Clinch County, Georgia



Hazard Mitigation Plan 2020-2025

Including the Cities of Argyle, Du Pont, Fargo, and Homerville

This Plan produced for the Clinch County Board of Commissioners by the Southern Georgia Regional Commission through funding provided by the Federal Emergency Management Agency and the Georgia Emergency Management Agency

Effective April 7, 2020 – April 7, 2025

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Chapter 1: Introduction to the Planning Process

Summary of changes:

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

CHAPTER 1 Section	Updates to Section
I. Purpose, Need, Authority, and Statement of Problem	• Language updated to reflect that this was an update to the existing plan
II. Local Methodology, Plan Update Process, and Participants	 Planning Committee reviewed each section and updated as necessary
III. Plan Review, Analysis, and Revision	Planning Committee reviewed each section Ludates made using national states.
	 Updates made using national, state, and local data
IV. Organization of Plan	 Consistent with original plan
V. Local Hazard, Risk and Vulnerability	• Updates made using national, state, and
(HRV) Summary, Local Mitigation	local data
Goals, and Objectives	
VI. Multi-Jurisdictional Special	 No major changes from original plan
Considerations	
VII. Adoption, Implementation,	 Evaluation method revised and
Monitoring, and Evaluation	updated.
VIII. Community Data	 Updates made using most recent available national, state, and local data

Table 1.1: Overview of updates to Chapter 1: Introduction to the Planning Process

Section I. Purpose and Need, Authority and Statement of Problem

This document is the official plan update to the previous Clinch County Pre-Disaster Mitigation Plan Update, as approved by the Georgia Emergency Management Agency (GEMA) and the Federal Emergency Management Agency (FEMA), which took effect on April 8, 2015 and expires on April 7, 2020.

The purpose of this document is to provide an overview of the hazards that may impact Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, and to outline the community's plans to mitigate the potential loss of life and damages to property and the economy that could occur with these events. Hazard Mitigation is a means to address and proactively reduce the potential damage that may be caused by natural or man-made disasters.

This Plan is a direct result of research and a planning and public involvement process undertaken by the local government officials and citizens of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville after they formed the Clinch County Hazard Mitigation Plan Update Committee (hereafter known as the HMPUC). This Plan is the result of their commitment to reduce

the risks of natural hazards and the effects of those natural hazards to their communities. The Cities of Argyle, Du Pont, Fargo, and Homerville are incorporated cities located in Clinch County.

Authority for the development of this Plan was given by the Clinch County Commission as a result of their execution of the Grantee-Subgrantee Agreement for the Clinch County Hazard Mitigation Grant Program (HMGP) Planning Project; and by the Cities of Argyle, Du Pont, Fargo, and Homerville, located within Clinch County, through their participation in the planning project.

In order to initiate an outreach program to neighboring communities, governments, local and regional agencies, and to agencies authorized to regulate development, business, and the public, two Public Hearing Notices were published in the legal organ of the local newspaper. In addition, e-mail lists of stakeholders were kept updated and those on them were informed of meetings through e-mails, letters, and/or telephone calls. Surrounding county EMA Directors were notified of the plan update and invited to participate in the process via phone calls. Additionally, several area county Hazard Mitigation Plans were being updated at the same time and an active meeting list was maintained for scheduling purposes.

Planning Division staff from the Southern Georgia Regional Commission, which represents eighteen counties in the region (including Clinch County), attended the Clinch County meetings. They participated in all aspects of the planning process and provided a regional perspective in the formation of the multi-jurisdictional Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville Hazard Mitigation Plan.

Through the above efforts, the multi-jurisdictional Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville Hazard Mitigation Plan was updated, including a comprehensive range of Mitigation Goals, Objectives, and Action Steps (see Chapter 4) which will assist the local governments in emphasizing a more direct approach to Hazard Mitigation. The long-term goal is to reduce potential natural disaster losses to life, property, and the economy through Hazard Mitigation efforts.

Section II. Local Methodology, Plan Update Process, and Participants

A. Overview

This Hazard Mitigation Plan Update encompasses the jurisdictions of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, located in Southern Georgia. Each of these jurisdictions also participated in the previous Hazard Mitigation Plan update. The Southern Georgia Regional Commission provided technical assistance. A local Hazard Mitigation Plan Update Committee (Clinch County HMPUC) was formed, and a year-long planning effort was undertaken, the final product of which was a Plan Update containing updated Mitigation Goals, Objectives, and Action Steps to reduce or eliminate the potential for loss of life and damage to property and the economy caused by natural disasters (see Chapter 4).

Potential members of the Clinch County HMPUC were contacted by telephone or by letter/e-mail concerning their participation on the Committee. Southern Georgia Regional Commission (SGRC) staff provided technical assistance to the Clinch County HMPUC. The Clinch County HMPUC was comprised of representatives from Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville and also included representatives from other groups and individuals, as shown below, who attended meetings and/or conducted research:

Jurisdiction	Title	Name
Clinch County EMA	Director	Will Joyce
Clinch County BOC	County Administrator	Jaclyn James
Clinch County BOC	Chairman	Kenton McLain
Clinch County Health Dept.	Nurse Manager	Amber Kinsey
City of Homerville	City Manager	Nan Mikell
GEMA	Haz Mit Planner	Shelby Meyers
SGRC	Planner	Loretta Hylton
City of Fargo	City Clerk	Lisa Johnson
City of Fargo	Mayor	John L. Griffis, Jr.
River Brook Nursing Home	Administrator	Valier Fawcett
Clinch County EMS	Interim Director	Troy F. Humbers
Town of Du Pont	Town Clerk	Jane Douglas
Town of Argyle	Mayor	Kaye Riley
Town of Du Pont	Mayor	James Rawls

The Committee held the following meetings, the sign-in sheets of which are included in Appendix E:

- Kick-off public hearing May 10, 2018
- First workshop July 23, 2018
- Second workshop September 24, 2018
- Final public hearing October 6, 2020

Building upon the previous Plan, each chapter was reviewed chronologically with updated hazard, risk, and vulnerability data, as well as previous accomplishments of mitigation strategy efforts.

Open discussion was permitted at all public meetings for suggestions and/or comments regarding the plan update. Also, during general question and answer periods, comments (if any) were noted by the Southern Georgia Regional Commission staff and incorporated into the plan as appropriate.

The Towns of Argyle and DuPont were not able to send representatives to attend the regular meetings. Therefore, SGRC staff held individual meetings with their mayors and city clerks and conducted monthly phone calls to update them on the progress of the plan update. This allowed these jurisdictions to review drafts of the plan on a monthly basis while the plan was being developed, and provide input as needed.

Copies of the previous Plan were made available at each meeting, while relevant chapters and sections under discussion were photocopied and distributed to those in attendance for comments. Outside of the formal meetings, parts of the plan were e-mailed to certain individuals who were unable to attend the meetings, and their comments were sought. Copies of the previous Plan and the draft Plan Update document were also available on the Southern Georgia Regional Commission website and from the local EMA office and city and county government offices.

For the plan update, the Hazard Mitigation Plan Update Committee (HMPUC) used the prior Hazard Mitigation Plan as a basis, reviewing all chapters and sections and updating them as appropriate using national, state, and local data sources. The HMPUC reviewed the individual parts of the prior plan (with an emphasis on the hazards, goals, objectives, and action steps), and updated these elements through open discussion in which updates were noted by SGRC staff, who then used notes from the workshops to create the new Hazard Mitigation Plan document. The Wildfire section was updated using the Georgia Forestry Commission's "Community Wildfire Protection Plan" (see Appendix C). The CWPP was consulted to ensure consistency between the CWPP and HMP, and all action items from the CWPP that were still relevant were included as action steps in the HMP. Land use descriptions, information about zoning, and information about community services were updated using the current joint Comprehensive Plan for the County and City. Other documents used were the local Emergency Operations Plan, the previous Hazard Mitigation Plan, the State of Georgia Hazard Mitigation Plan, and information from the National Climatic Data Center (NCDC). The State Hazard mitigation plan was consulted to ensure the HMP would be consistent with this plan, and data from the NCDC were used to create the Hazard Frequency Table and associated information regarding each hazard, which can be found in Chapter 2. The County and City do not have a Flood Mitigation Assistance Plan or a Flood Insurance Study.

B. Public Comment and Participation

The publication of a Public Notice in the legal organ is considered the legal method of notifying the public and inviting them to meetings.

The public was invited to attend and comment during two public hearings. The "kick-off" public hearing was advertised in the local newspaper (meeting advertisements and sign-in sheets are provided in Appendix E). A second and final public hearing was held on October 6, 2020 and was advertised in the local newspaper (see Appendix E). Citizens, including staff and members of the HMPUC, were present (see Appendix E). There were no substantive comments other than those complimentary of the planning process itself. Therefore, there was no need to consider or add public comments.

In addition, an e-mail list of stakeholders was kept up to date, including all the attendees who wrote their e-mail address on the sign-in sheet at each meeting, as well as any other interested parties. Further reminders of meetings were provided as needed through telephone calls and in-person communication.

C. Mission and Vision Statements

The HMPUC decided on the following Mission Statement and Vision Statement in the original plan and re-confirmed them in this update to help guide them through the planning process.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville Hazard Mitigation Plan Update Committee Mission Statement

This committee's mission is to make Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, and their citizens, local governments, communities, residences, and businesses less vulnerable to the effects of natural hazards. This will be accomplished through the effective administration of Hazard Mitigation Programs, hazard risk assessments, wise floodplain management, and a coordinated approach to mitigation policy through state, regional, and local planning activities.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville Hazard Mitigation Plan Update Committee Vision Statement

This committee's vision is to institutionalize a local Hazard Mitigation ethic through leadership, professionalism, and excellence, thus leading the way to a safe, sustainable way of life for Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville.

Due to Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville being such close-knit communities, the Clinch County HMPUC chose not to break into subcommittees, but to address issues as a whole group. Various members of this group had direct knowledge relating to local infrastructure and agencies, emergency planning, hazard planning, and the operations of major departments and emergency services. Through their efforts, this Plan was developed.

The HMPUC was responsible for identifying natural hazard events and completing a profile, vulnerability assessment, potential loss estimation (see Chapter 2, Appendix A, and Appendix D), and updating the Georgia Mitigation Information System (GMIS) Critical Facilities Inventory (see Appendix F). They were also responsible for reviewing and updating the Mitigation Goals, Objectives, and Action Steps (see Chapter 4), among other responsibilities.

Section III. Plan Review, Analysis, and Revision

As mentioned above, the prior Hazard Mitigation Plan was used as a basis for the plan update. The Hazard Mitigation Plan Update Committee (HMPUC) reviewed all chapters and sections of the

prior plan and updated them as appropriate, using national, state, and local sources. Other documents consulted included:

- The Community Wildfire Protection Plan (see Appendix C)
- The current joint Comprehensive Plan for the County and Cities, which includes the fiveyear Community Work Program
- The Local Emergency Operations Plan
- The current State of Georgia Hazard Mitigation Strategy
- The local Service Delivery Strategy
- Data from the National Climatic Data Center (NCDC).

Relevant information from the above sources and documents has been incorporated into this Plan Update as appropriate, including alignment of local goals with state goals and updating of all relevant data using data from the NCDC. After organizing resources, an update of the risk assessment was performed. New forms, worksheets, and data (included in the Appendix) were also completed. Afterward, the Mitigation Goals, Objectives, and Action Steps were reviewed to determine if they were to remain the same or be added to, modified, or removed.

All chapters of this Plan have been updated to reflect the new material. See the tables at the beginnings of the chapters for further information regarding which items were changed and updated.

Section IV. Organization of the Plan

This Plan focuses on eight natural hazards chosen by the HMPUC that may affect and cause damage to Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Chapter 2, Chapter 4, and Appendix A are each subdivided into Sections I through VIII; these sections reflect the eight natural hazards that were chosen. The natural hazards are as follows (in order of priority):

- 1. Wildfires
- 2. Thunderstorms/Wind
- 3. Tornadoes
- 4. Floods
- 5. Drought
- 6. Hurricanes/Tropical Storms
- 7. Winter Storms
- 8. Hail

Other hazards, such as Avalanche, Coastal Erosion, Coastal Storm, Dam Failure, Earthquake, Expansive Soils, Extreme Heat, Land Slide, SLOSH (Sea, Lake and Overland Surges from Hurricanes), Tsunami, and Volcano, were examined and determined not to be of sufficient significance in the community to warrant their inclusion in the present Hazard Mitigation Planning effort, based on past history and available data.

This Plan also contains a HAZUS report (see Appendix G), a comprehensive range of Mitigation Goals, Objectives, and Action Steps (Chapter 4), and information on implementation, monitoring,

and plan update and maintenance (see Chapter 6), as well as other FEMA-required items and materials (included in various Chapters, Sections and Appendices).

Throughout the effective time period of this Plan, the County Commissioners and City Council Members will assign staff, as appropriate, to implement the comprehensive range of Mitigation Goals, Objectives, and Action Steps and other pertinent items that are contained in this Plan.

The Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville Hazard Mitigation Plan exists in one bound volume appended with various papers and documents, as well as a PDF document that is available on the SGRC website. The planning efforts of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are intended to be an ongoing process and the Plan is to be amended as appropriate.

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Copies of the Plan are on file and may be examined at the County and City government offices, the County Emergency Management Agency, the Southern Georgia Regional Commission office (as well as the SGRC website, www.sgrc.us), and the Georgia Emergency Management and Homeland Security Agency (GEMHSA).

