fire behavior is the manner in which a fire reacts to the following environmental influences:

1. **Fuels**
2. **Weather**
3. **Topography**



Fire behavior characteristics are attributes of wildland fire that pertain to its spread, intensity, and growth. Fire behavior characteristics utilized in the Southern Wildfire Risk Assessment (SWRA) include fire type, rate of spread, flame length and fire intensity scale. These metrics are used to determine the potential fire behavior under different weather scenarios. Areas that exhibit moderate to high fire behavior potential can be identified for mitigation treatments, especially if these areas are in close proximity to homes, business, or other assets.

Fuels

The SWRA includes composition and characteristics for both surface fuels and canopy fuels. Significant increases in fire behavior will be captured if the fire has the potential to transition from a surface fire to a canopy fire.

Fuel datasets required to compute both surface and canopy fire potential include:

- **Surface Fuels**, generally referred to as fire behavior fuel models, provide the input parameters needed to compute surface fire behavior.
- **Canopy Cover** is the horizontal percentage of the ground surface that is covered by tree crowns. It is used to compute wind reduction factors and shading.
- **Canopy Ceiling Height/Stand Height** is the height above the ground of the highest canopy layer where the density of the crown mass within the layer is high enough to support vertical movement of a fire. A good estimate of canopy ceiling height would be the average height of the dominant and co-dominant trees in a stand. It is used for computing wind reduction to midflame height and spotting distances from torching trees (Fire Program Solutions, L.L.C, 2005).
- **Canopy Base Height** is the lowest height above the ground above which there is sufficient canopy fuel to propagate fire vertically (Scott & Reinhardt, 2001). Canopy base height is a property of a plot, stand, or group of trees, not of an individual tree. For fire modeling, canopy base height is an effective value that incorporates ladder fuel, such as tall shrubs and small trees. Canopy base height is used to determine if a surface fire will transition to a canopy fire.
- **Canopy Bulk Density** is the mass of available canopy fuel per unit canopy volume (Scott & Reinhardt, 2001). Canopy bulk density is a bulk property of a stand, plot, or group of trees, not of an individual tree. Canopy bulk density is used to predict whether an active crown fire is possible.

Weather

Environmental weather parameters needed to compute fire behavior characteristics include 1-hour, 10-hour, and 100-hour timelag fuel moistures, herbaceous fuel moisture, woody fuel moisture, and the 20-foot wind speed.

Weather variables were acquired from gridded weather data to generate 216 weather scenarios comprised of 9 wind speeds, 8 wind directions, and 3 moisture scenarios. Rather than employing multiple percentile weather categories (as previously used in the SWRA fire behavior calculations), the fire behavior modeling in the SWRA update is calculated with the Wildfire Exposure Simulation Tool (WildEST).

WildEST is a cloud-based system that uses a custom implementation of the FlamMap fire modeling system (Finney 2006) to produce simulations under a range of weather types (wind speed, wind direction, fuel moisture content). The 216 FlamMap runs are combined into a single output by weighting each scenario according to weather type probabilities that reflect how often each weather scenario occurs in the record, its co-occurrence with historical fire ignitions, and the influence of high-spread conditions (such as the disproportionate impact of hot, dry, and windy conditions on fire growth).

Two sets of results are provided for each of the Flame Front Characteristic layers. Results using all 216 weather scenarios are labeled “Characteristic” while “95th Percentile” or average-worst Flame Front Characteristics demonstrate the impact of the top five percent of weather types. These results represent an average of the worst 5% of weather types, weighted according to the frequency of the weather type and the influence of high-spread conditions.

Topography

Topography datasets required to compute fire behavior characteristics are elevation, slope and aspect.

Characteristic Fire Intensity Scale

Characteristic Fire Intensity Scale (FIS) 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 calculated using WildEST. Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculations. These estimates include the contribution of crown fuel and crowning fire intensity.

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. Refer to descriptions below.

1. 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.

2. 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.

3. 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.

4. 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.

5. Class 5, Very High:

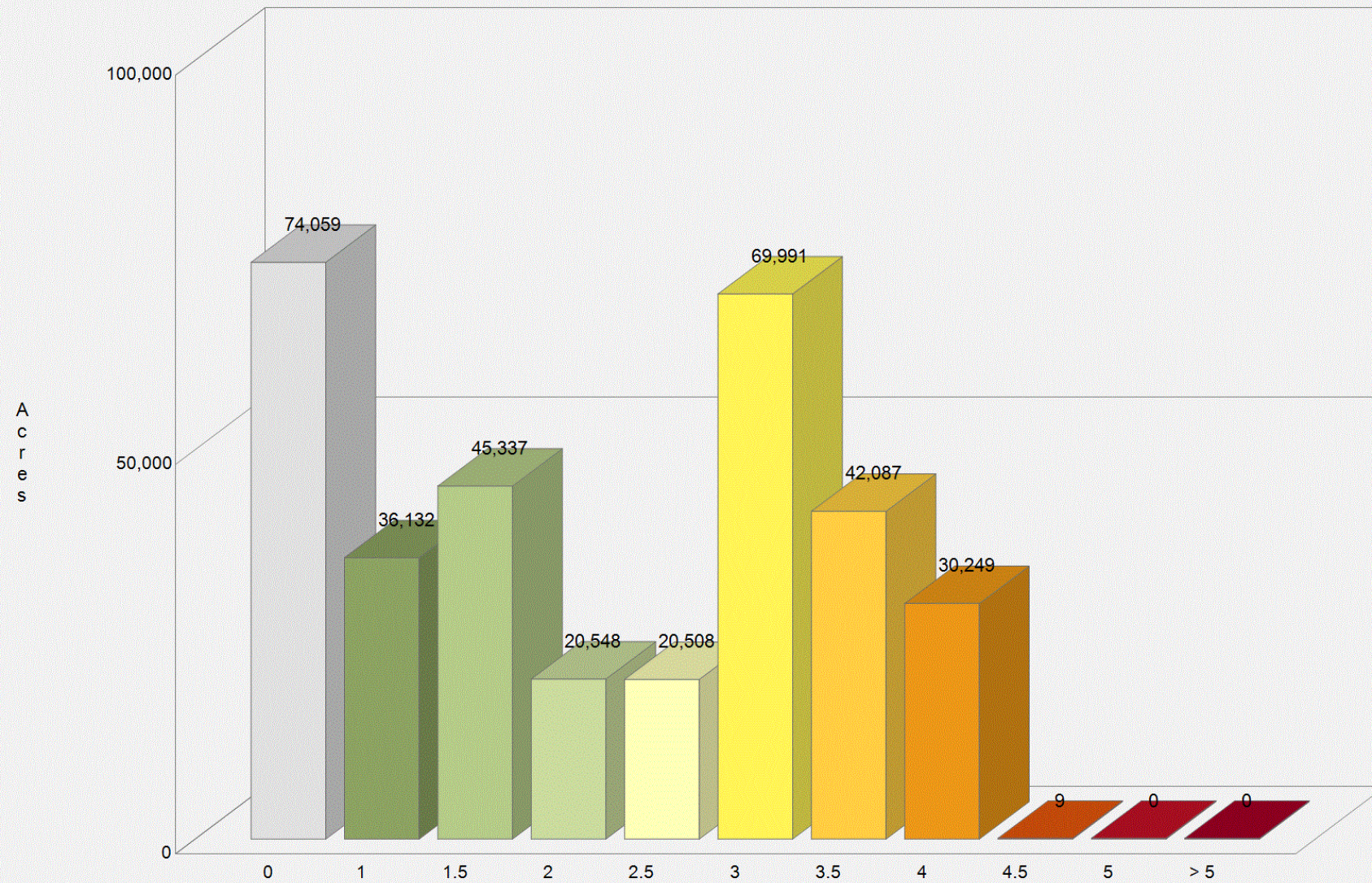
Flames exceeding 200 feet in length; expect extreme fire behavior.

To aid in viewing on the map, FIS is presented in 1/2 class increments. Please consult the SouthWRAP User Manual for a more detailed description of the FIS class descriptions.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Characteristic Fire Intensity Scale Category	Acres	Percent
	0	74,059	21.9 %
	1	36,132	10.7 %
	1.5	45,337	13.4 %
	2	20,548	6.1 %
	2.5	20,508	6.1 %
	3	69,991	20.7 %
	3.5	42,087	12.4 %
	4	30,249	8.9 %
	4.5	9	0.0 %
	5	0	0.0 %
	> 5	0	0.0 %
	Total	338,920	100.0 %

Jefferson County
Characteristic Fire Intensity Scale



95th Percentile Fire Intensity Scale

This layer represents the "average-worst" 95th Percentile Fire Intensity Scale at the flaming front of the fire. Here, fireline intensity is represented as the standard Fire Intensity Scale (Log10 of fireline intensity) as determined by fuel and weather characteristics. These results are weighted according to the Weather Type Probabilities (WTPs) from the highest five percent of possible wind and weather conditions and include the contribution of crown fuel and crowning fire intensity, if applicable. Fireline intensity is calculated using WildEST. Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculations.

Similar to the Richter scale for earthquakes, FIS provides a standard scale to measure potential wildfire intensity. FIS consists 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. Refer to descriptions below.

1. 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.

2. 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.

3. 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.

4. 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.

5. Class 5, Very High:

Flames exceeding 200 feet in length; expect extreme fire behavior.

To aid in viewing on the map, FIS is presented in 1/2 class increments. Please consult the SouthWRAP User Manual for a more detailed description of the FIS class descriptions.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	95th Percentile Fire Intensity Scale Category	Acres	Percent
	0	74,059	21.9 %
	1	33,454	9.9 %
	1.5	2,417	0.7 %
	2	54,849	16.2 %
	2.5	12,788	3.8 %
	3	22,895	6.8 %
	3.5	60,430	17.8 %
	4	16,472	4.9 %
	4.5	60,227	17.8 %
	5	1,329	0.4 %
	> 5	0	0.0 %
	Total	338,920	100.0 %

Characteristic Flame Length

This layer represents the flame length (in feet) as determined by fuel and weather characteristics. These results are weighted across a full range of possible wind and weather conditions and include the contribution of crown fire flame lengths, if applicable. Flame length is calculated using WildEST, a process used to perform and combine multiple fire behavior simulations under a range of weather types (wind speed, wind direction, fuel moisture content). Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculations.

Uses for this flame length dataset include comparison of expected flame-lengths across the landscape for identifying wildfire hazards to the public and exploring hazard mitigation opportunities for communities and land management agencies.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Characteristic Flame Length Category	Acres	Percent
	0	74,059	21.9 %
	< 1	38,580	11.4 %
	1 - 2	65,987	19.5 %
	2 - 4	68,799	20.3 %
	4 - 10	40,772	12.0 %
	10 - 21	48,166	14.2 %
	21 - 46	2,558	0.8 %
	46 - 100	0	0.0 %
	> 100	0	0.0 %
	Total	338,921	100.0 %

95th Percentile Flame Length

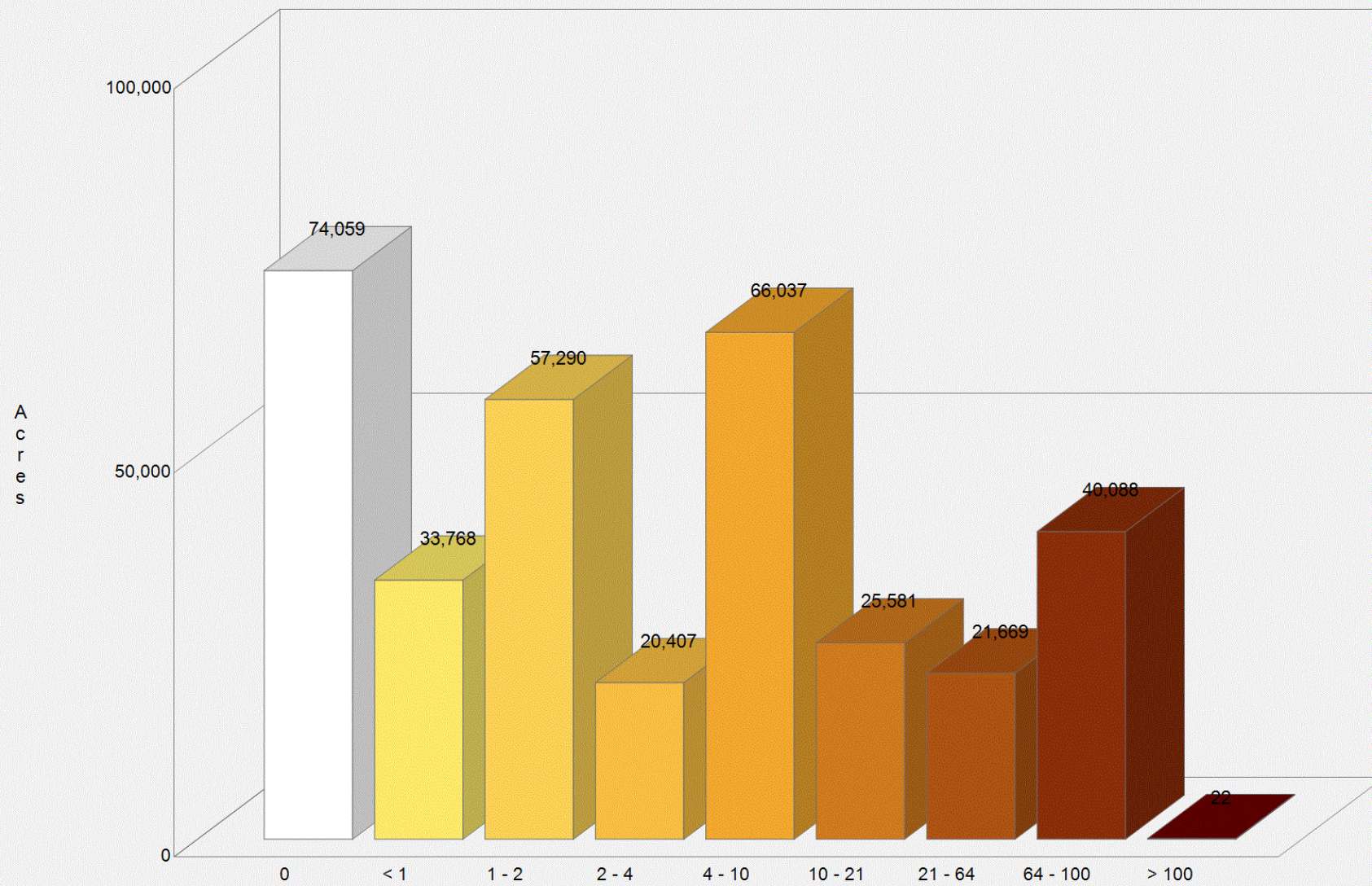
This layer represents the "average-worst" 95th Percentile Flame Length (in feet) at the flaming front of the fire as determined by fuel and weather characteristics. These results are weighted according to the Weather Type Probabilities (WTPs) from the highest five percent of possible wind and weather conditions and include the contribution of crown fire flame lengths, if applicable.

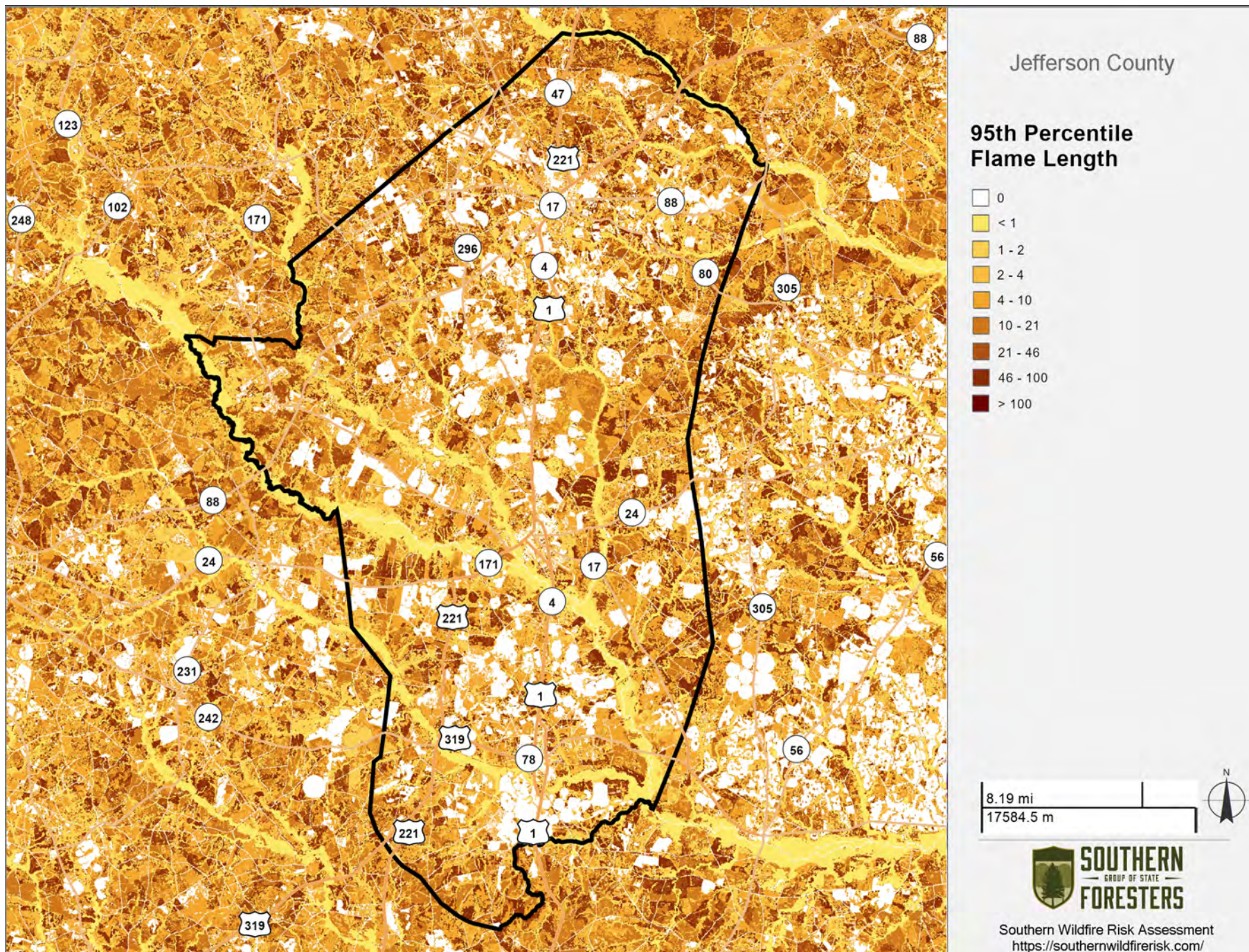
Flame length is calculated using WildEST, a process used to perform and combine multiple fire behavior simulations under a range of weather types (wind speed, wind direction, fuel moisture content). Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculation.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	95th Percentile Flame Length Category	Acres	Percent
	0	74,059	21.9 %
	< 1	33,768	10.0 %
	1 - 2	57,290	16.9 %
	2 - 4	20,407	6.0 %
	4 - 10	66,037	19.5 %
	10 - 21	25,581	7.5 %
	21 - 46	21,669	6.4 %
	46 - 100	40,088	11.8 %
	> 100	22	0.0 %
	Total	338,921	100.0 %

Jefferson County
95th Percentile Flame Length





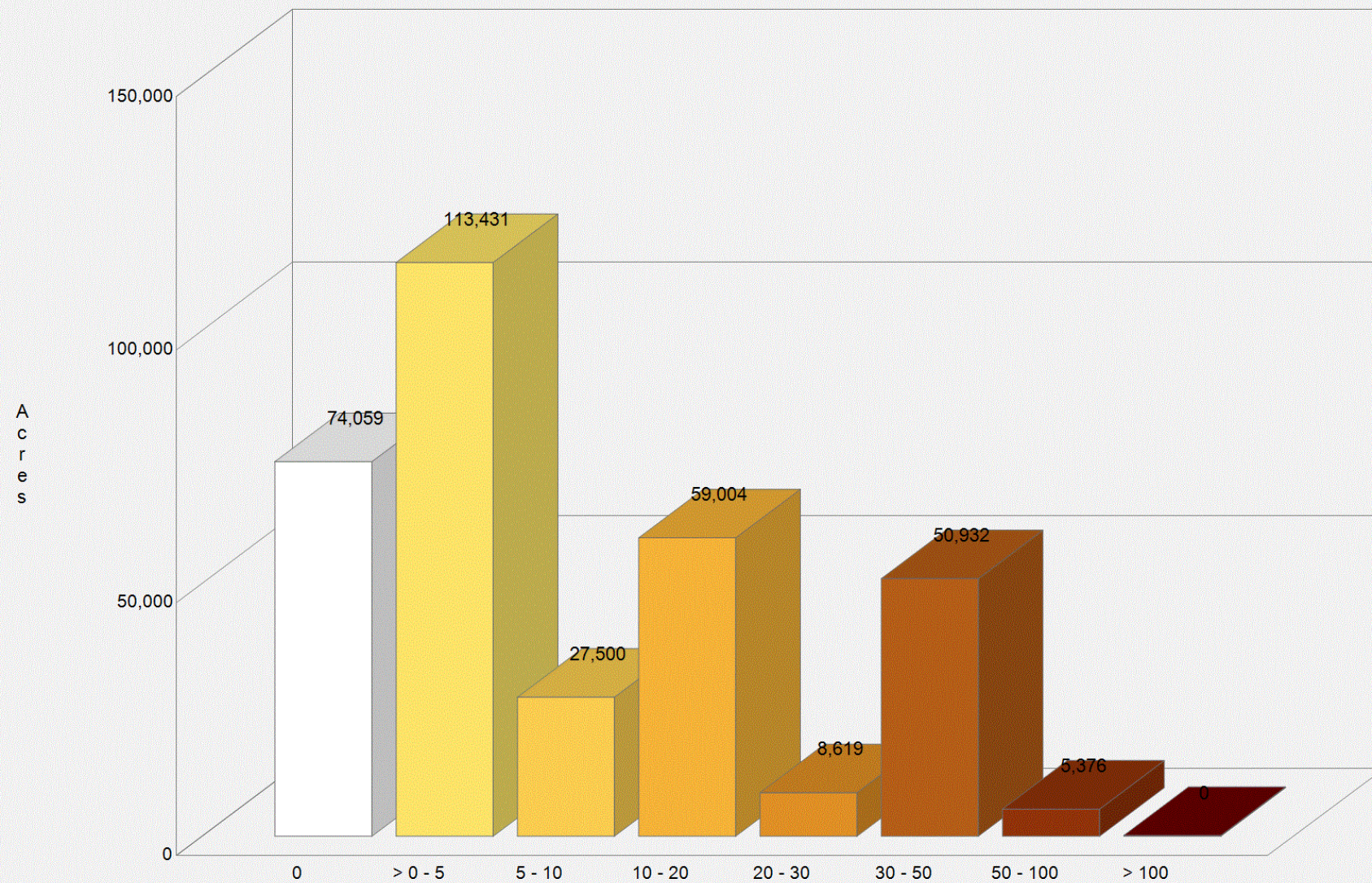
Characteristic Rate of Spread

This layer represents the rate of spread as determined by fuel and weather characteristics. These results are weighted across a full range of possible wind and weather conditions and include the contribution of crown fire spread rate, if applicable. Note: Burnable cornfields in the fall harvest season have been excluded from this dataset. Rate of Spread is calculated using WildEST, a process used to perform and combine multiple fire behavior simulations under a range of weather types (wind speed, wind direction, fuel moisture content). Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculations. Note: Burnable cornfields in the fall harvest season have been excluded from this dataset.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Characteristic Rate of Spread Category	Acres	Percent
	0	74,059	21.9 %
	> 0 - 5	113,431	33.5 %
	5 - 10	27,500	8.1 %
	10 - 20	59,004	17.4 %
	20 - 30	8,619	2.5 %
	30 - 50	50,932	15.0 %
	50 - 100	5,376	1.6 %
	> 100	0	0.0 %
	Total	338,921	100.0 %

Jefferson County
Characteristic Rate of Spread



95th Percentile Rate of Spread

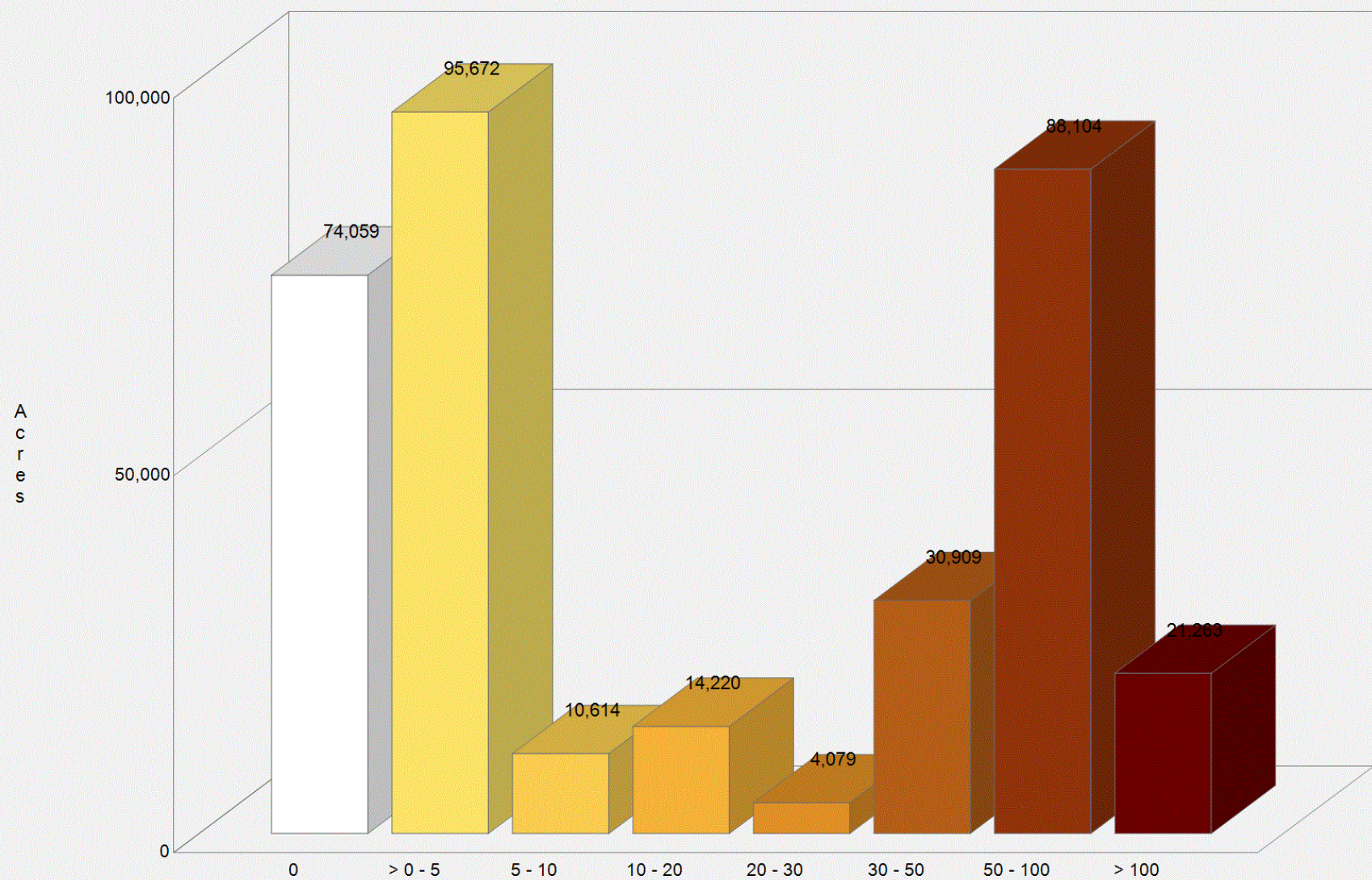
This layer represents the "average-worst" 95th Percentile Rate of Spread (ch/h) at the flaming front of the fire as determined by fuel and weather characteristics. These results are weighted according to the Weather Type Probabilities (WTPs) from the highest five percent of possible wind and weather conditions and include the contribution of crown fire spread rate, if applicable.