Section V. Local Hazard, Risk, and Vulnerability (HRV) Summary, Local Mitigation Goals, and Objectives

The HMPUC determined that the hazards established in the previous plan were still the most significant threats to the community, and their order of priority remains unchanged. A Hazard, Risk, and Vulnerability (HRV) Assessment has been formulated through a variety of information obtained during the planning process. Information has been obtained from online databases, published sources, and personal accounts regarding hazards, their history in the community, and when and where they were active. This summary is provided in Chapter 2.

The vulnerability of the community to natural hazards is also summarized in the Hazard Frequency Table (see Appendix D), and the Inventory of Assets and number of people exposed to each hazard is evaluated in GEMA Worksheet 3A (see Appendix A). Critical Facilities and Critical Infrastructure are also examined as to the present value and potential losses from natural hazards (see Appendix F).

A description that identifies and analyses a comprehensive range of Mitigation Goals, Objectives, and Action Steps to reduce the effects of each hazard (based on risk assessment findings, with identifiable comprehensive ranges for each jurisdiction) is included in Chapter 4, Sections I-VII. In Chapter 6, Section I, there is a description related to prioritization of these Mitigation Goals, Objectives, and Action Steps through the use of cost/benefit analysis, STAPLEE (Social, Technical, Administrative, Political, Legal, Economic and Environmental), and other criteria. Also in Chapter 6, there are sections on Implementing the Action Plan (see Section I), Evaluation, Monitoring, Updating (see Section II), and Plan Update and Maintenance (see Section III).

Section VI. Multi-Jurisdictional Special Considerations

Clinch County has a total area of 824 square miles, of which 800 square miles is land and 24 square miles is water. It is the fourth-largest county in Georgia by land area and third largest by total area with a population density of 8.5 people per square mile (US Census Data). As such, certain services, including emergency services, may have large distances to cover when responding to an event, which may negatively influence emergency response times and strain resources. Clinch County contains four incorporated cities: Homerville (the County seat), Argyle, Du Pont, and Fargo.

All of Clinch County's Fire Departments are staffed by volunteers. There is one fire station located in each of the four cities.

The following are the ISO Classes of fire districts in Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville:

Station	ISO Class
Argyle	Class 4
Du Pont (Clinch County)	Class 4
Fargo	Class 4
Homerville	Class 4

Section VII. Adoption, Implementation, Monitoring, and Evaluation

After all plan development workshops were concluded, the draft plan was submitted to all local governments for their review. The draft plan was then submitted to GEMA and FEMA for their review and approval. After their approval, and any recommended changes, a second and final public hearing was held on Oct. 6, 2020 in order to provide a further opportunity for public comment and review. After this final public hearing, resolutions adopting the plan were passed by the Clinch County Board of Commissioners on November 9, 2020, the City of Argyle on October 15, 2020, the City of Fargo on October 26, 2020, the City of Homerville on January 5, 2021, and

the City of Du Pont on February 9, 2021 adopting the Plan Update. Copies of the public hearing advertisements and resolutions are available in Appendix E.

The comprehensive range of Mitigation Goals, Objectives, and Action Steps (see Chapter 4), which contains items related to all local governments, will be implemented as soon as possible and/or as funds become available to do so.

All sections of the Plan will be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals Objectives and Action Steps will be reported to the public through appropriate means (TV, website, social media, local newspapers, City Council meetings, County Commission meetings, etc.).

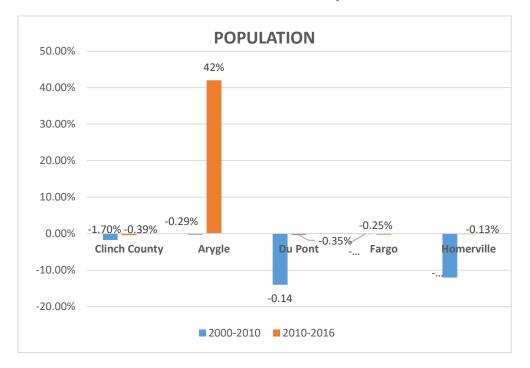
The method that the County EMA will use to monitor the plan will be to conduct quarterly telephone interviews with the various local governments and area agencies in order to chart their plan progress. Also, throughout the year, a series of informal meetings will be held in which various aspects of the plan are discussed. In addition, annual evaluations of the plan will take place on or near the anniversary of the date of Plan adoption. The annual evaluation will assess which of the goals, objectives, and action steps have been achieved; whether those goals, objectives, and action steps still address current and expected conditions; whether the nature or magnitude of risks has changed; whether current resources are appropriate for implementing the plan; and whether agencies and other parties have participates as originally proposed.

During this annual evaluation, problems (if any) with completing the action steps will be discussed, methods of resolving those problems (if any) will be formulated, the action steps will be updated (if necessary), and new actions steps will be developed (if necessary) in response to new problems that have developed throughout the year. If any changes or updates are needed to the other sections of the plan itself, these will also be discussed and noted. Critical Facilities and infrastructure changes and updates will also be discussed at this time and then added to the online GEMA database as required. New hazards in the area (if any) will be discussed and planned for and an assessment made as to whether community needs dictate additions to the materials of the plan.

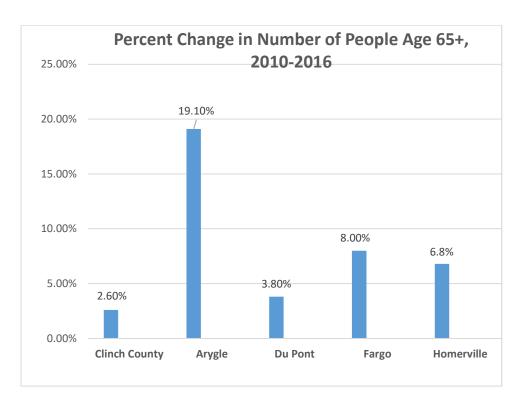
The major criteria to measure plan success will be the number of goals, objectives, and action steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

The Plan will be updated by the EMA Director and chosen representatives of all of the local governments every five years, as required by FEMA. All sections of this Plan will be updated at that time. The Plan update will be reviewed by all jurisdictions and relevant stakeholders. The requirements of this Hazard Mitigation Plan will be taken into consideration and incorporated into Comprehensive Plans, Capital Improvement Plans, Local Emergency Operations Plans, and all other such Plans, as appropriate. This updating process will be publicly advertised and public comment solicited and incorporated as necessary and as appropriate.

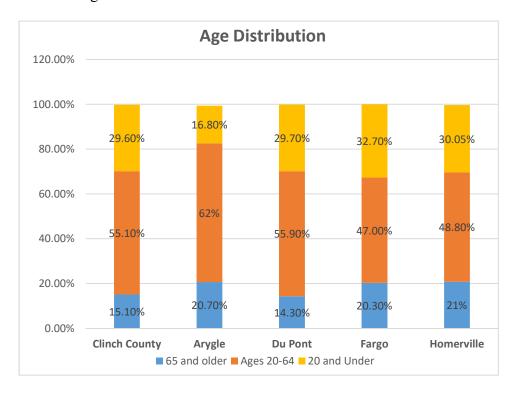
Section VIII. Community Data



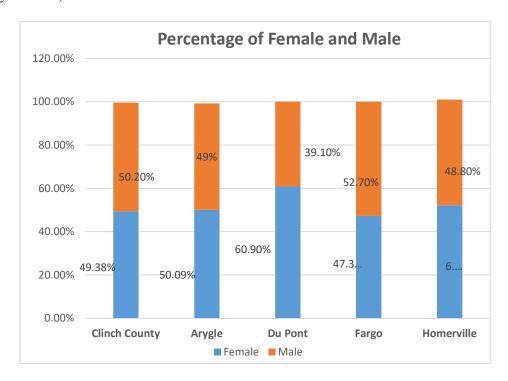
According to 2016 U.S. Census Bureau American Community Survey 5-year estimates, the population of Clinch County is 6,814, a decrease of -0.39% since 2010. The City of Argyle's 2016 population is 173, a 42% increase since 2010, the City of Du Pont's 2016 population is 161, a decrease of -0.35% since 2010, the City of Fargo's population is 300, a decrease of -0.25% since 2010 and the City of Homerville's is 2,425, a -0.13% decrease since 2010. Clinch County had a decrease in population between 2000 and 2010 at -1.7%, while the City of Argyle's population decreased by -.29%, the City of Du Pont decreased by-.14%, the City of Fargo decreased by -.16% and the City of Homerville decreased by -12.%.



The total number of people aged 65 and older increased in Clinch County from 2010 to 2016 by 2.6%. The number of people aged 65+ increased in Argyle by 19.1%, increased in Du Pont by 3.8%, increased in Fargo 8% and increased in Homerville 6.8%.



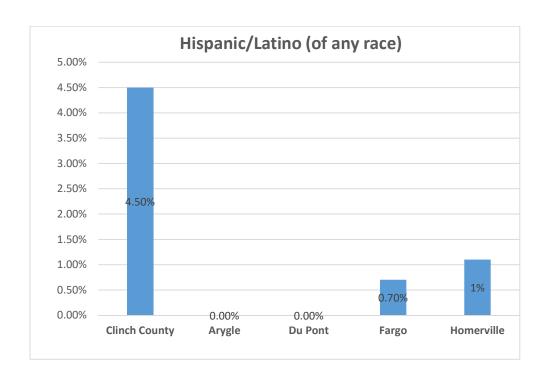
According to 2016 estimates, the age distribution in Clinch County is 15.1% over 65, 55.1% ages 20-64, and 29.6% under 20. In the City of Argyle, the age distribution 20.7% over 65, 61.9% ages 20-64, and 16.8% under 20. In the City of Du Pont, the age distribution is 14.3% over 65, 55.9% ages 20-64, and 29.7% under 20. In the City of Fargo, the age distribution is 20.3% over 65, 47% ages 20-64, and 32.7% under 20. In the City of Homerville, the age distribution is 20.8% over 65, 48.8% ages 20-64, and 30.05% under 20.



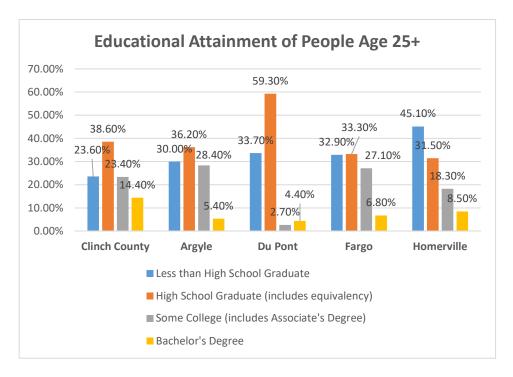
Clinch County's population is 49.8% female and 50.2% male, the City of Argyle's population is 50.09% female and 49.1% male, the City of Du Pont's is 60.9% female and 39.1% male, the City of Fargo's population is 47.3% female and 52.7% male and City of Homerville's is 52.2% female and 47.8% male.



The population of Clinch County is 67.1% White/Caucasian, 26.8% Black/African American, 0.5% Asian, 3.4% some other race and 1.6% two or more races. The City of Argyle's population is 57.2% White/Caucasian and 42.8% Black/African American. The City of Du Pont's population is 42.2% White/Caucasian and 57.8% Black/African American. The City of Fargo's population is 79.0% White/Caucasian and 19.7% Black/African American, 0.7% some other race. The City of Homerville's population is 46.9% White/Caucasian, 51.3% Black/African American, 0.6% Asian, and 1.2% two or more races.

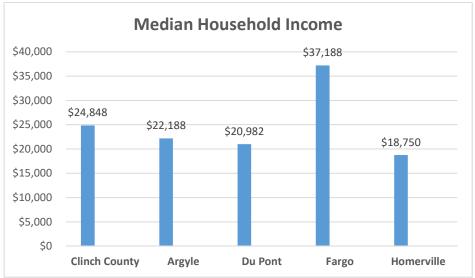


The percentage of the population that is Hispanic/Latino (of any race) is 4.5% in Clinch County, 0% in the City of Argyle, 0% in the City of Du Pont, 0.7% in the City of Fargo and 1.1% in the City of Homerville.

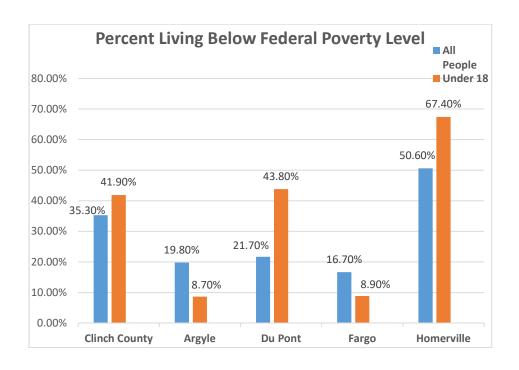


Among persons aged 25 or older, in Clinch County, 23.6% have no high school diploma, 38.6% are high school graduates (includes equivalency) with no further education, 23.4% have an associate's degree or some college, and 14.4% have a bachelor's or higher degree. Among persons

aged 25 or older in the City of Argyle, 30.0% have no high school diploma, 36.2% are high school graduates (includes equivalency) with no further education, 28.4% have an associate's degree or some college, and 5.4% have a bachelor's or higher degree. The City of Du Pont, 33.7% have no high school diploma, 59.3% are high school graduates (includes equivalency) with no further education, 2.7% have an associate's degree or some college, and 4.4% have a bachelor's or higher degree. The City of Fargo, 32.9% have no high school diploma, 33.3% are high school graduates (includes equivalency) with no further education, 27.1% have an associate's degree or some college, and 6.8% have a bachelor's or higher degree. The City of Homerville, 45.1% have no high school diploma, 31.5% are high school graduates (includes equivalency) with no further education, 18.3% have an associate's degree or some college, and 8.5% have a bachelor's or higher degree.



As of 2016 (US Census Bureau American Community Survey 5-year estimates), the median household income in Clinch County is \$24,848, the median household income in the City of Argyle is \$22,188, median household income in the City of Du Pont is \$20,982, median household income in the City of Fargo is \$37,188 and City of Homerville is \$18,750.



The percentage of the population living below the federal poverty level is estimated at 35.3% for Clinch County, 19.8% for the City of Argyle, 21.7% for the City of Du Pont, 16.7% for the City of Fargo and 50.6% for the City of Homerville. For persons under 18, the percent living below the poverty level is estimated at 41.9% in Clinch County, 8.7% in the City of Argyle, 43.8% in the City of Du Pont, 8.9% in the City of Fargo and 67.4% in the City of Homerville.

In 2016, according to the Bureau of Labor Statistics, the annual average seasonally-adjusted unemployment rate for Clinch County was 12.8%. Georgia's 2016 unemployment rate was 8.5%.

Source for Community Data: U.S. Census Bureau (www.census.gov/americanfactfinder)

Chapter 2: Local Natural Hazard, Risk, And Vulnerability (HRV) Summary

Summary of changes:

During the plan update process, the HMPUC reviewed the hazards that may affect the community, and their priority. This updated plan includes the same natural hazards that were included in the previous plan, in the same order of priority. Table 2.1 provides a brief description of each section in this chapter and a summary of changes that have been made.

Chapter 2 Section	$[\mathbf{U}]$	pdates to Section
I. Wildfire	$ U_{l}$	odated data and information; edited for clarity
II. Thunderstorm/	Wind U ₁	odated data and information; edited for clarity
III. Tornado	U_1	odated data and information; edited for clarity
IV. Flood	$U_{\rm J}$	odated data and information; edited for clarity
V. Drought	$ U_1 $	odated data and information; edited for clarity
VI. Hurricane	$ U_1 $	odated data and information; edited for clarity
VII. Winter Storm	U	odated data and information; edited for clarity
VIII. Hail	U ₁	odated data and information; edited for clarity

Table 2.1: Overview of updates to Chapter 2

Flood and wildfire are the only hazards for which the level of risk varies geographically within the county; the remaining hazards constitute an equal threat to all geographic areas of the community. For more information, including hazard maps, see Appendix A.

Other hazards, such as Avalanche, Coastal Erosion, Coastal Storm, Dam Failure, Earthquake, Expansive Soils, Extreme Heat, Land Slide, SLOSH (Sea, Lake and Overland Surges from Hurricanes), Tsunami, and Volcano, were examined and determined not to be of sufficient significance in the community to warrant their inclusion in the present Hazard Mitigation Planning effort, based on past history and available data.

Section I. Wildfires

A. Identification of Hazard

A wildfire is a large, destructive fire that spreads quickly over woodland or brush. It can be caused by human negligence (for example, campfires that are not properly put out, or discarded cigarette butts that are not extinguished), by human technology (for example, faulty power lines), or by natural causes (most commonly lightning). Although naturally occurring wildfires are a part of many ecosystems, they cause problems when they threaten human habitation and when they are caused by humans.

The threat of wildfire has been chosen by the HMPUC as the most likely hazard to occur and cause damage in the community, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center and Georgia Forestry Commission (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events.

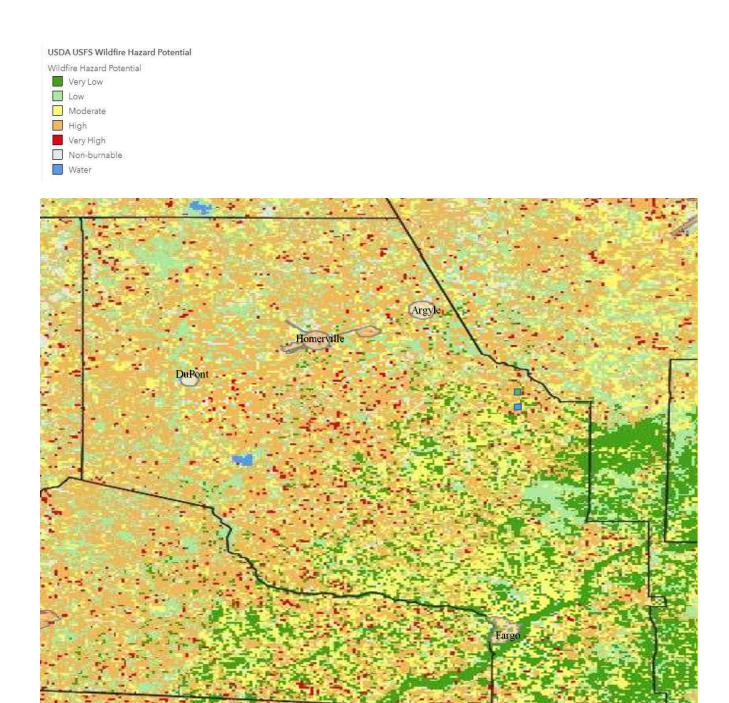
Much of southern Georgia is covered by forests, and fires play an important role in the health of forest ecosystems by breaking down organic matter into soil nutrients and helping seeds to germinate (source: NASA, https://earthobservatory.nasa.gov/Features/GlobalFire/fire 2.php). When naturally occurring wildfires are suppressed, combustible fuel (such as dead leaves and branches) accumulates in the forest. This increases the risk of larger, more destructive fire events in the future. Controlled, prescribed fires lower the risk of larger fire events and are beneficial to forest health (source: USDA, https://www.fs.usda.gov/detail/dbnf/home/?cid=stelprdb5281464).

Low humidity, lack of recent precipitation (or drought conditions), wind speed, and temperature are a combination of weather conditions that favor the kindling and spread of wildfires. A high fuel load (i.e. the accumulation of dead vegetation), in combination with the above, also provides for the kindling and spread of wildfires. Much of Clinch County, including some areas near the City, is forested with commercial and free-growing pine trees and other trees. These trees can and do catch fire frequently in both small and large fire events.

According to NASA (https://earthobservatory.nasa.gov/IOTD/view.php?id=89757), an estimated 84 percent of wildfires are caused by humans. Some common ways that people start fires include discarding cigarettes, leaving campfires unattended, and losing control of prescribed burns or crop fires. Sparks from railroads and power lines, as well as arson, also routinely cause wildfires.

When a residential area, whether it be a single home or an entire subdivision, is adjacent to an area containing vegetative fuels, such as a forest or other wooded area, this is referred to as a Wildland-Urban Interface area (WUI). These are the areas at greatest risk for property damage due to Wildfire.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are all vulnerable to the effects of wildfires. The USDA Forest Service assigns areas a Wildfire Hazard Potential (WHP) score of Very Low, Low, Moderate, High, or Very High. As the map below shows, most of Clinch County is scored either Low, Moderate, High, or Non-burnable.



Data Source: USDA Forest Service and Fire Modeling Institute https://www.arcgis.com/home/item.html?id=f291ac4840984de5a0cf842d8d7a0973

B. Profile of Events, Frequency of Occurrences, Probability

According to Georgia Forestry Commission data (see Appendix F), there are 3,311 reports of wildfires occurring in Clinch County (including the City) between 01/01/1968 and 12/31/2017 (the most recent data provided in the current Community Wildfire Protection Plan; more recent data are not yet available). The Historic Recurrence Interval is 0.02 years. This is a 6622% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 35.9, the past 20-year frequency is 42.6, and the past 50-year frequency is 66.22 (see the Hazard Frequency Table in Appendix D).

Since the previous Hazard Mitigation Plan became effective, approximately 155 wildfire events have been recorded. In 2017, a total of 3,379 acres burned. Most of this damage was caused by the Okefenokee Swamp West Mims Fire, which covered portions of Clinch County in April 2017. Many roads were closed or impassable due to smoke and debris. The Georgia Forestry Commission managed the fire with crews from the US Fish and Wildlife Service, Florida Forest Service, US Forest Service and from many jurisdictional fire firefighters.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Wildfires may happen at any place at any time, but are more likely in forested areas. Unincorporated Clinch County has more areas rated "High" for Wildfire Hazard Potential than the Cities, and unincorporated Clinch County is the only jurisdiction that has any areas rated "Very High." The impact of a wildfire would be more severe in places with higher population density due to more people being in danger and more potential for destruction of homes and other buildings. 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 wildfires and other hazards.

All of Clinch County Fire Departments are staffed by volunteers. There are four fire stations, one in each of the four Cities. All the fire stations have an ISO Rating of 4.

G. Overall HRV Summary of Events and Their Impact

Wildfires have the potential to cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. They can spread quickly and residents may not have time to evacuate. The cost of the damage and potential loss of life may be higher if the event strikes populated areas as opposed to more sparsely populated or unpopulated areas.

The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

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.

Section II. Thunderstorm Wind

A. Identification of Hazard

Thunderstorms are defined by NOAA as rain showers during which thunder is heard. The threat of thunderstorm wind has been chosen by the Clinch County HMPUC as the second most likely hazard to occur and cause damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, based on past experience, the FEMA-described methodology, and other factors. Historic data has been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events. Each jurisdiction is equally vulnerable to this hazard. For further information, see the HAZUS Report in Appendix G.

Wind is categorized, according to its strength and severity, using the Beaufort Wind Scale, developed in 1805 by Sir Francis Beaufort of the U.K. Royal Navy. The Beaufort Wind Scale is shown in the table below. (Source: http://www.spc.noaa.gov/faq/tornado/beaufort.html)

Beaufort Wind Scale

			World	Appearance of Wind Effects	
	Wind	Wind	Meteorological Organization (WMO)		
Force	(Knots)	(Mph)	Classification	On the Water	On Land
0	Less than 1	Less than 1	Calm	Sea surface smooth and mirror-like	Calm, smoke rises vertically
1	1-3	1-3	Light Air	Scaly ripples, no foam crests	Smoke drift indicates wind direction, still wind vanes
2	4-6	4-7	Light Breeze	Small wavelets, crests glassy, no breaking	Wind felt on face, leaves rustle, vanes begin to move
3	7-10	8-12	Gentle Breeze	Large wavelets, crests begin to break, scattered whitecaps	Leaves and small twigs constantly moving, light flags extended
4	11-16	13-18	Moderate Breeze	Small waves 1-4 ft. becoming longer, numerous whitecaps	Dust, leaves, and loose paper lifted, small tree branches move
5	17-21	19-24	Fresh Breeze	Moderate waves 4-8 ft taking longer form, many whitecaps, some spray	Small trees in leaf begin to sway
6	22-27	25-31	Strong Breeze	Larger waves 8-13 ft, whitecaps common, more spray	Larger tree branches moving, whistling in wires
7	28-33	32-38	Near Gale	Sea heaps up, waves 13-19 ft, white foam streaks off breakers	Whole trees moving, resistance felt walking against wind
8	34-40	39-46	Gale	Moderately high (18-25 ft) waves of greater length, edges of crests begin to break into spindrift, foam blown in streaks	Twigs breaking off trees, generally impedes progress

9	41-47	47-54	Strong Gale	High waves (23-32 ft), sea begins to roll, dense streaks of foam, spray may reduce visibility	Slight structural damage occurs, slate blows off roofs
10	48-55	55-63	Storm	Very high waves (29-41 ft) with overhanging crests, sea white with densely blown foam, heavy rolling, lowered visibility	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	56-63	64-72	Violent Storm	Exceptionally high (37-52 ft) waves, foam patches cover sea, visibility more reduced	Very rarely experienced; accompanied by widespread damage.
12	64+	73+	Hurricane	Air filled with foam, waves over 45 ft, sea completely white with driving spray, visibility greatly reduced	Devastation.

B. Profile of Events, Frequency of Occurrences, Probability

According to the NOAA Storm Events Database (see Appendix F), there are 140 reports of thunderstorm wind occurring in Clinch County (includig the Cities) between 01/01/1950 and 12/31/2019. The Historic Recurrence Interval is 0.50 years. This is a 200.0% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 4.2, the past 20-year frequency is 5.7, and the past 50-year frequency is 2.8 (see the Hazard Frequency Table in Appendix D).

26 thunderstorm wind events have been reported since the previous Hazard Mitigation Plan became effective. Most recently, on 4/19/2019, a storm event caused a mobile home roof to be damaged by winds near the intersection of U.S. Highway 84 and Leland Smith Road. Earlier, a storm event on 6/2/2018 caused one tree to be blown down over a road, and another tree to fall on a residence. Another event on 1/22/2017 caused several downed trees and power outages due to power line damage. Although there were no injuries associated with these recent events, there were recorded wind speeds of 50 knots.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of

\$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Thunderstorm Wind events are usually area-wide, and no difference in severity is expected between Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. However, the impact may be more severe in places with higher population density due to more people being in danger, 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.

G. Overall HRV Summary of Events and Their Impact

Thunderstorm/wind events can cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. They can form quickly and residents may not have time to find adequate shelter, or adequate shelter facilities may not be available. The cost of the damage and potential loss of life may be higher if the event strikes populated areas as opposed to more sparsely populated or unpopulated areas.

The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

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.

Section III. Tornadoes

A. Identification of Hazard

The threat of tornadoes has been chosen by the HMPUC as the third most likely hazard to occur and cause damage in the community, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events. For further information, see the HAZUS Report in Appendix G.

A tornado is defined by NOAA (http://www.nssl.noaa.gov/education/svrwx101/tornadoes/) as a narrow, violently rotating column of air that extends from the base of a thunderstorm to the ground. Because wind is invisible, it is hard to see a tornado unless it forms a condensation funnel made up of water droplets, dust and debris. Tornadoes are the most violent of all atmospheric storms.