Rate of Spread is calculated using WildEST, a process used to perform and combine multiple fire behavior simulations under a range of weather types (wind speed, wind direction, fuel moisture content). Rather than weighting results solely by how frequently the weather conditions occur, the WildEST process factors the greater influence of high-spread conditions into the weighting calculations.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	95th Percentile Rate of Spread Category	Acres	Percent
	0	74,059	21.9 %
	> 0 - 5	95,672	28.2 %
	5 - 10	10,614	3.1 %
	10 - 20	14,220	4.2 %
	20 - 30	4,079	1.2 %
	30 - 50	30,909	9.1 %
	50 - 100	88,104	26.0 %
	> 100	21,263	6.3 %
	Total	338,920	100.0 %

Jefferson County
95th Percentile Rate of Spread



Probability of Crown Fire

This layer shows the likelihood of the head of the fire experiencing crown fire (at least mid-grade passive crown fire). The head of the fire exhibits the most extreme fire behavior, demonstrating the highest intensity and fastest spread rates.

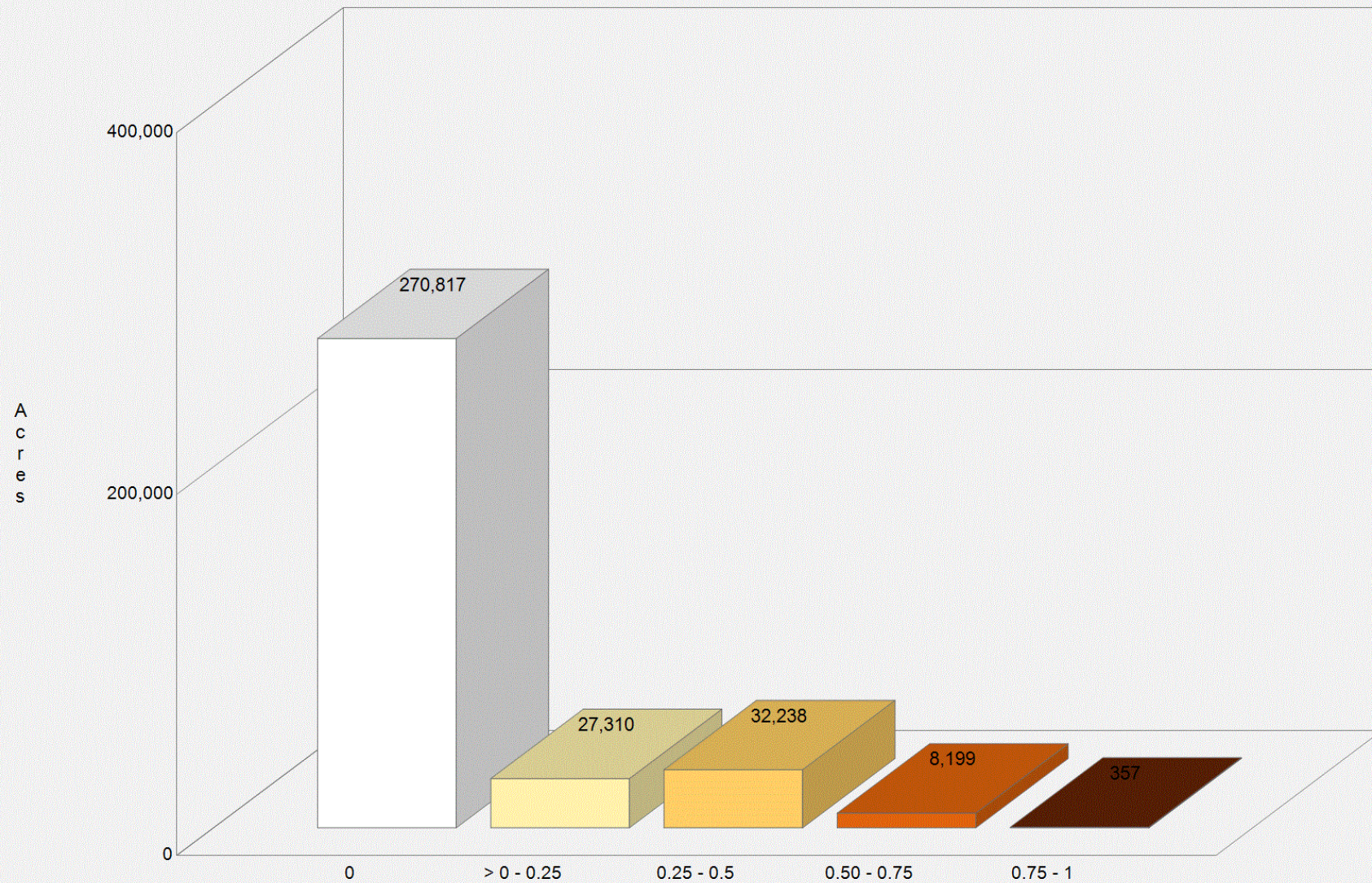
Crown (or canopy) fires are very dangerous, destructive, and difficult to control due to their increased fire intensity. From a planning perspective, it is important to identify where these conditions are likely to occur on the landscape so that special preparedness measures can be taken if necessary.

Higher probability values indicate a high likelihood of crown fire. Probability results reflect fuel characteristics and the flame lengths produced under a range of weather conditions. These probabilities do not include the likelihood of a wildfire occurring, rather, they provide information about the likelihood of a location experiencing crown fire, if a wildfire were to occur.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Probability of Crown Fire Category	Acres	Percent
	0	270,817	79.9 %
	> 0 - 0.25	27,310	8.1 %
	0.25 - 0.5	32,238	9.5 %
	0.50 - 0.75	8,199	2.4 %
	0.75 - 1	357	0.1 %
	Total	338,921	100.0 %

Jefferson County
Probability of Crown Fire



Challenges to Fire Operations

The information in this section of the report describes fire behavior information useful in operational fire planning and for identifying fuel treatment opportunities.

Contents:

[Probability of Exceeding Manual Control](#)

[Probability of Exceeding Mechanical Control](#)

[Probability of Extreme Fire Behavior](#)

[Suppression Difficulty Index](#)

[Wildfire Hazard Potential](#)

Probability of Exceeding Manual Control

This layer shows the likelihood that flames at the head of the fire will exceed 4 feet, which is generally considered the limit for manual fire control. The head of the fire exhibits the most extreme fire behavior, demonstrating the highest intensity and fastest spread rates.

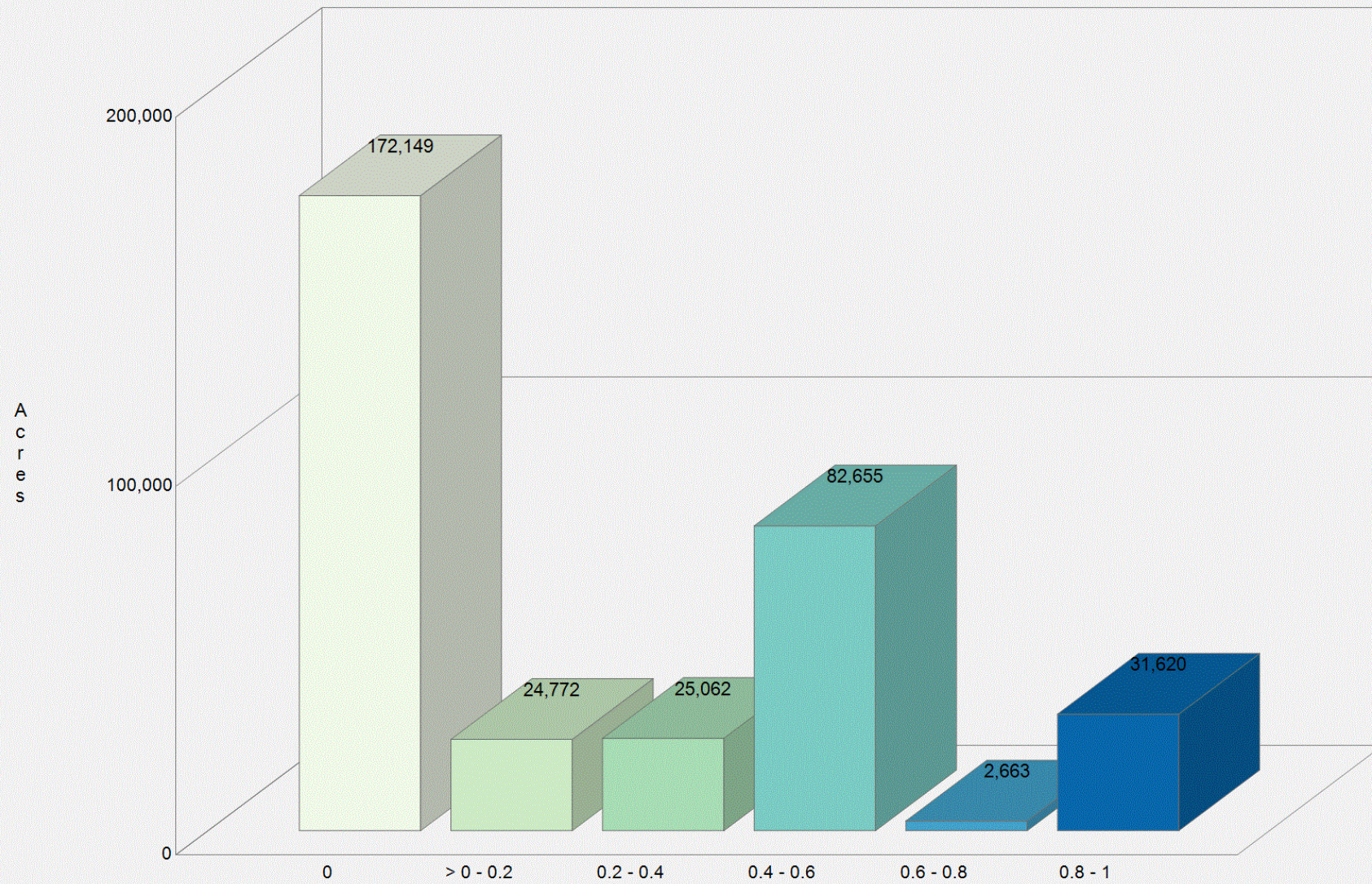
Higher probability values indicate a lower chance of success using manual control measures (i.e. hand crews and hand line). Probability results reflect fuel characteristics and the flame lengths produced under a range of weather conditions. These probabilities do not include the likelihood of a wildfire occurring, rather, they provide information about flame lengths if a wildfire were to occur.

Flame length exceedance probabilities refer to the likelihood of flames reaching or surpassing a certain height, typically measured from the leading edge or "head" of a fire. These probabilities provide insight into the range of potential flame lengths under various weather conditions. For example, if the probability of exceeding a certain flame length threshold is 0.2 (20%), it means there is a 20% chance that flames exceed that height under the range of modeled weather scenarios. It also means that 80% of flame lengths are expected to be below the threshold. These probabilities help fire management personnel anticipate and plan for the potential intensity of wildfires in a specific area.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Probability of Exceeding Manual Control Category	Acres	Percent
	0	172,149	50.8 %
	> 0 - 0.2	24,772	7.3 %
	0.2 - 0.4	25,062	7.4 %
	0.4 - 0.6	82,655	24.4 %
	0.6 - 0.8	2,663	0.8 %
	0.8 - 1	31,620	9.3 %
	Total	338,921	100.0 %

Jefferson County
Probability of Exceeding Manual Control



Probability of Exceeding Mechanical Control

This layer shows the likelihood that flames at the head of the fire will exceed 8 feet, which is considered the limit for mechanical fire control in fire operations. The head of the fire exhibits the most extreme fire behavior, demonstrating the highest intensity and fastest spread rates.

Higher probability values indicate a lower chance of success using mechanical control measures such as dozers and engines. Probability results reflect fuel characteristics and the flame lengths produced under a range of weather conditions. These probabilities do not include the likelihood of a wildfire occurring, rather, they provide information about flame lengths if a wildfire were to occur.

Flame length exceedance probabilities refer to the likelihood of flames reaching or surpassing a certain height, typically measured from the leading edge or "head" of a fire. These probabilities provide insight into the range of potential flame lengths under various weather conditions. For example, if the probability of exceeding a certain flame length threshold is 0.2 (20%), it means there is a 20% chance that flames exceed that height under the range of modeled weather scenarios. It also means that 80% of flame lengths are expected to be below the threshold. These probabilities help fire management personnel anticipate and plan for the potential intensity of wildfires in a specific area.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Probability of Exceeding Mechanical Control Category	Acres	Percent
	0	202,853	59.9 %
	> 0 - 0.2	61,119	18.0 %
	0.2 - 0.4	30,623	9.0 %
	0.4 - 0.6	27,590	8.1 %
	0.6 - 0.8	415	0.1 %
	0.8 - 1	16,321	4.8 %
	Total	338,921	100.0 %

Probability of Extreme Fire Behavior

This layer shows the likelihood that flames at the head of the fire will exceed 11 feet, which is considered threshold for extreme fire behavior in fire operations. The head of the fire exhibits the most extreme fire behavior, demonstrating the highest intensity and fastest spread rates. Flames of this height can indicate extreme fire behavior and present significant challenges for suppression efforts.