About 1,200 tornadoes hit the U.S. yearly. A tornado watch is issued when weather conditions are favorable for tornadoes. During a tornado watch, residents are advised to watch and prepare for severe weather and stay tuned to NOAA Weather Radio to know when warnings are issued. A tornado warning is issued when a tornado has been reported by spotters or indicated by radar and there is a serious threat to life and property to those in the path of the tornado. When a tornado warning is issued, residents must act immediately to find safe shelter. A warning can cover parts of counties or several counties in the path of danger.

The Enhanced Fujita Scale, implemented by the National Weather Service in 2007, is used to assign a tornado a rating based on estimated wind speeds and related damage. The wind speeds associated with the EF ratings are shown in the table below. Because of the difficulty of measuring wind speeds inside a tornado, wind speeds are estimated based on the type of damage that occurs; more information is available on the NOAA website at http://www.spc.noaa.gov/faq/tornado/ef-scale.html.

ENHANCED FUJITA WIND DAMAGE SCALE

(Source: http://www.spc.noaa.gov/faq/tornado/ef-scale.html)

EF Number	3-Second Gust	Damage
EF-0	65 to 85 mph	Light damage. Some damage chimneys; branches broken
		off trees; shallow-rooted trees pushed over; sign boards
		damaged.
EF-1	86 to 110 mph	Moderate Damage. The lower limit is the beginning of
		hurricane wind speed; peels surface off roofs; mobile
		homes pushed off foundations or overturned; moving
		autos pushed off the roads; attached garages may be
		destroyed.
EF-2	111 to 135 mph	Significant Damage. Roofs torn off frame houses; mobile
		homes demolished; boxcars overturned; large trees
		snapped or uprooted; high rise windows broken and blown
		in; light-object missiles generated.

EF-3	136 to 165 mph	Severe Damage. Roofs and walls torn off well-constructed
		houses; trains overturned; most trees in forest uprooted;
		heavy cars lifted off the ground and thrown.
EF-4	166 to 200 mph	Devastating, damage. Well-constructed houses leveled;
		structures with weak foundations blown away some
		distance; cars thrown and large missiles generated.
EF-5	Over 200 mph	Incredible, damage. Strong frame houses lifted off
		foundations and carried considerable distances to
		disintegrate; automobile sized missiles fly through the air
		in excess of 100 m (109 yards); trees debarked; steel
		reinforced concrete structures badly damaged.

Tornadoes may occur at any time of year, although the peak "tornado season" for the Southern Plains is during May into early June. Tornadoes can occur due to inclement weather conditions, as a result of a passing front, or as part of thunderstorm or hurricane/tropical storm events. Tornadoes can occur at any time of the day or night, but according to NOAA (http://www.nssl.noaa.gov/education/svrwx101/tornadoes/), most tornadoes occur between 4:00 and 9:00 p.m. The path and severity of a tornado cannot be determined in advance. The best defense is to heed tornado warnings and seek appropriate shelter when a tornado has been sighted in the area or when conditions conducive to a tornado are present.

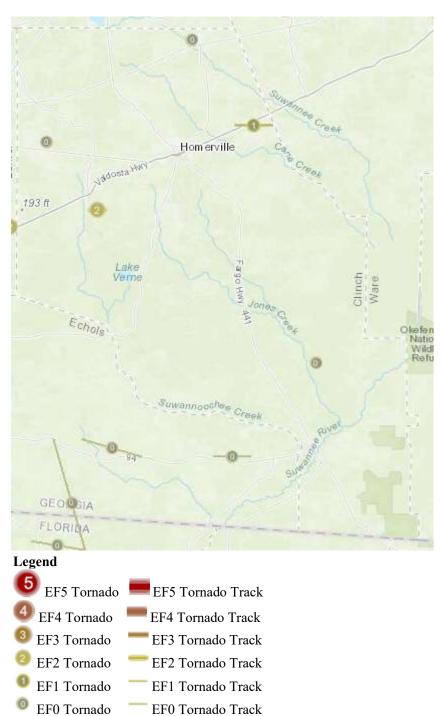
Clinch County and the Cities are all vulnerable to the effects of tornadoes. According to NOAA (https://www.ncdc.noaa.gov/climate-information/extreme-events/us-tornado-climatology), an average of 30 tornadoes occur per month in Georgia.

B. Profile of Events, Frequency of Occurrences, Probability

According to the NOAA Storm Events Database (see Appendix F), there are 6 reports of tornadoes occurring in Clinch County (including the City) between 01/01/1950 and 12/31/2019. The Historic Recurrence Interval is 11.5 years. This is an 8.7% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0.1, the past 20-year frequency is 0.25, and the past 50-year frequency is 0.12 (see the Hazard Frequency Table in Appendix D).

One tornado event has impacted the community since the previous Hazard Mitigation Plan became effective. On 4/1/2016, an EF1 tornado caused damage near the Clinch and Atkinson county line. It was a high-end EF1 with maximum winds near 100 mph. One home was heavily damaged with most of the roof gone. Major trees were blown down in two locations. One post-storm injury occurred when an individual was clearing storm debris. Cost of damage was unknown.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.



Historic tornado tracks in Clinch County and the Cities. Source: NOAA (https://www.arcgis.com/home/webmap/viewer.html?useExisting=1&layers=ae96a522f2824552b20cdcf53a30d3c1) Note: This map does not show the EF-1 tornado that occurred on 4/1/2016.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small

size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

Typically, mobile/manufactured homes are most vulnerable to tornado damage. According to 2018 Census Bureau estimates, 30.1% of occupied housing units in Clinch County are mobile homes (892 mobile homes and approximately 2,524 people based on the average household size of 2.83 persons per household in the County). In the City of Argyle, 30.3% of occupied housing units are mobile homes (105 mobile homes and approximately 298 people). In the City of Du Pont, 35.2% of occupied housing units are mobile homes (32 mobile homes and approximately 91people). In the City of Fargo, 32.5% of occupied housing units are mobile homes (50 mobile homes and approximately 142 people). In the City of Homerville, 25.6% of occupied housing units are mobile homes (304 mobile homes and approximately 860 people).

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Tornadoes tend to follow a straight path regardless of natural features or political boundaries, and no difference in severity is expected between Clinch County and the Cities of Argyle, Du Pont,

Fargo, and Homerville. However, the impact may be more severe in places with higher population density due to more people being in danger, more people needing to evacuated, 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.

G. Overall HRV Summary of Events and Their Impact

Tornadoes have the potential to cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. They can form quickly and residents may not have time to find adequate shelter, or else adequate shelter facilities may not be available. The cost of the damage and potential loss of life may be higher if the event strikes populated areas as opposed to more sparsely populated or unpopulated areas, or if the event strikes areas with a large number of mobile homes.

The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

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.

Section IV. Floods

A. Identification of Hazard

The threat of a flood has been chosen by the HMPUC as the fourth most likely hazard to occur and cause damage in the community, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events. Drainage ditches and canals that are improperly cleaned or maintained contribute significantly to flooding occurrences which require the homeowners to experience hours, if not days, of water filled yards, even in the cities. For further information, see the HAZUS Report in Appendix G.

Floods may occur at any time, in many cases without warning, and their effects can range from minor inconvenience to wholesale destruction. Floods are most often caused by heavy rains associated with thunderstorms, hurricanes, or tropical storms. Flooding can result from a rise in the level of a body of water such as a river or a lake, or from rain falling faster than it can be absorbed by the ground (especially under weather conditions that make soil less pervious, for example after a period of drought). Flooding frequently occurs in urban areas when a large amount of rain, above the capacity of the urban drainage system, falls on impervious surfaces such as streets, buildings, and parking lots. Flooding can also result from the failure of man-made structures such as levees and dams.

Flash floods are floods that occur in short time-spans, often so quickly that people are caught off-guard. Flash floods can occur as a result of any of the causes mentioned above, but are most often due to extremely heavy rainfall from thunderstorms. More information is available at the National Weather Service (https://www.weather.gov/phi/FlashFloodingDefinition).

According to the National Weather Service (http://tadd.weather.gov/), more deaths occur each year due to flooding than from any other thunderstorm-related hazard. The Centers for Disease Control and Prevention report that over half of all flood-related drownings occur when a vehicle is driven into hazardous flood water. The next highest percentage of flood-related deaths is due to walking into or near flood waters. People underestimate the force and power of water. Many of the deaths occur in automobiles as they are swept downstream. Of these drownings, many are preventable, but too many people continue to drive around the barriers that warn you the road is flooded. A mere 6 inches of fast-moving flood water can knock over an adult. It takes just 12 inches of rushing water to carry away a small car, while 2 feet of rushing water can carry away most vehicles. It is never safe to drive or walk into flood waters.

Flood zones, as defined by FEMA, are described in the table below.

Flood Zone Designations and Descriptions

Source: FEMA (https://hazards.fema.gov/onlinelomc/ext/Help/loadInstructions)

Zone Designations	Zone Descriptions
Zone Designations	Areas with a 1% annual chance of flooding and a 26% chance of flooding over the life of a
A	30-year mortgage. Because detailed analyses are not performed for such areas, no depths or base flood elevations are shown within these zones.
АН	Areas with a 1% annual chance of shallow flooding, usually in the form of a pond, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
AO	River or stream flood hazard areas, and areas with a 1% or greater chance of shallow flooding each year, usually in the form of sheet flow, with an average depth ranging from 1 to 3 feet. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Average flood depths derived from detailed analyses are shown within these zones.
A1-A30	These are known as numbered A Zones (e.g., A7 or A14). This is the base floodplain where the FIRM shows a BFE (old format).
A99	Areas with a 1% annual chance of flooding that will be protected by a Federal flood control system where construction has reached specified legal requirements. No depths or base flood elevations are shown within these zones.
AE	The base floodplain where base flood elevations are provided. AE Zones are now used on new format FIRMs instead of A1-A30 Zones.
AR	Areas with a temporarily increased flood risk due to the building or restoration of a flood control system (such as a levee or a dam). Mandatory flood insurance purchase requirements will apply, but rates will not exceed the rates for unnumbered A zones if the structure is built or restored in compliance with Zone AR floodplain management regulations.
V	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. No base flood elevations are shown within these zones.
V1-V30	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
VE	Coastal areas with a 1% or greater chance of flooding and an additional hazard associated with storm waves. These areas have a 26% chance of flooding over the life of a 30-year mortgage. Base flood elevations derived from detailed analyses are shown at selected intervals within these zones.
В	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
С	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.
D	Areas with possible but undetermined flood hazards. No flood hazard analysis has been conducted. Flood insurance rates are commensurate with the uncertainty of the flood risk.
X Shaded	Area of moderate flood hazard, usually the area between the limits of the 100-year and 500-year floods. Are also used to designate base floodplains of lesser hazards, such as areas protected by levees from 100-year flood, or shallow flooding areas with average depths of less than one foot or drainage areas less than 1 square mile.
X Unshaded	Area of minimal flood hazard, usually depicted on FIRMs as above the 500-year flood level.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are all vulnerable to the effects of flooding. Areas within flood zones are naturally more vulnerable. For more information, see the maps in Appendix A.

B. Profile of Events, Frequency of Occurrences, Probability

According to the NOAA Storm Events Database (see Appendix F), there are 3 reports of floods occurring in Clinch County (including the Cities) between 01/01/1950 and 12/31/2019. The Historic Recurrence Interval is 23.0 years. This is a 4.35% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0, the past 20-year frequency is 0.1, and the past 50-year frequency is 0.06 (see the Hazard Frequency Table in Appendix D).

No flood events have been recorded since the previous Hazard Mitigation Plan became effective. Most recently, on 7/3/2002, extensive street flooding occurred in Homerville, which caused several road closures (up to 3 inches of water over some roads was reported). A countywide flood event also occurred on 6/12/2001, with flooded and impassable roads reported in numerous locations. Water depths over roads up to 4 inches were reported in the unincorporated county. During this event, according to local reports, 4 inches of rain fell in a 24-hour period throughout all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville.

During the countywide flood event on 6/12/2001, according to local reports, water depths over 2 inches were reported on roads in the City of Du Pont and 2 inches in the City of Argyle. This resulted in temporarily closed roads in both these cities.

The City of Fargo has also seen extensive flooding due to its location on the Suwannee River. The highest river crest recorded was 112 feet, which resulted in roads being underwater in some parts of the city. One road was reported as being under at least 6 inches of water.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that 1,469 (35.1%) of the 4,180 properties in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 27.1% of the Residential property (774 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$29,467,030. Also, an estimated 52.4% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (695 of 1,325) in the community may be affected, with a total value of \$355,820,197. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report

(http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, none of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) are in flood zones. Therefore, none of these facilities are considered at risk from flooding.

Many individuals do not have access to transportation and thus are susceptible to weather hazards. It is very important to notify these individuals through weather radios, radio stations, and other means so that they may seek shelter and/or make arrangements for transportation to shelter facilities. Therefore, a major consideration should be helping individuals, government, and non-profit organizations prepare for the pending flood hazard events.

Below are historic crest levels for the Suwannee River at Fargo (source: National Weather Service, https://water.weather.gov/ahps2/hydrograph.php?gage=fgog1&wfo=jax).