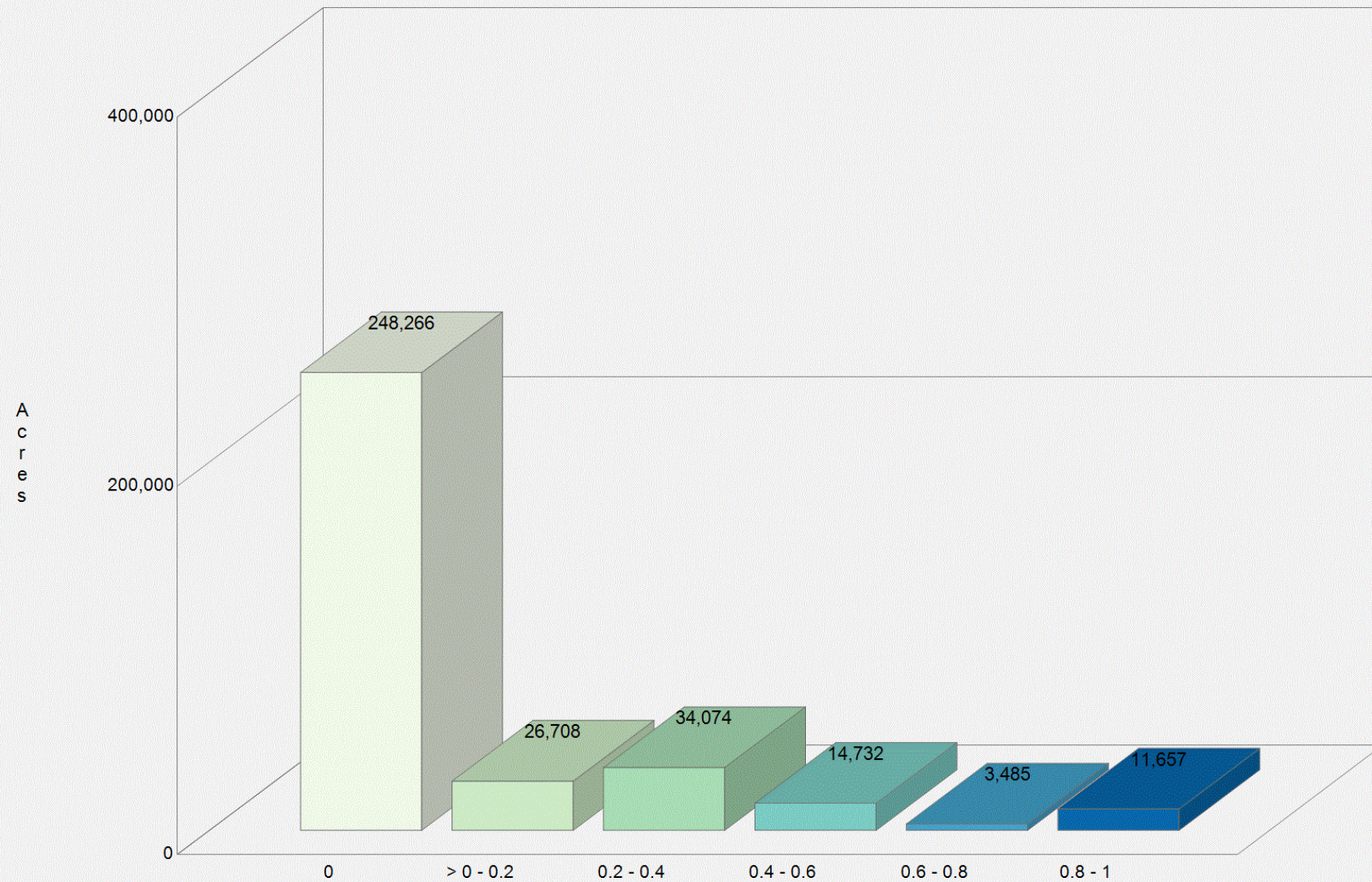
Higher probability values indicate a high likelihood of extreme fire behavior such as crowning and spotting. Probability results reflect fuel characteristics and the flame lengths produced under a range of weather conditions. These probabilities do not include the likelihood of a wildfire occurring, rather, they provide information about flame lengths if a wildfire were to occur.

Flame length exceedance probabilities refer to the likelihood of flames reaching or surpassing a certain height, typically measured from the leading edge or "head" of a fire. These probabilities provide insight into the range of potential flame lengths under various weather conditions. For example, if the probability of exceeding a certain flame length threshold is 0.2 (20%), it means there is a 20% chance that flames exceed that height under the range of modeled weather scenarios. It also means that 80% of flame lengths are expected to be below the threshold. These probabilities help fire management personnel anticipate and plan for the potential intensity of wildfires in a specific area.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Probability of Extreme Fire Behavior Category	Acres	Percent
	0	248,266	73.3 %
	> 0 - 0.2	26,708	7.9 %
	0.2 - 0.4	34,074	10.1 %
	0.4 - 0.6	14,732	4.3 %
	0.6 - 0.8	3,485	1.0 %
	0.8 - 1	11,657	3.4 %
	Total	338,922	100.0 %

Jefferson County
Probability of Extreme Fire Behavior



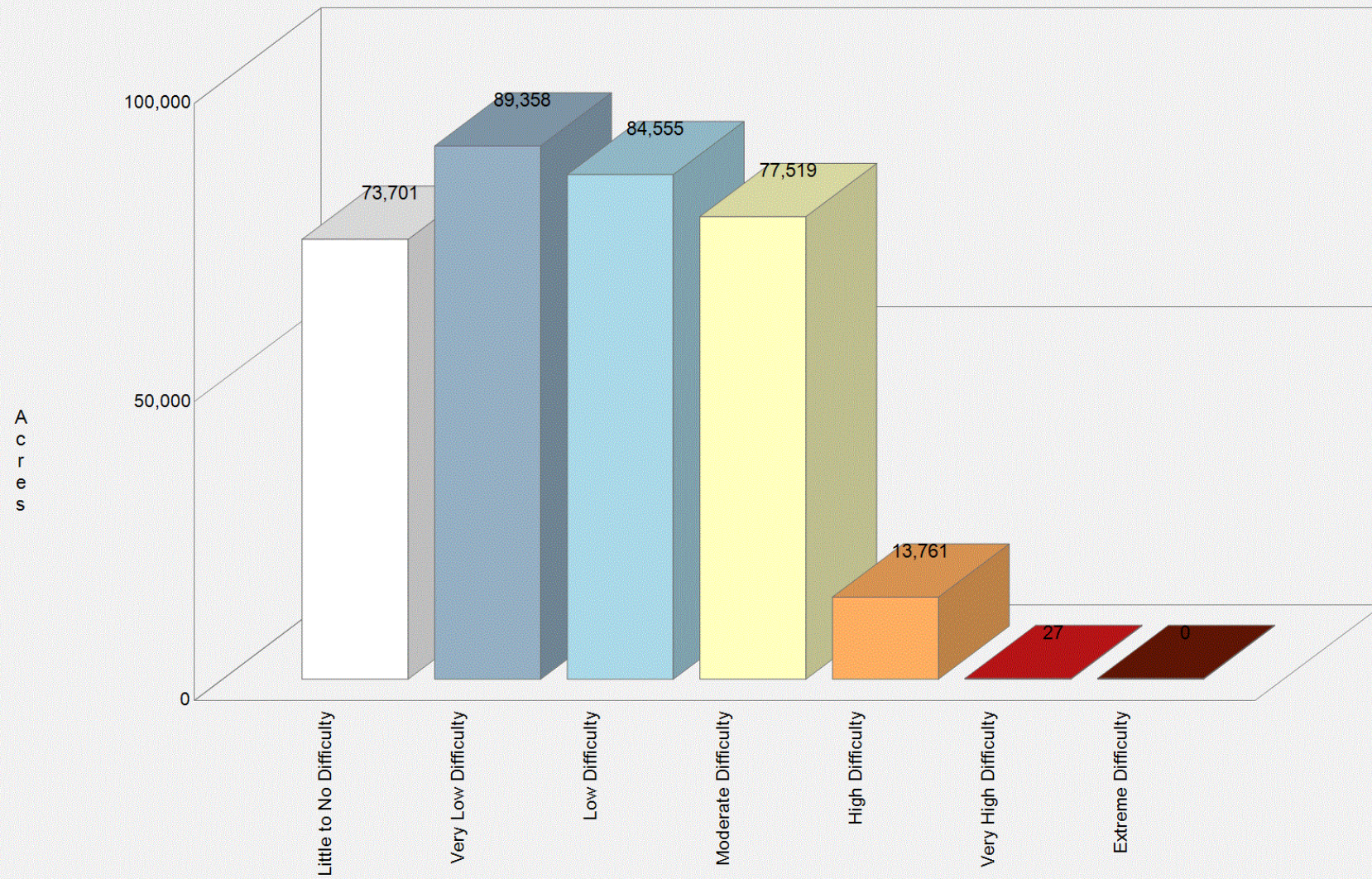
Suppression Difficulty Index

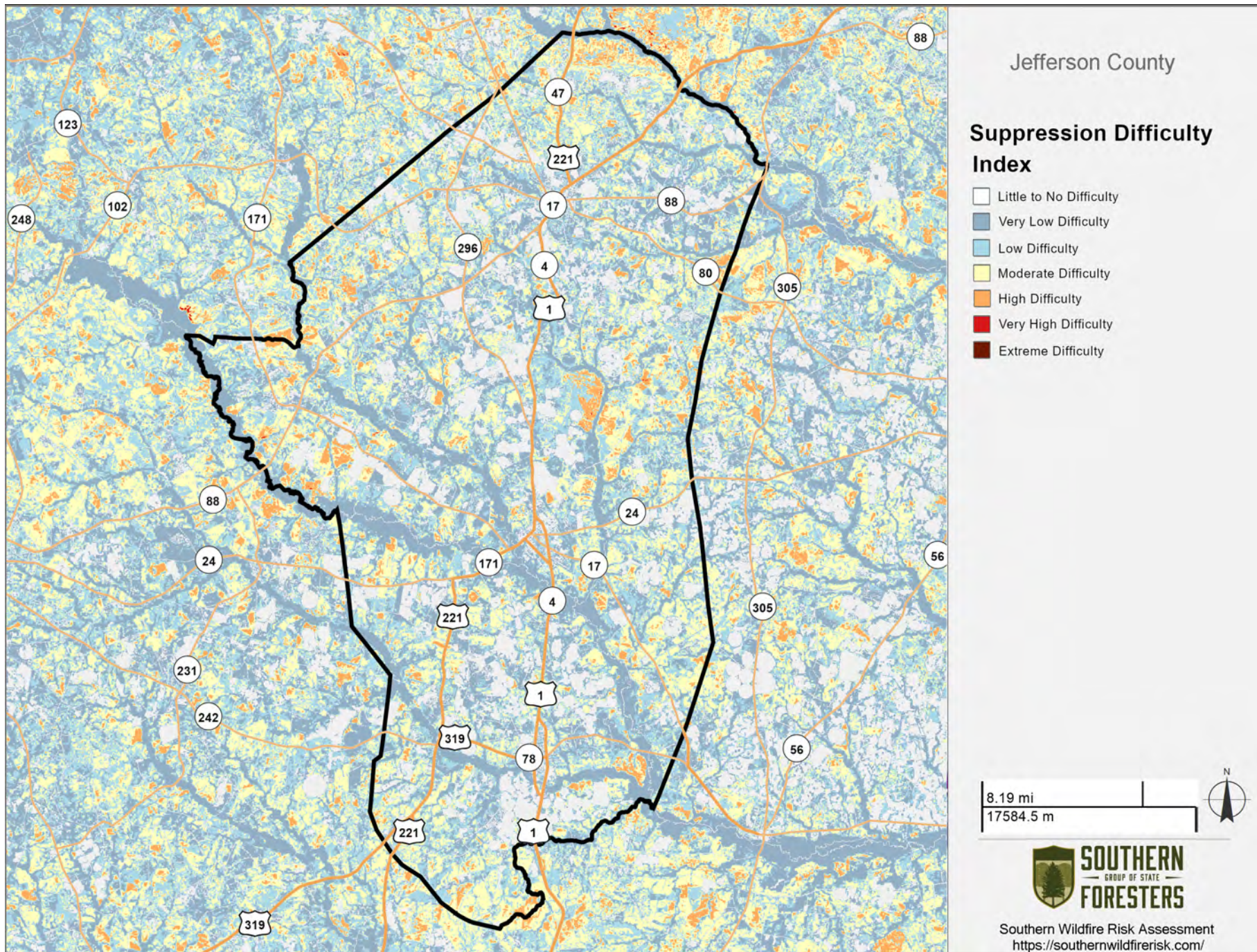
Suppression Difficulty Index can inform fire management decisions related to suppression strategies and resource placement. It classifies fire suppression challenges into six levels, ranging from very low to extreme. Blue areas indicate relatively manageable conditions with some combination of gentle terrain, less resistant fuels, easier access, and milder fire behavior. Red areas highlight tougher conditions with steep terrain, limited access, and more-intense fire activity. This index does not consider aerial suppression strategies, overhead hazards to firefighters like standing dead trees, and does not include the likelihood of a wildfire occurring.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Suppression Difficulty Index Category	Acres	Percent
	Little to No Difficulty	73,701	21.7 %
	Very Low Difficulty	89,358	26.4 %
	Low Difficulty	84,555	24.9 %
	Moderate Difficulty	77,519	22.9 %
	High Difficulty	13,761	4.1 %
	Very High Difficulty	27	0.0 %
	Extreme Difficulty	0	0.0 %
	Total	338,921	100.0 %

Jefferson County
Suppression Difficulty Index





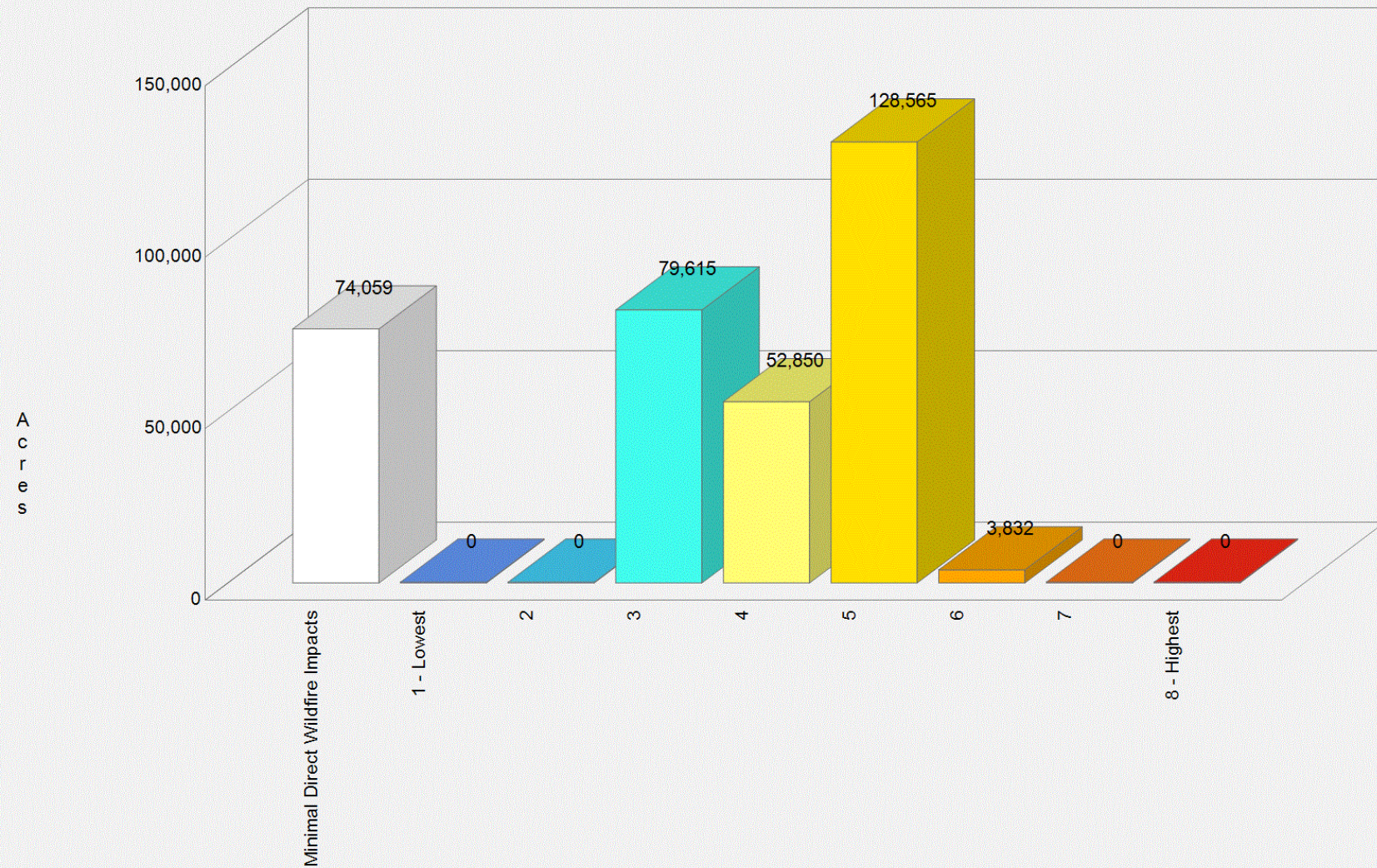
Wildfire Hazard Potential

Wildfire Hazard Potential is mapped with eight classes, ranging from low (blue) to high (red) hazard levels. The highest classes indicate areas with fuels more prone to experiencing extreme fire behavior during severe fire-weather conditions. Although Wildfire Hazard Potential is useful for long-term planning purposes, it does not incorporate current or forecasted weather conditions and should not be relied upon as a seasonal outlook.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Wildfire Hazard Potential Category	Acres	Percent
	Minimal Direct Wildfire Impacts	74,059	21.9 %
	1 - Lowest	0	0.0 %
	2	0	0.0 %
	3	79,615	23.5 %
	4	52,850	15.6 %
	5	128,565	37.9 %
	6	3,832	1.1 %
	7	0	0.0 %
	8 - Highest	0	0.0 %
	Total	338,921	100.0 %

Jefferson County
Wildfire Hazard Potential



Ember Characteristics

The information in this section of the report identifies the locations most likely to produce embers and the areas most likely to receive embers, given a wildfire occurs. Ember modeling is based on fuel characteristics, climate, and topography.

Contents:

[Conditional Ember Production Index](#)

[Conditional Ember Load Index](#)

Conditional Ember Production Index

Conditional Ember Production Index (cEPI) provides a relative index of embers produced at a location, given that a fire occurs.

Ember production is based on surface and canopy fuel characteristics, climate, and topography within the pixel. Units are an index of the relative number of embers rather than a count of embers produced. Conditional EPI is based on heading-only fire behavior and does not include the likelihood of wildfire.

Embers can be produced from any burnable fuel source in the fuelscape, dependent on the wind and weather characteristics that lead to lofting embers.

Conditional EPI is useful for prioritizing fuel treatments to reduce the potential for ember production in volatile fuel types.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Conditional Ember Production Index Category	Acres	Percent
	Minimal Direct Wildfire Impacts	74,059	21.9 %
	1 - Lowest	1	0.0 %
	2	137,154	40.5 %
	3	4,949	1.5 %
	4	48,132	14.2 %
	5	10,197	3.0 %
	6	20,075	5.9 %
	7	42,116	12.4 %
	8	2,235	0.7 %
	9 - Highest	1	0.0 %
	Total	338,919	100.0 %

Conditional Ember Load Index

Conditional Ember Load Index (cELI) provides a relative index of embers received at a location, given that a fire occurs.

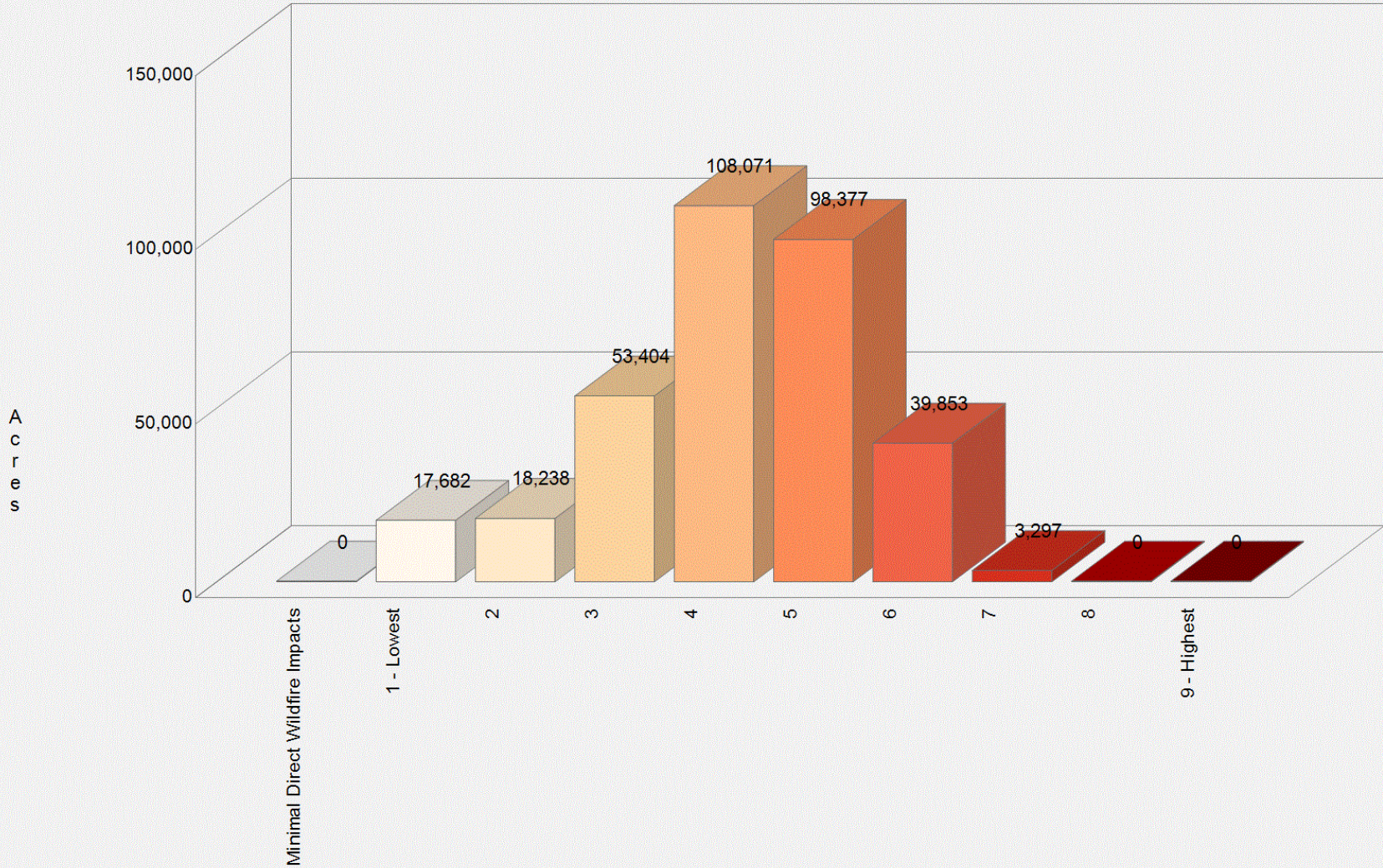
Ember load is based on surface and canopy fuel characteristics, climate, and topography within the pixel. Ember load incorporates downwind ember travel. Units are an index of the relative number of embers rather than a count of embers produced. Conditional ELI is based on heading-only fire behavior and does not include the likelihood of wildfire. Embers can be received by any pixel in the fuelscape; including both burnable and nonburnable fuel types.

Conditional ELI can be used to prioritize building hardening activities to resist ember ignition.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Conditional Ember Load Index Category	Acres	Percent
	Minimal Direct Wildfire Impacts	0	0.0 %
	1 - Lowest	17,682	5.2 %
	2	18,238	5.4 %
	3	53,404	15.8 %
	4	108,071	31.9 %
	5	98,377	29.0 %
	6	39,853	11.8 %
	7	3,297	1.0 %
	8	0	0.0 %
	9 - Highest	0	0.0 %
	Total	338,922	100.0 %

Jefferson County
Conditional Ember Load Index



Landscape Characteristics

The information in this section of the report describes the type of fuel characterized by the surface fuel model map and the percent slope, which is useful for characterizing conditions important for operating equipment.

Contents:

[Surface Fuels](#)

[Percent Slope](#)

Surface Fuels

Surface Fuels, or fire behavior fuel models as they are technically referred to, contain the parameters needed by the Rothermel (1972) surface fire spread model to compute surface fire behavior characteristics, such as rate of spread, flame length, fireline intensity, and other fire behavior metrics. Surface fuels include grass, timber litter, shrub/brush, slash and other dead or live vegetation within about 6 feet of the ground and are shown here at 30-meter resolution.

Surface fuels are typically categorized into one of four primary fuel types based on the primary carrier of the surface fire: 1) grass, 2) shrub/brush, 3) timber litter and 4) slash. There are two standard fire behavior fuel model sets published for use. The Fire Behavior Prediction System 1982 Fuel Model Set (Anderson, 1982) contains 13 fuel models and the Fire Behavior Prediction System 2005 Fuel Model Set (Scott & Burgan, 2005) contains 40 fuel models.

The SWRA Surface Fuels reflect fuel disturbances through 2022 and are based initially on LANDFIRE 2020, calibrated with input from fuel calibration workshops.

A detailed fuels calibration process was undertaken that involved collaboration with Southern state fuels and fire behavior specialists supported by federal partner involvement. Workshops were held to review the LANDFIRE fuels product and calibrate the data by modifying specific vegetation and fuels classes to better reflect local knowledge and input

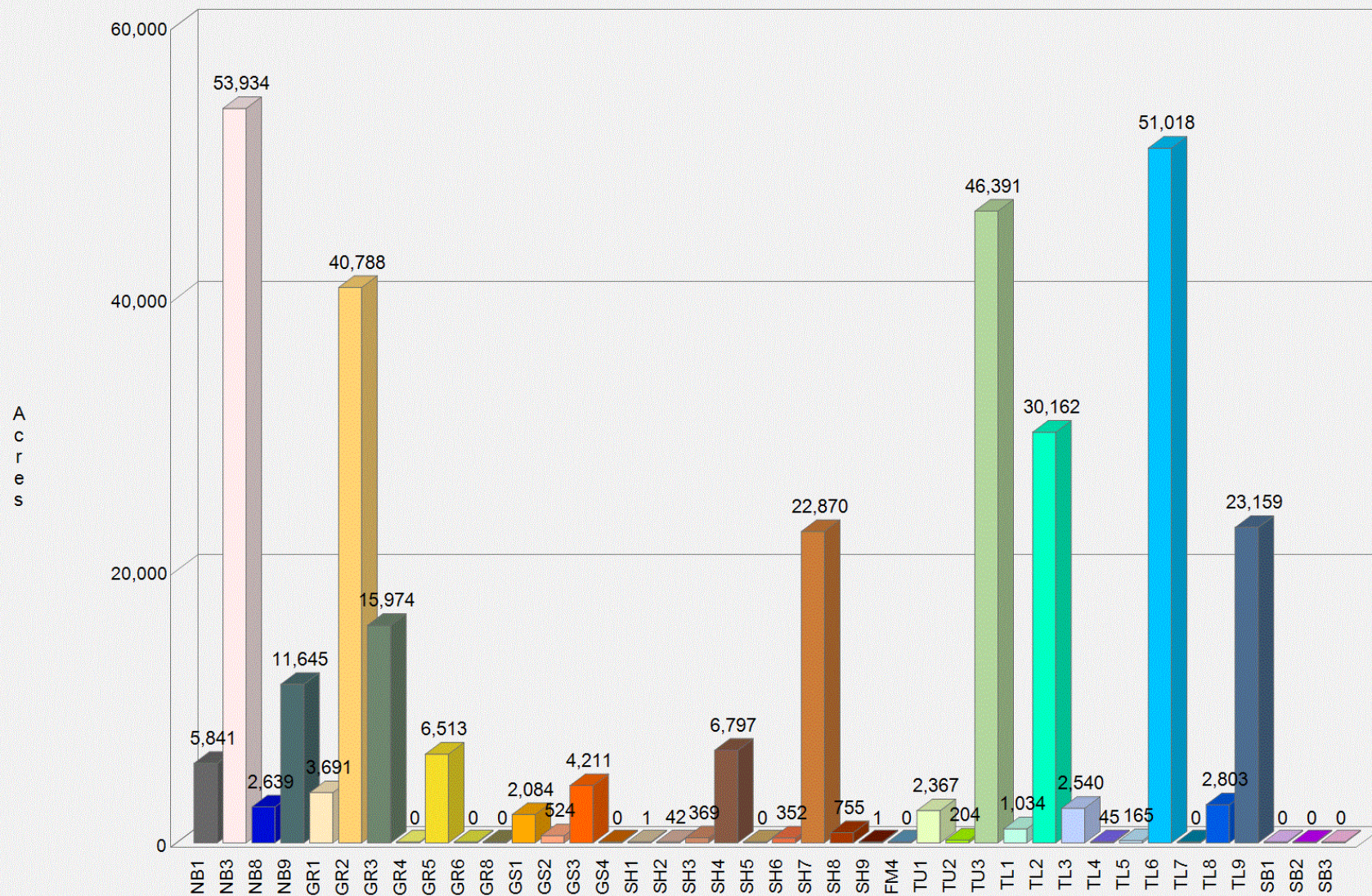
Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