Flood Categories (in feet)

M. Fl. 10	100
Major Flood Stage:	108
Moderate Flood Stage:	106
Flood Stage:	104
Action Stage:	102
Low Stage (in feet):	92.7

Historic Crests

(1) 112.01 ft on 04/09/1973 (2) 111.60 ft on 10/03/1929 (3) 111.50 ft on 10/01/1928 (4) 110.60 ft on 10/29/1947 (5) 109.73 ft on 10/03/2004 (6) 109.60 ft on 09/17/1964 (7) 109.02 ft on 04/06/1984

(8) 108.68 ft on 02/26/1998

(9) 108.30 ft on 08/22/1945

(10) 108.28 ft on 04/04/1948 (P)

(P): Preliminary values subject to further review.

Recent Crests

(1) 106.10 ft on 12/30/2018

(2) 108.28 ft on 12/17/2018

(3) 104.57 ft on 09/19/2017

(4) 102.80 ft on 02/07/2015

(5) 107.36 ft on 04/24/2014

(6) 102.50 ft on 03/20/2014

(7) 102.33 ft on 08/26/2013

(8) 102.58 ft on 08/07/2013

(9) 103.75 ft on 07/06/2013

(10) 101.43 ft on 05/07/2013

(P): Preliminary values subject to further review.

Low Water Records

- (1) 90.92 ft on 07/08/2011
- (2) 91.40 ft on 12/08/2010
- (3) 91.61 ft on 02/09/2012
- (4) 91.90 ft on 06/23/2015
- (5) 92.03 ft on 06/28/2008

The GMIS reports do not list any Repetitive Loss/NFIP properties in Clinch County or the Cities of Argyle, Du Pont, Fargo, and Homerville.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

According to FEMA data, 37.4% of the total area of Clinch County is within a flood zone. 56.8% of the Town of Argyle is within a flood zone. 36.3% of the Town of Du Pont is within a flood zone. 60.3% of the City of Fargo is within a flood zone. 24.9% of the City of Homerville is within a flood zone. All flood zones in the County and Cities are Flood Zone "A" per FEMA data.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are members of the National Flood Insurance Program (source: https://www.fema.gov/cis/GA.html). As of March 2019, these jurisdictions are in compliance with NFIP requirements and intend to remain in compliance by enforcing flood plain ordinances which prohibit or severely limit development in floodplains. These ordinances are enforced by the local governments of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, each of which have building inspections and require compliance with flood plain ordinances as part of any building permit application.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville do not participate in the Community Rating System (CRS) program. As of 2019, they were not eligible, according to FEMA (source: http://www.fema.gov/library/viewRecord.do?id=3629).

G. Overall HRV Summary of Events and Their Impact

Floods have the potential to cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, and especially in flood-prone areas. Floods can happen quickly and residents may not have time to evade floodwaters. The cost of the damage and potential loss of life may be higher if the event strikes populated areas as opposed to more sparsely populated or unpopulated areas.

The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

Section V. Drought

A. Identification of Hazard

Drought is defined as a prolonged period of abnormally low rainfall, leading to a shortage of water. The threat of drought has been chosen by the HMPUC as the fifth most likely hazard to occur and cause damage in the community, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center and U.S. Drought Monitor (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events.

Although drought is associated with the summer months in many other parts of the United States, our region has a humid subtropical climate with more precipitation, on average, in the summer than in the winter. Drought can occur at any time, and its effects can last throughout the year and continue from year to year. These effects may include agricultural losses, increased wildfire and fire risk, lack of water for citizens and firefighting, increased flooding risk (because dry land can be less absorbent of rainfall), and other effects that influence other hazards and the safety of the community.

Crops (including trees) are usually most adversely affected by drought events, along with community residents whose water supplies are restricted or cut off (especially those using individual wells). Residents of unincorporated Clinch County have wells, which may go dry during drought periods, thus leaving those residents without water for extended periods of time. The Cities of Fargo and Homerville have municipal water systems.

The U.S. Drought Monitor (http://droughtmonitor.unl.edu), established in 1999, is a weekly map of drought conditions that is produced jointly by the National Oceanic and Atmospheric Administration, the U.S. Department of Agriculture, and the National Drought Mitigation Center (NDMC) at the University of Nebraska-Lincoln. The U.S. Drought Monitor website is hosted and maintained by the NDMC. The Drought Monitor summary map identifies general drought areas, labelling droughts by intensity, with D1 being the least intense and D4 being the most intense. Descriptions these categories are provided in the table below (source: of http://droughtmonitor.unl.edu/AboutUs/ClassificationScheme.aspx).

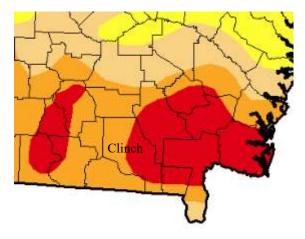
Category	Description	Possible Impacts
D 0	Abnormally Dry	Going into drought: short-term dryness slowing planting, growth of crops or pastures Coming out of drought; some lingering water deficits pastures or crops not fully recovered
D1	Moderate Drought	 Some damage to crops, pastures Streams, reservoirs, or wells low, some water shortages developing or imminent Voluntary water-use restrictions requested
D2	Severe Drought	 Crop or pasture losses likely Water shortages common Water restrictions imposed
D3	Extreme Drought	Major crop/pasture losses Widespread water shortages or restrictions
D4	Exceptional Drought	 Exceptional and widespread crop/pasture losses Shortages of water in reservoirs, streams, and wells creating water emergencies

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are all equally vulnerable to the effects of drought.

B. Profile of Events, Frequency of Occurrences, Probability

According to U.S. Drought Monitor data (see Appendix F), there are 381 reports of Drought (D1-D4) events occurring in Clinch County (including the Cities) between 01/01/2000 and 12/31/2019. The Historic Recurrence Interval is 0.05 years. This is a 1905% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 20.3, the past 20-year frequency is 19.05, and the past 50-year frequency is 7.62 (see the Hazard Frequency Table in Appendix D).

Since the previous Hazard Mitigation Plan became effective, 80 drought events (D1-D4) have been recorded. This included 80 D1 events, 39 D2 events, and 3 D3 events. Drought has caused crop damage (including the blueberry crop, which is an important part of the county's economy) and has increased the community's vulnerability to wildfires due to the dryness of the vegetative fuel available to burn. Drought conditions have exacerbated damage done by wildfires (see Ch. 2, Section I).



The map above, from the US Drought Monitor (https://droughtmonitor.unl.edu/Maps/CompareTwoWeeks.aspx), shows typical drought conditions during the week of May 16, 2017, with D3 conditions (Extreme Drought) covering approximately half of Clinch County.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Residents of unincorporated Clinch County have wells, which may go dry during drought periods, thus leaving those residents without water for extended periods of time. The Cities of Argyle, Du Pont, Fargo, and Homerville have municipal water systems.

No other multi-jurisdictional differences have been identified at this time.

G. Overall HRV Summary of Events and Their Impact

Drought has the potential to harm people and the economy throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, potentially at any time of the year, and most significantly in unincorporated areas not served by municipal water systems. Drought may increase the likelihood of wildfires and flooding. Water shortages can impede firefighting efforts at all levels.

The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

Section VI. Hurricanes/Tropical Storms

A. Identification of Hazard

The threat of hurricanes/tropical storms has been chosen by the HMPUC as the sixth most likely hazard to occur and cause damage in the community, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events. For further information, see the HAZUS Report in Appendix G.

Hurricanes and tropical storms are both types of tropical cyclones. Tropical cyclones are the general term used for all circulating weather systems over tropical water. Tropical cyclones are destructive and have the potential to cause great damage and loss of life. They are divided into four major types: Hurricanes, Tropical Storms, Tropical Disturbances, and Tropical Depressions.

A hurricane, also known as a typhoon, is defined by NOAA's National Hurricane Center (http://www.nhc.noaa.gov/aboutgloss.shtml) as a tropical cyclone in which the maximum sustained surface wind (using the U.S. 1-minute average) is 64 kt (74 mph or 119 km/hr) or more. 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.

A tropical storm is defined as tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) ranges from 34 kt (39 mph or 63 km/hr) to 63 kt (73 mph or 118 km/hr).

A tropical disturbance is a discrete tropical weather system of apparently organized convection -generally 100 to 300 nmi in diameter -- originating in the tropics or subtropics, having a nonfrontal migratory character, and maintaining its identity for 24 hours or more. It may or may not be associated with a detectable perturbation of the wind field.

A tropical depression is defined as tropical cyclone in which the maximum sustained surface wind speed (using the U.S. 1-minute average) is 33 kt (38 mph or 62 km/hr) or less.

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time. The scale provides examples of the type of damage and impacts in the United States associated with winds of the indicated intensity. The following table shows the scale broken down by winds:

¹ A tropical cyclone is defined by NOAA as "a warm-core non-frontal synoptic-scale cyclone, originating over tropical or subtropical waters, with organized deep convection and a closed surface wind circulation about a well-defined center. Once formed, a tropical cyclone is maintained by the extraction of heat energy from the ocean at high temperature and heat export at the low temperatures of the upper troposphere. In this they differ from extratropical cyclones, which derive their energy from horizontal temperature contrasts in the atmosphere (baroclinic effects)." (http://www.nhc.noaa.gov/aboutgloss.shtml)

SAFFIR-SIMPSON HURRICANE SCALE

(Source: NOAA http://www.nhc.noaa.gov/aboutgloss.shtml)

Category	Wind Speed	Damage
1	74 - 95	Very dangerous winds will produce some damage
2	96 - 110	Extremely dangerous winds will cause extensive damage
3	111 - 129	Devastating damage will occur
4	130 - 156	Catastrophic damage will occur
5	> 156	Catastrophic damage will occur

The official Atlantic hurricane season (which includes Gulf Coast and East Coast hurricanes) is June 1 through November 30, but hurricanes and tropical storms may also occur outside of those dates. Whether the hurricane/tropical storm is a short-term event or a long term event depends on many factors including category, strength, speed, and impact of other weather systems, including fronts and wind patterns.

Because of their location, Clinch County and the cities are vulnerable to severe hurricanes/tropical storms forming in both the Atlantic Ocean and the Gulf of Mexico. Also due to location, hurricanes may degrade into tropical storms, tropical depressions, or tropical disturbances by the time they reach this area. These may or may not contain tornadoes or hail. In some cases, tropical storms, depressions, or disturbances may never reach hurricane strength before reaching the shore. The effects vary depending on the severity of the hurricane/tropical storm and the duration of the event.

B. Profile of Events, Frequency of Occurrences, Probability

According to the NOAA Storm Events Database (see Appendix F), there are 6 reports of tropical storms occurring in Clinch County (including the City) between 01/01/1950 and 12/31/2019. The Historic Recurrence Interval is 11.67 years. This is a 8.57% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0.3, the past 20-year frequency is 0.3, and the past 50-year frequency is 0.12 (see the Hazard Frequency Table in Appendix D).

Since the previous Hazard Mitigation Plan was completed, the community was impacted by Hurricane Irma on Sept. 10-11, 2017, causing 8.66 inches of rainfall, widespread power outages, downed trees blocking roads, flooding of the Suwanee River to levels up to 104.57 ft., and widespread damage to homes and businesses. About a year earlier, on Sept. 1, 2016, Hurricane Hermine caused damage to homes and businesses and mades roads impassable due to downed trees and branches, bringing winds up to 51 mph and rainfall up to 3.7 inches. The county was not impacted by Hurricane Matthew. More recently, the community was impacted by Hurricane/Tropical Storm Michael on Oct. 10, 2018. A peak tropical storm force wind gust of 46 mph was measured at the Homverville Airport at 8:15 pm on 10/10. The county experienced widespread power outages and trees blown down or snapped.

Although the most complete available data were used for this analysis, the possibility remains that other hurricane/tropical storm events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities are equally vulnerable to hurricanes/tropical storms. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

Clinch County and the Cities have a wind hazard score of 2 (91-100 mph gust). A map of the wind hazard scores and critical facilities is provided in Appendix A.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Hurricane/tropical storm events are usually area-wide, and no difference in severity is expected between Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville. However, the impact may be more severe in places with higher population density due to more people being in danger, more people needing to evacuated, 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.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are members of the National Flood Insurance Program. (Source: https://www.fema.gov/cis/GA.html) Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville do not participate in the Community Rating System (CRS) program. As of 2019, they were not eligible, according to FEMA. (Source: http://www.fema.gov/library/viewRecord.do?id=3629).

G. Overall HRV Summary of Events and Their Impact

Hurricanes/tropical storms have the potential to cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. They are usually preceded by some watch or warning well in advance. The cost of the damage and potential loss of life may be higher if the path of the hurricanes/tropical storms covers populated areas as opposed to more sparsely populated or unpopulated areas.

The Clinch County HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

VII. Winter Storm

A. Identification of Hazard:

The threat of a winter storm has been chosen by the Clinch County HMPUC as the seventh most likely hazard to occur and cause damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine frequency of events.

Although this natural hazard did not rank high in any dataset of occurrences or damages happening in Clinch County or the Cities of Argyle, Du Pont, Fargo, and Homerville, undocumented personal accounts of the Clinch County HMPUC members rated this hazard as likely to occur and cause damage. A major reason for this is the blueberry crop, which is an important part of the local economy and could be severely damaged by a winter storm or by unseasonably cold temperatures, resulting in a substantial economic loss to the community. According to the 2017 Georgia Farm Gate Value Report, the value of the blueberry crop in Clinch County in 2017 was \$55,362,500. This is more than half the county's total farm gate value.

In addition, because of the infrequency of winter storms in this region, residents of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are not well prepared to handle such events. Icy roads may result in a disproportionate number of automobile crashes because residents are not accustomed to driving in icy conditions. Being unprepared may result in loss of life or substantial damage to property and the economy.