Surface Fuel		FBPS Fuel Model Set	Description	Acres	Percent
Non-burnable Fuel Type Models (insufficient wildland fuel to carry a wildland fire under any condition)					
	NB1	2005	Urban or suburban development; insufficient wildland fuel to carry wildland fire. Includes roads.	5,841	1.7 %
	NB3	2005	Agricultural field, maintained in nonburnable condition.	53,934	15.9 %
	NB8	2005	Open water	2,639	0.8 %
	NB9	2005	Bare ground	11,645	3.4 %
Grass Fuels Type Models (nearly pure grass and/or forb type)					
	GR1	2005	Grass is short, patchy, and possibly heavily grazed. Spread rate moderate; flame length low.	3,691	1.1 %
	GR2	2005	Moderately coarse continuous grass, average depth about 1 foot. Spread rate high; flame length moderate.	40,788	12.0 %
	GR3	2005	Very coarse grass, average depth about 2 feet. Spread rate high; flame length moderate.	15,974	4.7 %
	GR4	2005	Moderately coarse continuous grass, average depth about 2 feet. Spread rate very high; flame length high.	0	0.0 %
	GR5	2005	Dense, coarse grass, average depth about 1 to 2 feet. Spread rate very high; flame length high.	6,513	1.9 %
	GR6	2005	Dryland grass about 1 to 2 feet tall. Spread rate very high; flame length very high.	0	0.0 %
	GR8	2005	Heavy, coarse, continuous grass 3 to 5 feet tall. Spread rate very high; flame length very high.	0	0.0 %
Grass-Shrub Fuels Type Models (mixture of grass and shrub, up to 50 percent shrub coverage)					
	GS1	2005	Shrubs are about 1 foot high, low grass load. Spread rate moderate; flame length low.	2,084	0.6 %
	GS2	2005	Shrubs are 1 to 3 feet high, moderate grass load. Spread rate high; flame length moderate.	524	0.2 %
	GS3	2005	Moderate grass/shrub load, average grass/shrub depth less than 2 feet. Spread rate high; flame length moderate.	4,211	1.2 %
	GS4	2005	Heavy grass/shrub load, depth greater than 2 feet. Spread rate high; flame length very high.	0	0.0 %

Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent	
Shrub Fuel Type Models (Shrubs cover at least 50 percent of the site, grass sparse to nonexistent)					
	SH1	2005	Low shrub fuel load, fuelbed depth about 1 foot; some grass may be present. Spread rate very low; flame length very low.	1	0.0 %
	SH2	2005	Moderate fuel load (higher than SH01), depth about 1 foot, no grass fuel present. Spread rate low; flame length low.	42	0.0 %
	SH3	2005	Moderate shrub load, possibly with pine overstory or herbaceous fuel, fuel bed depth 2 to 3 feet. Spread rate low; flame length low.	369	0.1 %
	SH4	2005	Low to moderate shrub and litter load, possibly with pine overstory, fuel bed depth about 3 feet. Spread rate high; flame length moderate.	6,797	2.0 %
	SH5	2005	Heavy shrub load, depth 4 to 6 feet. Spread rate very high; flame length very high.	0	0.0 %
	SH6	2005	Dense shrubs, little or no herb fuel, depth about 2 feet. Spread rate high; flame length high.	352	0.1 %
	SH7	2005	Very heavy shrub load, depth 4 to 6 feet. Spread rate lower than SH05, but flame length similar. Spread rate high; flame length very high.	22,870	6.7 %
	SH8	2005	Dense shrubs, little or no herb fuel, depth about 3 feet. Spread rates high; flame length high.	755	0.2 %
	SH9	2005	Dense, finely branched shrubs with significant fine dead fuel, about 4 to 6 feet tall; some herbaceous fuel may be present. Spread rate high, flame length very high.	1	0.0 %
1982 Fire Behavior Prediction System – ONLY USED FOR FLORIDA ASSESSMENT					
	FM4	1982	Chaparral	0	0.0 %
Timber-Understory Fuel Type Models (Grass or shrubs mixed with litter from forest canopy)					
	TU1	2005	Fuelbed is low load of grass and/or shrub with litter. Spread rate low; flame length low.	2,367	0.7 %
	TU2	2005	Fuelbed is moderate litter load with shrub component. Spread rate moderate; flame length low.	204	0.1 %
	TU3	2005	Fuelbed is moderate litter load with grass and shrub components. Spread rate high; flame length moderate.	46,391	13.7 %
Timber Litter Fuel Type Models (dead and down woody fuel litter beneath a forest canopy)					
	TL1	2005	Light to moderate load, fuels 1 to 2 inches deep. Spread rate very low; flame length very low.	1,034	0.3 %
	TL2	2005	Low load, compact. Spread rate very low; flame length very low.	30,162	8.9 %

Surface Fuel	FBPS Fuel Model Set	Description	Acres	Percent
TL3	2005	Moderate load conifer litter. Spread rate very low; flame length low.	2,540	0.7 %
TL4	2005	Moderate load, includes small diameter downed logs. Spread rate low; flame length low.	45	0.0 %
TL5	2005	High load conifer litter; light slash or mortality fuel. Spread rate low; flame length low.	165	0.0 %
TL6	2005	Moderate load, less compact. Spread rate moderate; flame length low.	51,018	15.1 %
TL7	2005	Heavy load forest litter, includes larger diameter downed logs. Spread rate low; flame length low.	0	0.0 %
TL8	2005	Moderate load and compactness may include small amount of herbaceous load. Spread rate moderate; flame length low.	2,803	0.8 %
TL9	2005	Very high load broadleaf litter; heavy needle-drape in otherwise sparse shrub layer. Spread rate moderate; flame length moderate.	23,159	6.8 %
Slash-Blowdown Fuel Type Models (activity fuel/slash or debris from wind damage)				
SB1	2005	Low load activity fuel. Spread rate moderate; flame length low.	0	0.0 %
SB2	2005	Moderate load activity or low load blowdown. Spread rate moderate; flame length moderate.	0	0.0 %
SB3	2005	High load activity fuel or moderate load blowdown. Spread rate high; flame length high.	0	0.0 %
Total			338,919	100.0 %

Jefferson County Surface Fuels



Percent Slope

Percent Slope measures the rate of change of elevation over a given horizontal distance (rise over run), expressed as a percent. Percent slope is used to characterize the local conditions for operating equipment. Slope identifies the inclination at a single location based on the adjacent elevation values. Steep local conditions can severely restrict the movement of equipment and resources for suppression and intensify fire behavior.

Data Source: Southern Wildfire Risk Assessment, Pyrologix 2023 (includes fuel disturbances through 2022)

	Percent Slope Category	Acres	Percent
	0 - 5	292,778	86.4 %
	5 - 15	44,695	13.2 %
	15 - 25	1,403	0.4 %
	25 - 40	44	0.0 %
	40 - 55	0	0.0 %
	55 - 75	0	0.0 %
	> 75	0	0.0 %
	Total	338,920	100.0 %

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Anderson, H. E. (1982). Aids to determining fuel models for estimating fire behavior. USDA For. Serv. Gen. Tech. Rep. INT-122.

Finney, M. A. 2006. In: Fuels management—how to measure success: conference proceedings. 2006 March 28-30; Portland, Oregon. Proceedings RMRS-P-41. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station: 213-220. (647 KB; 13 pages). <https://www.fs.usda.gov/research/treesearch/39312>

Fire Program Analysis (FPA) System and US Forest Service Missoula Fire Sciences Laboratory, 20140307, Burn Probabilities for the Conterminous US (270-m GRID) from Calibrated FSim Runs for the 2014 FPA Submissions [bp_20140307]; Fire Program Analysis (FPA) System, National Interagency Fire Center, Boise, ID.

Scott, J. H., & Burgan, R. E. (2005). Standard Fire Behavior Fuel Models: A Comprehensive Set for Use with Rothermel's Surface Fire Spread Model. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Gen. Tech. Rpt. RMRS-GTR-153.

Scott, J. H., & Reinhardt, E. D. (2001). Assessing the Crown Fire Potential by Linking Models of Surface and Crown Fire Behavior. Ft. Collins, CO, Rocky Mountain Research Station: USDA Forest Service, Research Paper RMRS-RP-29.

Scott, Joe. November 2006. Off the Richter: Magnitude and Intensity Scales for Wildland Fire. A non-published white paper prepared for the AFE Fire Congress, November 2006, San Diego, CA.

More information about the Fire Program Analysis project is available from <https://www.forestsandrangelands.gov/WFIT/applications/FPA/index.shtml>



SOUTHERN GROUP OF STATE FORESTERS WILDFIRE RISK ASSESSMENT PORTAL

APPENDIX D

WORKSHEETS
USED IN
PLANNING PROCESS

Date:

What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. Research newspapers and other historical records
2. Review existing plans and reports.
3. Talk to the experts in your community, state, or region.
4. Gather information on Internet Websites.
5. Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.

Task B. Focus on the most prevalent hazard in your community or state.

1. Go to hazard Websites.
2. Locate your community or state on the Website map.
3. Determine whether you are in a high-risk area. Get more localized information if necessary.
4. Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that pose a significant threat.

Use this space to record information you find for each of the hazards you will be **researching**. Attach additional pages as necessary. Note: **Bolded** hazards are addressed in this How-to Guide.

	Task A	Task B
Avalanche		
Coastal Erosion		
Coastal Storm	X	
Dam Failure	X	X
Drought	X	X
Earthquake	X	
Expansive Soils		
Extreme Heat	X	
Flood	X	X
Hailstorm	X	
Hurricane	X	
Land Subsidence		
Landslide		
Severe Winter Storm	X	X
Tornado	X	X
Tsunami		
Volcano		
Wildfire	X	X
Windstorm		
Lightning	X	X
Tropical Storms	X	X
Thunderstorm Winds	X	X

Hazard or Event Description (Type of hazard, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	Scale of Map
Dam Failure See Appendix A for this complete information	USGS, The Jefferson Reporter, NCDC	Only map of dams is available See Appendix A	
Drought See Appendix A for complete information	USDA, NCDC, SHELDUS, The Jefferson Reporter, Palmer Index	Maps area available for the state as a whole from the Palmer Index See Appendix A	
Flood See Appendix A for this complete information	USGS, NCDC, SHELDUS, The Jefferson Reporter,	Flood Plain Maps are available See Appendix A	
Severe Winter Weather See Appendix A for this complete information	SERRC, NCDC, SHELDUS, The Jefferson Reporter,	Maps are available in Appendix A	
Hail See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tornado See Appendix A for this complete information	Tornado History Project, NCDC, SHELDUS, The Jefferson Reporter,	Map is available See Chapter II. Section V.	
Lightning See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Tropical Storms See Appendix A for this complete information	NCDC, SHELDUS,	No map is available	
Thunderstorm Winds See Appendix A for this complete information	NCDC, SHELDUS,	No map is available Map is available for wind zone	
Wildfire See Appendix A for this complete information	GFC	Map is available for fire danger zones	

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Avera****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	648	648	100.000%	5,033,888	5,033,888	100.000%	246	246	100%
Commercial	30	30	100.000%	79,148	79,148	100.000%	246	246	100%
Industrial	0	0	100.000%	0	0	100.000%	0	0	100%
Agricultural/Forestry	16	16	100.000%	485,968	485,968	100.000%	4	4	100%
Religious/Non-profit	22	22	100.000%	458,000	458,000	100.000%	246	246	100%
Government	26	26	100.000%	198,958	198,958	100.000%	7	7	100%
Education	0	0	100.000%	0	0	100.000%	0	0	100%
Utilities	3	3	100.000%	377,345	377,345	100.000%	2	2	100%
Total	745	745	100.000%	6,633,305	6,633,305	100.000%	246	246	100%

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

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

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Avera****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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	678	0	0.00%	4,996,983	0	0.00%	246	0	0%
Commercial	33	0	0.00%	226,345	0	0.00%	246	0	0%
Industrial	0	0	0.00%	0	0	0.00%	0	0	0%
Agricultural/Forestry	15	0	0.00%	346,950	0	0.00%	4	0	0%
Religious/Non-profit	23	0	0.00%	391,112.50	0	0.00%	246	0	0%
Government	24	0	0.00%	161,477.50	0	0.00%	7	0	0%
Education	0	0	0.00%	0	0	0.00%	0	0	0%
Utilities	3	0	0.00%	385,070	0	0.00%	2	0	0%
Total	776	0	0.00%	6,507,938	0	0.00%	246	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Avera****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	678	678	100.00%	4,996,983	4,996,983	100.00%	246	246	100%
Commercial	33	33	100.00%	226,345	226,345	100.00%	246	246	100%
Industrial	0	0	100.00%	0	0	100.00%	0	0	100%
Agricultural/Forestry	15	15	100.00%	346,950	346,950	100.00%	4	4	100%
Religious/Non-profit	23	23	100.00%	391,112.50	391,112.50	100.00%	246	246	100%
Government	24	24	100.00%	161,477.50	161,477.50	100.00%	7	7	100%
Education	0	0	100.00%	0	0	100.00%	0	0	100%
Utilities	3	3	100.00%	385,070	385,070	100.00%	2	2	100%
Total	776	776	100.00%	6,507,938	6,507,938	100.00%	246	246	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Bartow****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	533	533	100.000%	6,397,115	6,397,115	100.000%	286	286	100%
Commercial	94	94	100.000%	1,210,733	1,210,733	100.000%	286	286	100%
Industrial	0	0	100.000%	-	-	100.000%	0	0	100%
Agricultural/Forestry	4	4	100.000%	1,977,710	1,977,710	100.000%	0	0	100%
Religious/Non-profit	15	15	100.000%	324,838	324,838	100.000%	286	286	100%
Government	27	27	100.000%	565,448	565,448	100.000%	7	7	100%
Education	0	0	100.000%	-	-	100.000%	0	0	100%
Utilities	4	4	100.000%	1,977,710	1,977,710	100.000%	2	2	100%
Total	677	677	100.000%	12,453,553	12,453,553	100.000%	286	286	100%

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

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

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Bartow****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.

Flood	Number of Structures			Value of Structures			Number of People		
	# 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	568	3	0.528%	6,228,935	32,899	0.528%	286	8	3%
Commercial	105	0	0.000%	1,405,670	0	0.000%	286	0	0%
Industrial	0	0	0.000%	0	0	0.000%	0	0	0%
Agricultural/Forestry	23	2	8.696%	619,517.5	53,871	8.696%	0	0	0%
Religious/Non-profit	18	0	0.000%	290,102.5	0	0.000%	286	0	0%
Government	26	0	0.000%	455,605	0	0.000%	7	0	0%
Education	0	0	0.000%	0	0	0.000%	0	0	0%
Utilities	5	0	0.000%	2,059,325	0	0.000%	2	0	0%
Total	745	5	0.671%	11,059,155	86,770	0.785%	286	8	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Bartow****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	568	568	100.00%	6,228,935	6,228,935	100.00%	286	286	100%
Commercial	105	105	100.00%	1,405,670	1,405,670	100.00%	286	286	100%
Industrial	0	0	100.00%	0	0	100.00%	0	0	100%
Agricultural/Forestry	23	23	100.00%	619,517.5	619,517.5	100.00%	0	0	100%
Religious/Non-profit	18	18	100.00%	290,102.5	290,102.5	100.00%	286	286	100%
Government	26	26	100.00%	455,605	455,605	100.00%	7	7	100%
Education	0	0	100.00%	0	0	100.00%	0	0	100%
Utilities	5	5	100.00%	2,059,325	2,059,325	100.00%	2	2	100%
Total	745	745	100.00%	11,059,155	11,059,155	100.00%	286	286	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Jefferson County All Jurisdictions****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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	27,827	87	0.313%	344,194,010	1,102,385	0.320%	16,930	191	1%
Commercial	3,315	0	0.000%	126,034,542.50	0	0.000%	16,930	0	0%
Industrial	358	3	0.838%	135,832,145	1,208,943	0.890%	1,865	114	6%
Agricultural/Forestry	7,690	114	1.482%	467,612,760	6,262,049	1.339%	622	43	7%
Religious/Non-profit	748	0	0.000%	28,170,852.50	0	0.000%	16,930	0	0%
Government	617	0	0.000%	46,467,097.50	0	0.000%	278	0	0%
Education	17	0	0.000%	10,481,132.50	0	0.000%	3,071	0	0%
Utilities	54	4	7.407%	129,575,762.50	2,858,489	2.206%	30	1	3%
Total	40,626	208	0.512%	1,288,368,303	11,431,866	0.887%	16,930	349	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Jefferson County All Jurisdictions****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	27,827	27,827	100.00%	344,194,010	344,194,010	100.00%	16,930	16,930	100%
Commercial	3,315	3,315	100.00%	126,034,542.50	126,034,542.50	100.00%	16,930	16,930	100%
Industrial	358	358	100.00%	135,832,145	135,832,145	100.00%	1,865	1,865	100%
Agricultural/Forestry	7,690	7,690	100.00%	467,612,760	467,612,760	100.00%	622	622	100%
Religious/Non-profit	748	748	100.00%	28,170,852.50	28,170,852.50	100.00%	16,930	16,930	100%
Government	617	617	100.00%	46,467,097.50	46,467,097.50	100.00%	278	278	100%
Education	17	17	100.00%	10,481,132.50	10,481,132.50	100.00%	3,071	3,071	100%
Utilities	54	54	100.00%	129,575,762.50	129,575,762.50	100.00%	30	30	100%
Total	40,626	40,626	100.00%	1,288,368,303	1,288,368,303	100.00%	16,930	16,930	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Jefferson County All Jurisdictions****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	25,744	25,744	100.000%	339,986,035	339,986,035	100.000%	16,930	16,930	100%
Commercial	3,107	3,107	100.000%	128,821,310	128,821,310	100.000%	16,930	16,930	100%
Industrial	369	369	100.000%	228,903,453	228,903,453	100.000%	1,865	1,865	100%
Agricultural/Forestry	6,789	6,789	100.000%	495,536,008	495,536,008	100.000%	622	622	100%
Religious/Non-profit	680	680	100.000%	28,022,263	28,022,263	100.000%	16,930	16,930	100%
Government	587	587	100.000%	48,191,470	48,191,469	100.000%	278	278	100%
Education	38	38	100.000%	10,745,091	10,745,091	100.000%	3,071	3,071	100%
Utilities	49	49	100.000%	117,891,820	117,891,820	100.000%	30	30	100%
Total	37,363	37,363	100.000%	1,398,097,448	1,398,097,447	100.000%	16,930	16,930	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Louisville****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	3,318	3,318	100.000%	46,372,040	46,372,040	100.000%	2,493	2,493	100%
Commercial	902	902	100.000%	38,884,098	38,884,098	100.000%	2,493	2,493	100%
Industrial	24	24	100.000%	1,299,218	1,299,218	100.000%	318	318	100%
Agricultural/Forestry	23	23	100.000%	675,083	675,083	100.000%	8	8	100%
Religious/Non-profit	97	97	100.000%	6,659,340	6,659,340	100.000%	2,493	2,493	100%
Government	181	181	100.000%	20,256,798	20,256,798	100.000%	100	100	100%
Education	3	3	100.000%	55,940	55,940	100.000%	568	568	100%
Utilities	3	3	100.000%	3,894,490	3,894,490	100.000%	6	6	100%
Total	4,551	4,551	100.000%	118,097,005	118,097,005	100.000%	2,493	2,493	100%

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

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

GEMA Worksheet #3a
Jurisdiction: Louisville
Hazard: Flood

Inventory of Assets

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.

Flood	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	3,439	0	0.00%	45,890,437.50	0	0.00%	2,493	0	0%
Commercial	966	0	0.00%	38,691,782.50	0	0.00%	2,493	0	0%
Industrial	25	0	0.00%	1,000,982.50	0	0.00%	318	0	0%
Agricultural/Forestry	20	8	40.00%	469,970	187,988	40.00%	8	8	0%
Religious/Non-profit	103	0	0.00%	6,887,522.50	0	0.00%	2,493	0	0%
Government	183	0	0.00%	18,512,977.50	0	0.00%	100	0	0%
Education	0	0	0.00%	0.00	0	0.00%	568	0	0%
Utilities	5	1	20.00%	3,950,737.50	790,148	20.00%	6	1	0%
Total	4,741	9	0.190%	115,404,410	978,136	0.848%	2,493	9	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Louisville****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	3,439	3439	100.000%	45,890,437.50	45,890,437.50	100.000%	2,493	2,493	100%
Commercial	966	966	100.000%	38,691,782.50	38,691,782.50	100.000%	2,493	2,493	100%
Industrial	25	25	100.000%	1,000,982.50	1,000,982.50	100.000%	318	318	100%
Agricultural/Forestry	20	20	100.000%	469,970	469,970	100.000%	8	8	100%
Religious/Non-profit	103	103	100.000%	6,887,522.50	6,887,522.50	100.000%	2,493	2,493	100%
Government	183	183	100.000%	18,512,977.50	18,512,977.50	100.000%	100	100	100%
Education	0	0	100.000%	0.00	0.00	100.000%	568	568	100%
Utilities	5	5	100.000%	3,950,737.50	3,950,737.50	100.000%	6	6	100%
Total	4,741	4,741	100.000%	115,404,410	115,404,410	100.000%	2,493	2,493	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Stapleton****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	812	812	100.000%	8,880,363	8,880,363	100.000%	438	438	100%
Commercial	75	75	100.000%	873,823	873,823	100.000%	438	438	100%
Industrial	4	4	100.000%	19,825	19,825	100.000%	0	0	100%
Agricultural/Forestry	6	6	100.000%	1,013,588	1,013,588	100.000%	4	4	100%
Religious/ Non-profit	19	19	100.000%	423,808	423,808	100.000%	438	438	100%
Government	32	32	100.000%	678,190	678,190	100.000%	12	12	100%
Education	9	9	100.000%	180,330	180,330	100.000%	0	0	100%
Utilities	6	6	100.000%	1,013,588	1,013,588	100.000%	2	2	100%
Total	963	963	100.000%	13,083,513	13,083,513	100.000%	438	438	100%

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

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

GEMA Worksheet #3a
Jurisdiction: Stapleton
Hazard: Flood

Inventory of Assets

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.

Flood	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	872	15	1.720%	8,862,469	152,451	1.720%	438	27	6%
Commercial	81	0	0.00%	805,115	0	0.000%	438	0	0%
Industrial	0	0	0.00%	0	0	0.000%	0	0	0%
Agricultural/Forestry	57	1	1.754%	1,369,993	24,035	1.754%	4	4	100%
Religious/ Non-profit	23	0	0.00%	376,522.50	0	0.000%	438	0	0%
Government	42	0	0.00%	787,460	0	0.000%	12	0	0%
Education	0	0	0.00%	0	0	0.000%	0	0	0%
Utilities	6	0	0.00%	1,165,475	0	0.000%	2	0	0%
Total	1,081	16	1.480%	13,367,032.50	176,486	1.320%	438	31	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Stapleton****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	872	872	100.00%	8,862,469	8,862,469	100.00%	438	438	100%
Commercial	81	81	100.00%	805,115	805,115	100.00%	438	438	100%
Industrial	0	0	100.00%	0	0	100.00%	0	0	100%
Agricultural/Forestry	57	57	100.00%	1,369,993	1,369,993	100.00%	4	4	100%
Religious/ Non-profit	23	23	100.00%	376,522.50	376,522.50	100.00%	438	438	100%
Government	42	42	100.00%	787,460	787,460	100.00%	12	12	100%
Education	0	0	100.00%	0	0	100.00%	0	0	100%
Utilities	6	6	100.00%	1,165,475	1,165,475	100.00%	2	2	100%
Total	1,081	1,081	100.00%	13,367,032.50	13,367,032.50	100.00%	438	438	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Unincorporated Jefferson County****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake****Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.**

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	16,168	16,168	100.00%	201,060,195	201,060,195	100.000%	9,219	9,219	100%
Commercial	924	924	100.00%	35,222,695	35,222,695	100.000%	9,219	9,219	100%
Industrial	157	157	100.00%	68,477,190	68,477,190	100.000%	781	781	100%
Agricultural/Forestry	7,501	7,501	100.00%	461,839,062.50	461,839,062.50	100.000%	586	586	100%
Religious/ Non-profit	402	402	100.00%	13,814,122.50	13,814,122.50	100.000%	9,219	9,219	100%
Government	132	132	100.00%	18,872,065	18,872,065	100.000%	79	79	100%
Education	15	15	100.00%	7,145,790	7,145,790	100.000%	1,259	1,259	100%
Utilities	20	20	100.00%	112,850,212.50	112,850,212.50	100.000%	12	12	100%
Total	25,319	25,319	100.00%	919,281,332.50	919,281,332.50	100.000%	9,219	9,219	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Unincorporated Jefferson County****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	14,580	14,580	100.000%	194,400,125	194,400,125	100.000%	9,219	9,219	100%
Commercial	911	911	100.000%	41,068,853	41,068,853	100.000%	9,219	9,219	100%
Industrial	165	165	100.000%	171,488,863	171,488,863	100.000%	781	781	100%
Agricultural/Forestry	6,663	6,663	100.000%	488,564,273	488,564,273	100.000%	586	586	100%
Religious/ Non-profit	373	373	100.000%	13,881,963	13,881,963	100.000%	9,219	9,219	100%
Government	117	117	100.000%	18,480,838	18,480,838	100.000%	79	79	100%
Education	22	22	100.000%	9,945,283	9,945,283	100.000%	1,259	1,259	100%
Utilities	19	19	100.000%	102,098,505	102,098,505	100.000%	12	12	100%
Total	22,850	22,850	100.000%	1,039,928,700	1,039,928,700	100.000%	9,219	9,219	100%

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

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

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Unincorporated Jefferson County****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.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	16,168	15	0.093%	201,060,195	186,535	0.093%	9,219	48	1%
Commercial	924	0	0.000%	35,222,695	0	0.000%	9,219	0	0%
Industrial	157	0	0.000%	68,477,190	0	0.000%	781	0	0%
Agricultural/Forestry	7,501	87	1.160%	461,839,062.50	5,356,619	1.160%	586	27	5%
Religious/ Non-profit	402	0	0.000%	13,814,122.50	0	0.000%	9,219	0	0%
Government	132	0	0.000%	18,872,065	0	0.000%	79	0	0%
Education	15	0	0.000%	7,145,790	0	0.000%	1,259	0	0%
Utilities	20	0	0.000%	112,850,212.50	0	0.000%	12	0	0%
Total	25,319	102	0.403%	919,281,332.50	5,543,154	0.603%	9,219	75	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wadley****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	2,852	2,852	100.000%	33,301,175	33,301,175	100.000%	2,061	2,061	100%
Commercial	364	364	100.000%	13,931,848	13,931,848	100.000%	2,061	2,061	100%
Industrial	104	104	100.000%	36,872,950	36,872,950	100.000%	454	454	100%
Agricultural/Forestry	50	50	100.000%	1,783,253	1,783,253	100.000%	12	12	100%
Religious/ Non-profit	54	54	100.000%	1,726,628	1,726,628	100.000%	2,061	2,061	100%
Government	102	102	100.000%	3,002,377	3,002,377	100.000%	36	36	100%
Education	2	2	100.000%	305,201	305,201	100.000%	292	292	100%
Utilities	10	10	100.000%	4,684,903	4,684,903	100.000%	3	3	100%
Total	3,538	3,538	100.000%	95,608,333	95,608,333	100.000%	2,061	2,061	100%

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

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

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wadley****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.