Winter storms, at the worst, will produce sleet, freezing rain, and/or 1 to 2 inches of snow, with temperatures as low as the teens (°F). Snow accumulation usually melts away within 24 hours. Possible damage that may occur includes downed tree limbs, impassable roadways, power outages, increased emergency service workloads, failed water/sewer/septic systems, and (as mentioned above) crop damage and vehicle crashes.

B. Profile of Winter Storm Events, Frequency of Occurrences, Probability:

According to National Climatic Data Center information (see Appendix F), there are 3 reports of winter storms (Frost/Freeze, Winter Storm, Winter Weather) occurring in Clinch County (including the Cities of Argyle, Du Pont, Fargo, and Homerville, as part of area-wide events) between 01/01/1950 and 12/31/2019, plus one additional event on 1/3/2018 that is not in the NCDC data, bringing the total to 4 events. The Historic Recurrence Interval is 17.25 years. This is a 5.8% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0.3, the past 20-year frequency is 0.2, and the past 50-year frequency is 0.08 (see GEMA PDM Hazard Frequencies Table contained in Appendix D).

One winter storm event has occurred since the previous hazard mitigation plan was completed. A winter weather event on 1/3/2018 (not recorded in the NCDC database) caused up to 1 inch of snow accumulation, treacherous roads due to snow and ice, multuple vehicle crashes, temperatures

well below 32 degrees Fahrenheit, and freezing rain. Some tree branches fell on roads due to ice and sleet. There was also significant damage to crops.

Since the previous plan was completed, no changes have occurred that would affect the community's overall vulnerability to this hazard.

C./D.: Inventory of Assets Exposed and Potential Loss to Winter Storms:

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities are equally vulnerable to winter storms. Due to the lack of data broken down by jurisdiction (which is partly due to the very small size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

However, it should be noted that damage to buildings and other structures is not usually the most significant effect seen from winter storms. As described above, the major hazards from winter storms are vehicle crashes and crop damage, as well as frozen/burst water pipes, power outages, overtaxed emergency services, and roadway blockages.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

E. Land Use and Development Trends Related to Winter Storms:

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive

planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Winter Storm Differences:

All of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville have an equal chance of being affected by winter storms. In the event of icy roads, hazards would be greater along high-traffic corridors (US-23 and GA-32) and in more densely populated areas (mainly the Cities of Argyle, Du Pont, Fargo, and Homerville). The impact in terms of crop damage would likely be more severely felt in unincorporated Clinch County, where more of the land is devoted to agriculture. Clinch County and the Cities do not have any snowplows or other snow/ice removal equipment.

G. General Overall HRV Summary of Winter Storm Events and their Impact on the Community:

Winter storms have the potential to cause damage at any place, at any time during the winter months, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. The cost of the damage may be higher in terms of vehicle crashes in the Cities of Argyle, Du Pont, Fargo, and Homerville and other population centers, and higher in terms of crop damage in the agricultural areas of the county. A majority of the winter storms that pass through the area cause minimal to no damage.

The Clinch County HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen winter storm impacts on Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. These are contained in Chapter 4.

Since the previous plan was approved, no new developments, accomplished mitigation actions, new regulations, or program implementations have occurred which would either increase or decrease the community's vulnerability to this hazard.

Section VIII. Hail

A. Identification of Hazard:

The threat of hail has been chosen by the Clinch County HMPUC as the eighth most likely hazard to occur and cause damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, based on past experience, the FEMA-described methodology, and other factors. Historic data have been examined from various sources, including the National Climatic Data Center (see Appendix F), as well as from local history and personal accounts, in order to determine the frequency of events. Hail is precipitation in the form of lumps of ice that form in some storms. They are usually round and vary from the size of a grain of millet all the way up to grapefruit size. Hailstones generally form in thunderstorms between currents of rising air called the updraft and the current of air descending toward the ground called the downdraft. Large hailstones indicate strong updrafts in storms. The larger the hail, the stronger the updraft needed to hold it aloft in the storm. In storms that cause tornadoes, hail often falls directly to the northeast or east of the path of the tornado. The strong updraft is associated with the part of the storm that produces the tornado. Fortunately, hail very rarely kills anyone. However, a couple of dozen people are injured by hailstones each year. The best way to keep safe during a hailstorm is to seek shelter immediately. Hailstorms cause an enormous amount of damage to property and crops across the U.S. every year. In just two years (1993 and 1994), hail caused over \$500 million in damages. In May 1995, a severe thunderstorm struck the Dallas/Fort Worth metro area, causing between 1 and 2 billion dollars' worth of damage, much of it due to hail and flooding. Individual hail events, although they can be destructive, tend to be relatively short in duration. They can occur at any time of year, but are more likely to occur during tornado season in Georgia, which is typically from March through August, or during hurricane/tropical storm season, which is typically June 1 through November 30.

B. Profile of Hail Events, Frequency of Occurrences, Probability:

According to the NOAA Storm Events Database (see Appendix F), there are 44 reports of hail occurring in Clinch County (including the Cities) between 01/01/1950 and 12/31/2019. The Historic Recurrence Interval is 1.57 years. This is a 63.77% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0.7, the past 20-year frequency is 2.0, and the past 50-year frequency is 0.88 (see the Hazard Frequency Table in Appendix D).

Since the previous hazard mitigation plan was completed, there has been 1 hail event, on 8/13/2015, where nickel-sized hail was reported. Previous events have brought much larger hail. On Oct. 8, 2003, 2.5-inch (golf-ball-sized) hail was reported. Hail events in the past have damaged automobile roofs and structures, and have forced residents to seek shelter. No injuries were reported.

C./D.: Inventory of Assets Exposed and Potential Loss to Hail:

In Worksheet 3A: Inventory of Assets (appearing in Appendix A), we estimate that all of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville are equally vulnerable to this hazard. Due to the lack of data broken down by jurisdiction (which is partly due to the very small

size and population of the incorporated cities), it was not possible to obtain these data at the jurisdictional level, so the estimates provided are for Clinch County including all the cities.

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends Related to Hail:

The population of the County and Cities has held fairly steady between 2010 and 2019. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Hail Differences:

All of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville have an equal chance of being affected by hail. No differences between the five jurisdictions have been identified at this time.

G. General Overall HRV Summary of Hail Events and their Impact on the Community:

Hail has the potential to cause damage at any place, at any time, throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. The cost of the damage will vary depending on the size and quantity of hailstones and where they land. Damage to vehicles (especially roof dents) is one of the most widespread effects of major hailstorms; injuries to people are rarer but not unheard of. The damage effects of hail, if any, vary with the storm. The Clinch County HMPUC recognizes hail as the eighth most likely natural hazard to occur and cause damage. They

developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen hail impacts on Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. These are contained in Chapter 4 Section VII.

Since the previous plan was approved, there are no new changes that would increase or decrease the community's overall vulnerability to this hazard.

<u>Chapter 3:</u> <u>Local Technological Hazard, Risk,</u> and Vulnerability (HRV) Summary

Section I. Hazardous Materials Release

A. Identification of Hazard

Hazardous materials are substances or materials that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce. When these materials are released they become dangerous. A release may occur by spilling, leaking, emitting toxic vapors, or any other process that enables the material to escape its container, enter the environment, and create a potential hazard.

The effects of hazardous material releases can occur very rapidly with little or no advance warning, in the form of explosions, fires, and immediate health impacts. Slower effects can include long-term environmental damage and long-term health problems resulting from exposure.

B. Profile of Events, Frequency of Occurrences, Probability

Hazardous material spills are common in areas where hazardous materials are fabricated, processed, and stored. Transportation of hazardous materials by truck is the cause of the greatest number of hazardous materials events. Many products containing hazardous chemicals are routinely used and stored in homes. These products are also shipped daily on the nation's highways, railroads, waterways, and in pipelines. In most cases, disasters involving hazardous materials are confined to a localized area, whether an accidental release occurs at a fixed facility or in association with a transportation incident. The United States Environmental Protection Agency categorizes wastes according to four characteristics: Ignitability, corrosivity, reactivity, and toxicity. Furthermore, the EPA categorizes hazardous wastes according to the following hazard codes (source: https://www.epa.gov/hw/defining-hazardous-waste-listed-characteristic-and-mixed-radiological-wastes(:

- (T) Toxic Waste
- (H) Acute Hazardous Waste
- (I) Ignitable Waste
- (C) Corrosive Waste
- (R) Reactive Waste
- (E) Toxicity Characteristic Waste

The extent or severity of a hazardous materials release within the community is not predictable due to the varied nature of hazardous materials and the widespread area covered by the transportation network upon which such materials may be transported.

According to the USDOT Pipeline and Hazardous Materials Safety Administration's Office of Hazardous Materials Safety database (see Appendix F), there is 1 report of Hazardous Materials

Release events occurring in Clinch County (including the City) between 01/01/1978 and 12/31/2017. In 1993 while unloading a cargo tank carrier the cap on the outlet pipe split and cracked while spraying product onto asphalt. Spill was contained. The Historic Recurrence Interval is 50 years. This is a 2% Historic Frequency Chance per year. The past 10-year Record Frequency Per Year is 0.0, the past 20-year frequency is 0.05, and the past 50-year frequency is 0.02 (see the Hazard Frequency Table in Appendix D).

No hazardous materials release events have been recorded since the previous Hazard Mitigation Plan was completed.

Although the most complete available data were used for this analysis, the possibility remains that other events may have occurred in the community that went unreported or underreported.

C./D.: Inventory of Assets Exposed and Potential Loss

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2017. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

The facilities most vulnerable to a hazardous materials release are those located within a one-mile buffer of the major highways and railways in the community.

State highways carrying truck traffic pass through all the jurisdictions. US-84, a 4-lane highway, passes from east to west through the southern portion of the county. US 129/SR 31/SR 125 intersect when entering Clinch County.

A CSX rail line passes north-south through the unincorporated County, including the Cities of Argyle, Du Pont, Fargo, and Homerville. The facilities most vulnerable to a hazardous materials release are those located within a one-mile buffer of the major highways and railways in the community.

G. Overall HRV Summary

A significant portion of the community could be vulnerable to a hazardous materials release. Preparation for such an event requires specific training for first responders and coordination among agencies to ensure a swift response and containment of hazardous materials in order to minimize the potential loss of life and property. Therefore, a key priority should be to train responders to fulfill their responsibilities and conduct periodic tests to be sure the response plan is realistic and responders are ready to carry it out.

Human error is the probable cause of most transportation incidents and associated consequences involving the accidental release of hazardous materials. Varying quantities of hazardous materials are manufactured, used, or stored in Clinch County. Due to the county's location on or near several major transportation routes, the potential exists for a catastrophic hazardous material release event due to a transportation accident.

Section II. Public Health Emergency

A. Identification of Hazard

The threat of a public health emergency has been chosen by the HMPUC as the second most likely human-caused hazard to occur and cause damage in the community.

The community is vulnerable to public health emergencies that may occur naturally on their own, including but not limited to:

- Communicable disease outbreaks
- Pandemic influenza
- Mosquito-borne illness
- Food-borne illness

Diseases that cause a public health emergency may have a rapid onset or a slow onset. They may be highly localized or may be widespread in nature. Depending on the nature of the public health emergency, treatment may or may not be immediately available.

Some examples of recent public health emergencies include:

- **Zika virus** spread mostly by the bite of an infected *Aedes* species mosquito, Zika can be passed from a pregnant woman to her fetus. Infection during pregnancy can cause certain birth defects. There is no vaccine or medicine for Zika. Local mosquito-borne Zika virus transmission has been reported in the continental United States. (Source: https://www.cdc.gov/zika/about/index.html)
- Pandemic Influenza Pandemics happen when new (novel) influenza A viruses emerge which are able to infect people easily and spread from person to person in an efficient and sustained way. Unlike seasonal flu, which happens annually, pandemic flu happens rarely (three times in the last century), but the results are much more devastating. Most people have little or no immunity to pandemic influenza because they have no previous exposure to the virus or similar viruses. Even healthy people may be at high risk for serious complications, and health care providers and hospitals may be overwhelmed. (Source: https://www.cdc.gov/flu/pandemic-resources/basics/about.html)
- **Ebola** a rare and deadly disease caused by infection with one of the Ebola virus species, Ebola is spread through direct contact with bodily fluids. An outbreak in West Africa in 2014 is estimated to have caused more than 11,000 deaths. Although only 4 cases related to this outbreak occurred in the United States, transmission could have been far more widespread were it not for close coordination between the CDC, other federal agencies, state and local health departments, and the travel industry. (Source: https://www.cdc.gov/vhf/ebola/outbreaks/2014-west-africa/qa.html).

B. Profile of Events, Frequency of Occurrences, Probability

According to the best data available, there have not been any disease outbreak events in Clinch County or the cities in recent history. However, the entire community is equally vulnerable to this hazard and an outbreak could happen at any place at any time.

C./D.: Inventory of Assets Exposed and Potential Loss

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2017. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

All of Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville have an equal chance of being affected by public health emergencies. The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

G. Overall HRV Summary of Events and Their Impact

For most of the last century, disease outbreaks have been rare in the United States due to the presence of an advanced health care system, effective vaccination programs, and coordination between the CDC, other federal agencies, state and local health departments, and health care providers. However, the potential remains for a disease outbreak to harm people throughout the community. The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 5.

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.

Section III. CBRNE

A. Identification of Hazard

The threat of a Chemical, Biological, Radiological, Nuclear, or Explosive (CBRNE) attack has been chosen by the HMPUC as the third most likely human-caused hazard to occur and cause damage in the community.