Flood	Number of Structures			Value of Structures			Number of People		
	# 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	3002	15	0.500%	31,666,725	158,228	0.500%	2,061	15	1%
Commercial	411	0	0.000%	15,354,130	0	0.000%	2,061	0	0%
Industrial	106	2	1.887%	56,965,835	1,074,827	1.887%	454	2	0%
Agricultural/Forestry	53	12	22.642%	2,068,570	468,355	22.642%	12	12	100%
Religious/ Non-profit	61	0	0.000%	1,738,690	0	0.000%	2,061	0	0%
Government	95	0	0.000%	1,783,117.50	0	0.000%	36	0	0%
Education	2	0	0.000%	3,335,342.50	0	0.000%	292	0	0%
Utilities	10	1	10.000%	5,325,452.50	532,545	10.000%	3	1	33%
Total	3740	30	0.802%	118,237,862.50	2,233,956	1.889%	2,061	30	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wadley****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	3,002	3,002	100.00%	31,666,725	31,666,725	100.00%	2,061	2,061	100%
Commercial	411	411	100.00%	15,354,130	15,354,130	100.00%	2,061	2,061	100%
Industrial	106	106	100.00%	56,965,835	56,965,835	100.00%	454	454	100%
Agricultural/Forestry	53	53	100.00%	2,068,570	2,068,570	100.00%	12	12	100%
Religious/ Non-profit	61	61	100.00%	1,738,690	1,738,690	100.00%	2,061	2,061	100%
Government	95	95	100.00%	1,783,117.50	1,783,117.50	100.00%	36	36	100%
Education	2	2	100.00%	3,335,342.50	3,335,342.50	100.00%	292	292	100%
Utilities	10	10	100.00%	5,325,452.50	5,325,452.50	100.00%	3	3	100%
Total	3,740	3,740	100.00%	118,237,862.50	118,237,862.50	100.00%	2,061	2,061	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wrens****Hazard: Dam Failure**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	3,001	3,001	100.000%	45,601,330	45,601,330	100.000%	2,187	2,187	100%
Commercial	731	731	100.000%	32,772,810	32,772,810	100.000%	2,187	2,187	100%
Industrial	72	72	100.000%	19,222,598	19,222,598	100.000%	312	312	100%
Agricultural/Forestry	27	27	100.000%	1,036,135	1,036,135	100.000%	8	8	100%
Religious/ Non-profit	100	100	100.000%	4,547,688	4,547,688	100.000%	2,187	2,187	100%
Government	102	102	100.000%	5,008,863	5,008,862	100.000%	37	37	100%
Education	2	2	100.000%	258,338	258,338	100.000%	952	952	100%
Utilities	4	4	100.000%	3,845,280	3,845,280	100.000%	3	3	100%
Total	4,039	4,039	100.000%	112,293,040	112,293,039	100.000%	2,187	2,187	100%

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

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

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wrens****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.

Flood	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	3,100	39	1.258%	45,488,267.50	572,272	1.258%	2,187	93	4%
Commercial	795	0	0.000%	34,328,805	0	0.000%	2,187	0	0%
Industrial	70	1	1.429%	9,388,137.50	134,116	1.429%	312	112	36%
Agricultural/Forestry	21	4	19.048%	898,697.50	171,180	19.048%	8	0	0%
Religious/ Non-profit	118	0	0.000%	4,672,780	0	0.000%	2,187	0	0%
Government	115	0	0.000%	5,894,395	0	0.000%	37	0	0%
Education	0	0	0.000%	0	0	0.000%	952	0	0%
Utilities	5	2	40.000%	3,839,490	1,535,796	40.000%	3	0	0%
Total	4,224	46	1.089%	104,510,572.50	2,413,364	2.309%	2,187	205	

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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction: Wrens****Hazard: Drought, Wildfire, Severe Weather, Winter Storm, Earthquake**

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

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# 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	3,100	3,100	100.00%	45,488,267.50	45,488,267.50	100.00%	2,187	2,187	100%
Commercial	795	795	100.00%	34,328,805	34,328,805	100.00%	2,187	2,187	100%
Industrial	70	70	100.00%	9,388,137.50	9,388,137.50	100.00%	312	312	100%
Agricultural/Forestry	21	21	100.00%	898,697.50	898,697.50	100.00%	8	8	100%
Religious/ Non-profit	118	118	100.00%	4,672,780	4,672,780	100.00%	2,187	2,187	100%
Government	115	115	100.00%	5,894,395	5,894,395	100.00%	37	37	100%
Education	0	0	100.00%	0	0	100.00%	952	952	100%
Utilities	5	5	100.00%	3,839,490	3,839,490	100.00%	3	3	100%
Total	4,224	4,224	100.00%	104,510,572.50	104,510,572.50	100.00%	2,187	2,187	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?	Y	
3. Is there enough data to determine which assets are subject to the greatest potential damages?	Y	
4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards?	Y	
5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards?	Y	
6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence?	Y	
7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives?		N

Jefferson County
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1						#DIV/0!	#DIV/0!	0	0	0
Hurricane Surge - Cat 2						#DIV/0!	#DIV/0!	0	0	0
Hurricane Surge - Cat 3						#DIV/0!	#DIV/0!	0	0	0
Hurricane Surge - Cat 4						#DIV/0!	#DIV/0!	0	0	0
Hurricane Surge - Cat 5						#DIV/0!	#DIV/0!	0	0	0
Hurricane Wind						#DIV/0!	#DIV/0!	0	0	0
Floods	9	95	1	4	8	10.56	9.47%	0.1	0.2	0.16
Wildfire	180	65	290	1000	2333	0.36	276.92%	29	50	46.66
Earthquake	0	68	0	0	0	#DIV/0!	0.00%	0	0	0
Tornado	15	54	3	6	12	3.60	27.78%	0.3	0.3	0.24
Thunderstorm	89	63	26	48	86	0.71	141.27%	2.6	2.4	1.72
Hail	32	65	3	17	30	2.03	49.23%	0.3	0.85	0.6
Drought	22	24	15	20	22	1.09	91.67%	1.5	1	0.44
Extreme Heat	4	74	0	3	4	18.50	5.41%	0	0.15	0.08
Winter Weather	17	74	2	6	17	4.35	22.97%	0.2	0.3	0.34
Lightning	4	74	0	1	4	18.50	5.41%	0	0.05	0.08
Landslide						#DIV/0!	#DIV/0!	0	0	0
Dam Failure	1	34	0	0	1	34.00	2.94%	0	0	0.02
Tropical Storm	13	22	3	11	13	1.69	59.09%	0.3	0.55	0.26
HazMat Release (fixed)						#DIV/0!	#DIV/0!	0	0	0
HazMat Release (trans)						#DIV/0!	#DIV/0!	0	0	0
Radiological Release						#DIV/0!	#DIV/0!	0	0	0

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval. For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past

APPENDIX E

COPIES OF REQUIRED PLANNING DOUCMENTATIONS

Public Meeting

Jefferson County Pre-Disaster Plan

Kickoff Meeting

July 23 @ 10:00 A.M.

JEFFERSON COUNTY EOC

(FORMER ARMORY BUILDING)

1841 Hwy 24 West, Louisville, GA 30434

Jefferson County is updating its FEMA-approved Pre-Disaster Hazard Mitigation Plan for 2025. You're invited to learn about the plan and give your input regarding local natural hazards.

Call Jefferson Co. EMA @ 478 625 4102 for more info.

Persons with special needs relating to handicapped accessibility or foreign language shall contact the Jefferson County Board of Commissioners at (478) 625-3332 before 07/19/24.

LOCALiQ

The Augusta Chronicle
Athens Banner-Herald
Savannah Morning News

PO Box 631697 Cincinnati, OH 45263-1697

AFFIDAVIT OF PUBLICATION

April Young
Ann Tanner
Not specified
Po Box 658

Louisville GA 30434-0658

STATE OF GEORGIA, COUNTY OF JEFFERSON & GLASCOCK

The Jefferson News & Farmer, a newspaper that is generally circulated in the counties of Jefferson & Glascock and in the area adjacent thereto, State of Georgia, printed and published and personal knowledge of the facts herein state and that the notice hereto annexed was Published in said newspapers in the issues dated on:

07/18/2024

and that the fees charged are legal.
Sworn to and subscribed before on 07/18/2024

Legal Clerk

Notary, State of WI, County of Brown

My commission expires

Publication Cost:	\$52.92	
Tax Amount:	\$0.00	
Payment Cost:	\$52.92	
Order No:	10379381	# of Copies:
Customer No:	757732	1
PO #:	Pre- Disaster Hazard Mitigation Plan Update	

THIS IS NOT AN INVOICE!

Please do not use this form for payment remittance.

AMY KOKOTT
Notary Public
State of Wisconsin












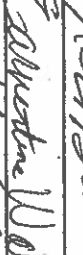


Public Meeting

Jefferson County Pre- Disaster Hazard Mitigation Plan Update

Jefferson County will begin its five-year update of their FEMA approved Pre-Disaster Hazard Mitigation Plan. As part of the planning process, Jefferson County is holding a public kick-off meeting on July 23, 2024 at 10:00 am at the Jefferson County EOC Building (Former Armory Building), 1841 Hwy 24 West, Louisville, 30434. Civic organizations, local businesses, and citizens of Jefferson County and the Cities of Avera, Bartow, Louisville, Stapleton, Wadley, and Wrens are encouraged to attend. The purpose of the meeting will be to outline the planning process and gather public input. Please contact Jefferson County EMA Director Jim Anderson at 478-625-4102 if you have any questions.

Jefferson County is committed to providing all persons with equal access to its services, programs, activities, education and employment regardless of race, color, national origin, religion, sex, familial status, disability or age. Persons with special needs relating to handicapped accessibility or foreign language shall contact Jerry Coalson, County Administrator at 478-625-3332 prior to July 19, 2024. This person can be located at Jefferson County Board of Commissioners, 217 E Broad Street, Louisville, GA between the hours of 8:30 am – 4:30 pm, Monday through Friday, except holidays. Persons with hearing disabilities can contact the Georgia Relay Service at (TDD) 1-800-255-0056 or (Voice) 1-800-255-0135.

EOC CHECK IN / OUT

INCIDENT / MEETING:		Hazard Mitigation Kick-Off Meeting		DATE	07/23/2024
NAME	AGENCY	SIGNATURE	EMAIL		
Jim Andersen	Jefferson Co Sur		janderson@jeffersoncountygov		
Anna Anderson	Jefferson Co EMA		amandria.anderson@jefferson-co		
Jerry Collier	Jeffers - Co		jcollier@jefferscountygov		
Jeanna A. Hattaway	Jefferson Co Health Dept		jeanna.hattaway@jeffersonco.gov		
Kan H. Hattaway	BDF		kh.hattaway@jefferson.k12.ga.us		
Sara Turner	JCRBC		turners@jefferson.k12.ga.us		
April Evans	CSNA DC		ayans@csna.usa.gov		
Rich H. Hattaway	Wien's		same		
Patricia Hattaway	New T. Turner		phattaway@newtturner.com		
James Davis	LFID		jdavis@louisville1995.gov		
Keith Boulanger	Wheas FD		k.boulanger@wheasfd.com		
Christine Walker					
Richy Supp	City of Louisville		rsupp@louisville.gov		
Jefferson Tammy Bennett	Jeff. Co. Leisure		tbennett@jeffersoncountygov		

JEFFERSON COUNTY HAZARD MITIGATION PLAN MEETING
FRIDAY, AUGUST 23, 2024 10:00 AM

NAME	ORGANIZATION	TITLE	EMAIL
Leigh Davis	Jefferson Co. Health Dept	EM-County Nurse Manager	leigh.davis@dcph.ga.gov
Leah Johnson	Jefferson Co EOC	Operations	leahjohn@jefferson.k12.ga.us
Tim Moor	Jefferson Co Sheriff's Office	Chief Brady	timmoor@jeffersoncountyga.gov
Jimmy Miller	Cowhatche AD	Chief	jmiller@cowhatchega.gov
James Davis	Louisville Fire	Chief	jdavis@louisvillega.gov
Keith Bondman	NR&S Inc	Chief	firechief@cityofnreus.com
Dr. Theresa	NR&S	Manager	same

JEFFERSON COUNTY HAZARD MITIGATION PLAN MEETING
FRIDAY, AUGUST 23, 2024 10:00 AM

NAME	ORGANIZATION	TITLE	EMAIL
Jim Anderson	Jefferson Co EMA	Director	janderson@jeffersoncountygov.gov
Ricky Sapp	City of Louisville	Administrator	rsapp@louisvillegov.gov

AGENDA

Jefferson County Pre-Disaster Mitigation Meeting August 23, 2024 10:00 AM

Chapter 1 updates

Update chart on page 11

Update rail traffic, air service, electricity page 14

Update natural gas, sewer, sewer and wastewater systems, water distribution systems, solid waste, and communications page 15

Update fire and emergency services page 16

Update fire department chart, law enforcement chart, and jail info page 17

Chapter 3 updates

Update goals

Update objectives on pages 63, 64, 65, 66

*If we have enough time go over mitigation actions

*Need annual budgets from each jurisdiction

Next meeting September 12th at 10 am

Contact:

CSRA Regional Commission

April Young

706-210-2022

ayoung@csrarc.ga.gov

JEFFERSON COUNTY HAZARD MITIGATION PLAN MEETING
THURSDAY, SEPTEMBER 12, 2024 10:00 AM

NAME	ORGANIZATION	TITLE	EMAIL
Terry Coleson	Jefferson County	County Administrator	jcoalsan@jeffersoncountyga.gov
DR. K. B. BARNES FIRE CHIEF	DEPT'S	Chief	same
Keith Barnhart	WRENS	FIRE CHIEF	k.barnhart@wrensis.com
Leigh Davis	Jefferson Co. HEAT DEPT	Jefferson Co. HEAT DEPT	leigh.davis@edph.ga.gov
Scott Tiner	JEFFERSON CO. BOE	DIRECTOR OF MAINTENANCE	tiners@jefferson.k12.ga.us
Anna Anderson	Jefferson Co EMA	EM Specialist	annamaria_anderson@jefferson.k12.ga.us
Jim Anderson	Jefferson Co EMT-045	Director	janderson@jeffersoncountyga.gov

JEFFERSON COUNTY HAZARD MITIGATION PLAN MEETING
THURSDAY, SEPTEMBER 12, 2024 10:00 AM

NAME	ORGANIZATION	TITLE	EMAIL
Tammie Bennett	Jeff. Co. Leisure Center	Sr. Director	tbenmett@jeffersoncountyga.gov
Tim Moore	Jefferson Co Sheriff's Office	Chief Deputy	Tmoore@jeffersoncountyga.gov
John Maynard	Wrens Police Department	Chief	wrenspolicechief@cityofwrens.com