In pursuit of the community's goals of local preparedness, it is essential for Clinch County and the City of Argyle, Du Pont, Fargo, and Homerville to have reliable chemical, biological, radiological, nuclear, and explosives (CBRNE) countermeasures and equipment that can be used with confidence for the protection of life, health, property and commerce.

Chemical weapons have been used by terrorists in the recent past, and it is likely to happen again. A very large number of casualties could be expected in a successful chemical attack. Chemical agents can enter the body by inhalation of the chemical agents, absorption through the skin or eyes, injection into the body by flying glass or shrapnel, or by ingesting with food or water. A likely delivery method is in the form of a gas or as an aerosol spray. (Source: http://www.disasters.org/dera/library/Heyer%20WMD.pdf)

Chemical weapons include the following categories (source: http://www.disasters.org/dera/library/Heyer%20WMD.pdf)

- Nerve Agents: Nerve agents attack the victim's nervous system. Most belong to the family
 of chemicals known as organophosphates. Many common pesticides belong to this family
 of chemicals.
- **Blister Agents**: Blister agents, also known as vesicants, attack the skin of the victim, resulting in blisters and skin burns. Mustard gas and Lewisite are common blister agents.
- **Blood Agents**: Blood agents attack the ability of the blood to hold and deliver oxygen. The victim suffocates. Cyanide gases and compounds are the most common types of these agents.

- **Choking Agents**: These chemicals attack the lungs causing them to fill with fluid. Chlorine gas and phosgene are typical choking agents.
- Incapacitating Agents: These agents usually irritate the skin, mucous membranes, eyes, nose, lips and mouth. They may cause vomiting or intolerable pain. While they may lead to serious medical situations such as seizures or heart attacks, they are not designed to kill or cause permanent harm. Used alone, the intention is to temporarily incapacitate or harass the target, or force them to evacuate the area. However, incapacitating agents may be used in combination with other agents to force responders to remove their gas masks and other protective gear, so that they will be exposed to lethal doses of the other agent. Examples of incapacitating agents are pepper spray, tear gas, riot control agents and several military chemicals from different nations.

Biological weapons present a serious challenge for response planning. There is risk that a biological attack may not be detected until days or even weeks after it happens. First responder resources, therefore, may be of little use at a bioterrorism incident unless it is detected promptly.

The following are the two main types of biological weapons:

- **Pathogens:** These are disease-causing organisms, some of which can reproduce and keep spreading long after the attack. The potential for many thousands of casualties is possible, but the more likely number is much less because of the difficulty of efficiently delivering the pathogenic agents to large numbers of people.
- Toxins: These are poisonous substances produced by living things. Many toxins are extremely lethal and small quantities can kill very large numbers of people. In many ways a toxin attack is more like a chemical attack than a biological one. Some possible toxin weapons are ricin, botulism toxin, and aflatoxin. Again, the difficulty for the terrorist is in finding an effective way to disperse or distribute the toxin.

(Source: http://www.disasters.org/dera/library/Heyer%20WMD.pdf)

Radiological weapons are weapons that produce radiation without detonation of a nuclear device. A radiological incident can cause victims to have contamination and/or exposure. Examples of radiological weapons include:

- Radiological Dispersal Devices (RDDs), which cause the purposeful dissemination of radioactive material without a nuclear detonation. One type of RDD is known as a "dirty bomb," which uses a conventional explosive to produce radioactive and nonradioactive shrapnel and radioactive dust, thereby causing radiation contamination and possibly some degree of radiation exposure, as well as physical injury and burns. (Source: https://www.remm.nlm.gov/rdd.htm)
- Radiological Exposure Devices (REDs), otherwise known as a Hidden Sealed Radioactive Source. These cause exposure but typically not contamination. The dose from exposure and specific effect on people depends on the source properties (isotope, activity, and amount), proximity of each person to the source, length of exposure time, and portion of the body exposed. (Source: https://www.remm.nlm.gov/red.htm)

Nuclear incidents involve a nuclear explosion (nuclear fission). A possible example is an attack from an improvised nuclear device (IND), which consists of an illicit nuclear weapon bought, stolen, or otherwise originating from a nuclear state, or a weapon fabricated by a terrorist group from illegally obtained fissile nuclear weapons material that produces a nuclear explosion. Detonation of such a weapon results in catastrophic loss of life, destruction of infrastructure, and contamination of a very large area.

(Source: https://www.remm.nlm.gov/nuclearexplosion.htm#ind)

Explosives can pack a very powerful punch and can bring down large buildings. The casualties could number in the hundreds in this type of attack. One example of this type weapon was the fuel oil-fertilizer bomb used to attack the Murrah Federal Building in Oklahoma City.

First responders should be alert to the potential for structure collapse as well as secondary explosive devices in the area.

Great caution should be used if the explosion seems to do little damage. A small explosive device might be used to disperse chemical, biological or even radioactive agents. Another purpose of a small device might be to bring large numbers of first responders, who are then subjected to a larger secondary device.

Another immediate problem for responders and victims is the potential for asbestos exposure. Older buildings may contain asbestos as insulation, pipe coverings, siding or roofing, flooring, adhesives, floor or ceiling tile and wall panels. Any explosion or collapse may cause this asbestos to become airborne in hazardous levels.

Another immediate problem for responders and victims is the potential for asbestos exposure. Older buildings may contain asbestos as insulation, pipe coverings, siding or roofing, flooring, adhesives, floor or ceiling tile and wall panels. Any explosion or collapse may cause this asbestos to become airborne in hazardous levels.

(Source: http://www.disasters.org/dera/library/Heyer%20WMD.pdf)

B. Profile of Events, Frequency of Occurrences, Probability

According to the best data available, there have not been any CBRNE events in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. However, the entire community is equally vulnerable to this hazard and an attack could happen at any place at any time.

C./D.: Inventory of Assets Exposed and Potential Loss

An estimated 100% of the Residential property (2,855 of 2,855) in Clinch County (including the Cities) could be affected by this hazard, with a total value of \$130,246,854. Also, an estimated 100% of the Commercial, Industrial, Agricultural, Religious/Non-Profit, Government, Education and Utility properties (1,325 of 1,325) in the community may be affected, with a total value of \$470,073,572. The values are based on the most recent available tax roll data for Clinch County

and the Cities of Argyle, Du Pont, Fargo, and Homerville, provided by the Clinch County Tax Assessor's Office.

Damage to crops is not taken into account in any of these figures. According to the Center for Agribusiness & Economic Development's 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf), the total farm gate value of agricultural production in Clinch County is \$95,399,802. Blueberries were a large portion of this value, with a total of \$55,362,500. Also, Clinch County was #1 in the state for Total Forestry Products Value at \$27,826,735.

According to the inventory database reports and maps, all of the 51 Critical Facilities and Infrastructure for Clinch County (including the Cities) could be affected by this hazard. The total value of these Critical Facilities is \$101,143,906, plus a content value of \$26,278,526.

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2017. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

The impact of a CBRNE event will be more severe in places with higher population density due to more people being in danger. Response times may be longer in remote areas. No other multi-jurisdictional differences have been identified at this time.

G. Overall HRV Summary of Events and Their Impact

A CBRNE event has the potential to harm people throughout the County and the Cities of Argyle, Du Pont, Fargo, and Homerville. The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

SECTION IV. Active Shooter

A. Identification of Hazard

The risk of an active shooter is real, and it can happen in any place at any given time. Taking steps now to prepare and implement a plan can better prepare those to react quickly when every second counts. The shootings are unpredictable and can evolve quickly.

Training opportunities for law enforcement officers are offered by the Georgia Public Safety Training Center (https://www.gpstc.org/).

B. Profile of Events, Frequency of Occurrences, Probability

According to the best data available, there have not been any Active Shooter events in Clinch County and the Cities. However, the entire community is equally vulnerable to this hazard and an attack could happen at any place at any time.

C./D.: Inventory of Assets Exposed and Potential Loss

People are the main asset exposed to potential death or injury from active shooter situations. Clinch County's population was estimated at 6,788 in 2017. This figure includes the four Cities: Argyle (population 205), Du Pont (160), Fargo (279), and Homerville (2,455).

E. Land Use and Development Trends

The population of the County and Cities has held fairly steady between 2010 and 2017. The City of Homerville has zoning regulations, but unincorporated Clinch County and the Cities of Argyle, Du Pont, Fargo do not. The County and Cities all have mandatory building and fire codes which are enforced by a building inspector. The Cities and the County participate in joint comprehensive planning and in the required updates of the Service Delivery Strategy. No other land use or development trends that relate to this hazard have been identified at this time.

F. Multi-Jurisdictional Differences

Law enforcement in the Cities of Argyle, Du Pont, and Fargo is provided by the Clinch County Sheriff's Department on a contractual basis. The City of Homerville has its own police department.

G. Overall HRV Summary of Events and Their Impact

An active shooter event has the potential to harm people throughout Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. The HMPUC has developed a comprehensive range of Mitigation Goals, Objectives, and Action Steps to lessen the impacts from this hazard. These are contained in Chapter 4.

Chapter 4: Local Natural Hazard Mitigation Goals and Objectives

Summary of Changes:

Table 4.1 provides a brief description of each section in this chapter and a summary of the changes that have been made.

Chapter 4 Section	Updates to Section
I. Wildfires	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
II. Thunderstorms/Winds	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
III. Tornado	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
IV. Flood	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
V. Drought	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
VI. Hurricane/Tropical Storm	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
VII. Winter Storm	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)
VII. Hail	Updated Goals, Objectives, and Action Step Formatting,
	Numbering and Data Fields, Updated or Deleted Prior
	Action Steps and Added New Action Steps (if applicable)

Table 4.1: Overview of updates to Chapter 4: Local Natural Hazards, Mitigation Goals and Objectives

Overall Community Mitigation Goals, Policies, and Values Narrative

While Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville each operate autonomously, there is a high level of cooperation exhibited when it comes to hazard mitigation and emergency planning efforts. Each local government has designated representatives to participate in the emergency management process, whether it be during planning, response, or recovery phases. The local Emergency Management Agency hosts regular meetings to gather all of the relevant local, regional and state partners together to develop effective plans and strengthen relationships among all of the stakeholders. Working together, the jurisdictions have been able to access resources available through several state and federal sources that have been instrumental in improving the technical capabilities of these communities to more effectively mitigate hazards and provide more accurate warning and preparatory information to their citizens.

Overall, the priorities for each of the local communities have remained relatively unchanged. The hazards and risks associated with each have not changed, and many of the action steps identified during previous Hazard Mitigation Plans are still relevant and remain a priority in this plan as well.

Authority for the development of this Plan was given by the Clinch County Commission as a result of their execution of the Grantee-Subgrantee Agreement for the Clinch County Hazard Mitigation Grant Program (HMGP) Planning Project; and by the Cities of Argyle, Du Pont, Fargo, and Homerville, located in Clinch County, through their participation in the planning project. The Clinch County Emergency Management Agency is authorized to oversee emergency management within Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville.

The jurisdictions have many current policies and programs related to hazard mitigation, which are described in detail in the goals, objectives, and action steps contained in Chapter 4 of this Plan. All jurisdictions (within the boundaries of their budgets) have the ability to expand and improve their existing policies and programs as evidenced by the new and existing goals, objectives, and action steps included in this plan. The amount of resources available to the jurisdictions for expansion and improvement of existing programs will depend on factors such as the local government budgets and the availability of state and federal funding to support hazard mitigation activities.

This chapter contains a description of the comprehensive range of Mitigation Goals, Objectives, and Action Steps that were developed by the HMPUC to reduce damages and improve safety through Hazard Mitigation. These have been arranged by the natural hazards contained in Chapter 2. There is particular emphasis on emergency preparedness and infrastructure.

The HMPUC discussed and identified the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Chapter 4 of this Plan after identifying the hazards noted in Chapter 2 of this Plan. All areas of the community were taken into account in the development of the comprehensive range of Mitigation Goals, Objectives, and Action Steps. These were identified after the weighing of many factors discovered during the planning process, including risk assessment, storm history, past damage, community resources, and other factors.

A list of the comprehensive range of Mitigation Goals, Objectives, and Action Steps was compiled from the input of the HMPUC, as well as from others within the community. Members of the

HMPUC prioritized the identified comprehensive range of Mitigation Goals, Objectives, and Action Steps based on what was anticipated to be most beneficial to the community. The benefits of all action steps were determined to be greater than the costs involved.

Several criteria were established to assist the HMPUC members in the prioritization of these suggested Mitigation Goals, Objectives, and Action Steps. Criteria included perceived cost vs. benefit or cost effectiveness, availability of potential funding sources, overall feasibility, measurable milestones, political support for the proposed actions, and the STAPLEE criteria.

Through this prioritization process, several projects emerged as having higher priority than others. Some of the projects involved expending considerable amounts of funds to initiate the required actions. The determination of the cost/benefit analysis (such as the FEMA B/CA model) of a project will be implemented at the time of project application or funding request. Other projects allowed the communities to pursue completion of the project using potential grant funding. Still others required no significant financial commitment by the communities.

In Chapter 6, Sections I-III, there is a description of the planning process involved in selecting the comprehensive range of Mitigation Goals, Objectives, and Action Steps. The Action Steps are given a rating of High, Medium, or Low Priority by the HMPUC based on a number of factors (with a primary emphasis on prioritized cost versus benefit review) identified in Chapter 6, Section I.

Relevant comprehensive ranges of Mitigation Goals, Objectives, and Action Steps are listed below throughout the chapter. The Clinch County EMA Director has been chosen by Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville to oversee the projects. The Clinch County EMA has been designated by Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville to be the coordinating agency for implementation and administration of these projects.

Action Steps Applicable to All Natural Hazards

Certain action steps will apply to all natural hazards and will be listed here to avoid redundancy.

Action Step 1: Have up to date brochures & fact sheets to distribute for student and citizen	
education to increase public awareness and cooperation.	
Responsible Department	EMA
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	Medium
Status	Ongoing

Action Step 2: Enforce existing ordinances protecting life and property from natural hazards.	
Responsible Department	Planning & Zoning
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 3: Consider a cooperative City, County, and Local Business Emergency Planning	
Group for pre and post disaster planning.	
Responsible Department	County/EMA
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 4: Purchase communications equipment (radios, pagers, batteries and chargers)	
which have multi-channel capabilities.	
Responsible Department	E-911 Director
Anticipated Cost	\$25,000
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 5: Purchase and install generators and trailers at critical facilities.	
Responsible Department	EMA
Anticipated Cost	\$20,000
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	Medium
Status	New

Action Step 6: Evaluate & obtain an advanced warning system to alert citizens of impending natural disasters.	
Responsible Department	County/Cities
Anticipated Cost	\$50,000
Existing & Potential Funding Sources	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 7: Provide First Responder Training (CERT) for citizens.	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 8: Review, update and add necessary floodplain, zoning, and building regulations	
Responsible Party	County Commission/City Councils
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 9: Increase public awareness of evacuation routes, safety procedures, & the hospital disaster plan by publishing articles in the local newspaper, holding town hall meetings and providing bulletins to local churches and the schools. Responsible Party **EMA Anticipated Cost** \$10,000 **Existing & Potential Funding Source** Grants, local funds Clinch County and Cities of Argyle, Du Pont, Jurisdiction Fargo, and Homerville 2020-2025 Timeframe Priority High Status Ongoing

Action Step 10: Increase public awareness of the assistance the local Emergency Management Agency can provide.	
Responsible Party	EMA
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step 11: Update and coordinate all Emergency Response Plans on an annual basis.	
Responsible Party	EMA
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, local funds
Jurisdiction	Clinch County and Cities of Argyle, Du Pont,
	Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	In Place and Ongoing

Section I. Wildfires

A. Community Mitigation Goals

As previously indicated in Chapter 2, this hazard may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Wildfires are unpredictable and can happen at any place and at any time. Due to the great damage it may cause, the HMPUC believes that the comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of the Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendation

Goal 1: Prevent or reduce damage caused by Wildfire in Clinch County and the Cities of Argyle, Du Pont, Fargo and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, and woodlands due to wildfire.

Action Step #1: Seek funding to obtain adequate firefighting equipment to each station as per required need	
Responsible Party	All Fire Departments
Anticipated Cost	\$25,000
Existing & Potential Funding Source	Grants, local funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #2: Provide up to date training for all firefighting personnel to include S130, S190, and S215	
Responsible Party	All Fire Departments
Anticipated Cost	Staff Time
Existing & Potential Funding Source	Fire Department funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #3: Seek funding to install more dry hydrants in populous areas.	
Responsible Party	All Fire Departments
Anticipated Cost	\$10,000
Existing & Potential Funding Source	Enhanced Fuel Management (EFM) Grant
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #4: Seek funds to repair existing ponds	
Responsible Party	Property Owners
Anticipated Cost	Property owners' time
Existing & Potential Funding Source	Private funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Low
Status	Ongoing

Action Step #5: Seek funding to acquire fire tankers (2000 to 3000 gallons) for local fire departments	
Responsible Party	All Fire Departments
Anticipated Cost	\$320,000
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #6: Support and enforce the use of required burn permits at the local level	
Responsible Party	All Fire Departments
Anticipated Cost	\$100,000
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #7: Encourage local governments and individual homeowners to trim tree lines	
and create fire buffers around homes, businesses, and utilities	
Responsible Party All Fire Departments	
Anticipated Cost	\$100,000
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #8: Clinch County and the Cities of Du Pont and Homerville should become "Firewise" Communities (Argyle became listed as firewise 4/2011 & Fargo was listed 3/2009)	
Responsible Party	Clinch County Commission, Town of Du Pont, City of
	Homerville
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #9: Promote more efficient use of surface irrigation	
Responsible Party	County Commission and City Councils
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #10: 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, holding town hall meetings, radio announcements and providing bulletins to local churches and schools

Responsible Party

Georgia Forestry Commission

Responsible Party	Georgia Forestry Commission
Anticipated Cost	Staff time
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #11: Construct an additional well and treatment building to increase firefighting capacity in the City of Fargo.	
Responsible Party City of Fargo	
Anticipated Cost	\$400,000
Existing & Potential Funding Source	FEMA BRIC Grant
Jurisdiction	City of Fargo
Timeframe	2020-2025
Priority	High
Status	New

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed and Deleted Action Steps:

Action Step #11: Develop a Community Safe Shelter program	
Responsible Party	Clinch County EMA
Anticipated Cost	\$2,000,000
Existing & Potential Funding Source	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2015
Priority	High
Status	Completed

Unchanged Action Steps:

- Action Step #1
- Action Step #2
- Action Step #6
- Action Step #7
- Action Step #8
- Action Step #10

Action steps with changes:

- Action Step #3 Some hydrants have been installed. Continue installing hydrants
- Action Step #4 Priority changed from Medium to Low
- Action Step #5 Estimated cost change from \$100,000 to \$320,000
- Action Step #9 Priority changed from High to Low

New Action Steps:

• Action Step #11

Action Steps Considered But Ultimately Not Included:

None

Section II. Thunderstorm/Wind

A. Community Mitigation Goals

As previously indicated in Chapter 2, this hazard may cause substantial damage to life, property, and the economy in the County and the City of Cities of Argyle, Du Pont, Fargo, and Homerville. Thunderstorms and wind are unpredictable and can happen at any place and at any time. Because these storms may be extremely violent and cause great damage, the HMPUC believes that the comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of the Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations:

Goal 2: Prevent or reduce damage caused by thunderstorms and wind in the County and in the City of Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Thunderstorms and Winds.

Action Step #2: Increase public awareness of weather radios and county shelters through all available media	
Responsible Department	Clinch County EMA
Anticipated Cost	\$500
Existing & Potential Funding Sources	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

• Action Step #1 – Deleted this item. Funding is not available

Action Step #1: Evaluate cost and retrofit as many critical facilities within the county as possible	
Responsible Party	Clinch County EMA
Anticipated Cost	\$200,000
Existing & Potential Funding Source	Local Governments and Grants
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	Deleted

Changed Action Steps:

• Action Step #2 – Priority changed from High to Medium

Action Steps Considered But Ultimately Not Included:

None

Section III. Tornadoes

A. Community Mitigation Goals

As previously indicated in Chapter 2, this hazard may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Tornadoes are unpredictable and can happen at any place and at any time. Because these tornadoes may be extremely powerful and cause great damage, the HMPUC believes that the comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendation:

Goal 3: Prevent or reduce damage caused by Tornadoes in Clinch County and in the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due Tornadoes.

Action Step #1: Use building inspection program to inspect for adequate tie-downs and other codes, ordinances, and all other regulations on manufactured housing in the cities and county	
Responsible Department County Planning and Zoning Staff	
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Grants, general funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Changed Action Steps:

• Action Step #1 – Priority changed from High to Medium

Action Steps Considered But Ultimately Not Included:

None

Section IV. Floods

A. Community Mitigation Goals

As previously indicated in Chapter 2, this hazard may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Floods are unpredictable and can happen at any place and at any time. Because of the damage and loss of life it may cause, the HMPUC believes that the comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of the Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations:

Goal 4: Prevent or reduce damage caused by flooding in Clinch County and in the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to Floods

Action Step #1: After flood events, perform analysis on properties affected and attempt to mitigate or purchase, if necessary	
Responsible Department	County Planning and Zoning Staff
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Funds, Grants
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	Ongoing

Action Step #2: Strictly maintain integrity of drainage canals throughout County and Cities	
Responsible Department	County Commission; City/Town Councils
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Funds, Grants
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #3: Evaluate, plan, & implement drainage projects along Suwanoochee Creek and River areas, and other waterways as needed	
Responsible Department County Commission; City/Town Councils	
Anticipated Cost	\$15,000
Existing & Potential Funding Sources	CDBG Grant Funds, or other grants
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Low
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy.

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Unchanged Action Steps:

• Action Step #2

Changed Action Steps:

- Action Step #1 Priority changed from High to Medium
- Action Step #3 Priority changed from High to Low

Action Steps Considered But Ultimately Not Included:

None

Section V. Drought

A. Community Mitigation Goals

As previously indicated in Chapter 2, drought may cause substantial economic, property, and personal damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville, particularly in the form of crop damage. Its effects can be long-term, with the damage increasing as time goes by. In addition, drought conditions can contribute to wildfires in the community. The HMPUC believes that, due to the damage drought can cause, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 5: Prevent or reduce damage caused by drought in Clinch County and in the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize economic losses and harm to residents due to drought.

Action Step #1: Work with County Extension Agent to distribute literature related to best agricultural management practices	
Responsible Department Clinch County EMA	
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #2: Work with GA DCA CDBG Immediate Threat and Danger Program to	
provide wells to low-moderate individuals affected by drought	
Responsible Department	County Commission, City/Town Councils
Anticipated Cost	\$25,000
Existing & Potential Funding Sources	DCA/CDBG Grant Fund
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Unchanged Action Steps:

• Action Step #1

Changed Action Steps:

• Action Step #2 – Priority changed from High to Medium

Action Steps Considered But Ultimately Not Included:

None

<u>Section VI.</u> Hurricanes/Tropical Storms

A. Community Mitigation Goals

As previously indicated in Chapter 2, hurricanes and tropical storms may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. They are usually accompanied by some advanced notice, giving the community time to prepare and/or evacuate. The HMPUC believes that, because these extreme weather events have the potential to cause great damage, injury, and loss of life, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 6: Prevent or reduce damage caused by hurricanes and tropical storms in Clinch County and in the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to hurricanes and tropical storms

Action Step #1: Recommend that all new educational facilities be designed to the level that they	
could be used as public shelters for emergency purposes	
Responsible Department	Clinch County Board of Education
Anticipated Cost	\$75,000
Existing & Potential Funding Sources	Grants, Board of Education
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #2: Secure & circulate pre-disaster information brochures in area news markets, & by presentations at schools, churches, and civic clubs	
Responsible Department	Clinch County EMA
Anticipated Cost	\$1,000
Existing & Potential Funding Sources	Grants, General Fund
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #3: Obtain additional road signage for emergency traffic circulation and publish	
most efficient routes	
Responsible Department	Clinch County EMA, County Commission
Anticipated Cost	\$5,000
Existing & Potential Funding Sources	GDOT
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Unchanged Action Steps:

- Action Step #1
- Action Step #2
- Action Step #3

Action Steps Considered But Ultimately Not Included:

None

Section VII. Winter Storm

A. Community Mitigation Goals:

As previously indicated in Chapter 2 Section VII, Winter Storms may cause substantial damage in Clinch County and in the Cities of Argyle, Dupont, Fargo and Homerville. They could happen at any place in Clinch County and in the Cities of Argyle, Dupont, Fargo and Homerville are so far South, Winter Storm events do not occur that often and the necessary equipment that more northern counties and cities possess is not available. The Clinch County Pre-Disaster Mitigation Plan Update Committee believes that, due to the fact that these Winter Storms have the potential to cause great damage, Mitigation Goals, and Action Steps (contained in Section C below) should be implemented to reduce the Winter Storm damage in the community.

B. Identification and Analysis of Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 7: Prevent or reduce damage caused by winter storms in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to winter storms.

Action Step #1: Wrap insulation around any exposed water pipes at critical facilities and shelters when freezing temperatures are anticipated	
Responsible Department Clinch County EMA	
Anticipated Cost	\$5,000
Existing & Potential Funding Sources	General Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

Action Step #2: Maintain temperatures above 32 degrees to prevent freezing damages in occupied and unoccupied structures	
Responsible Department Clinch County EMA	
Anticipated Cost	Staff time
Existing & Potential Funding Sources	General Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the Homerville-Clinch County EMA. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (TV, Web Site, Local Newspaper, City Council Meetings, County Commission Meetings, social media, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of goals, objectives, and action steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Unchanged Action Steps:

• Action Step #2

Changed Action Steps:

• Action Step #1 – Estimated cost was clarified as \$5,000

Action Steps Considered But Ultimately Not Included:

None

Section VIII. Hail

A. Community Mitigation Goals

As previously indicated in Chapter 2, Section VII, hail may cause substantial economic, property, and personal damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Hail is unpredictable and could happen at any place and at any time. The Clinch County HMPUC believes that, due to the damage hail may cause, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce the threat of hail damage in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 8: Prevent or reduce damage caused by Hail in Clinch County and in the Cities of Argyle, Du Pont, Fargo, and Homerville.

Objective 1: Minimize losses to existing and future structures, especially Critical Facilities and Infrastructure, due to hail.

Action Step #1: Install storm windows at critical facilities throughout County and Cities as funding becomes available	
Responsible Department County Commission, City/Town Councils	
Anticipated Cost	\$25,000
Existing & Potential Funding Sources	Grants/General Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	Ongoing

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the Alma-Clinch County EMA. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (TV, Web Site, Local Newspaper, City Council Meetings, County Commission Meetings, social media, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts. The major criteria to measure plan success will be the number of goals, objectives, and action steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

F. Changes from Previous Plan

Completed And Deleted Action Steps:

None

Unchanged Action Steps:

• Action Step #1

Action Steps Considered But Ultimately Not Included:

None

Chapter 5. Local Technological Hazard Mitigation Goals and Objectives

Section I. Hazardous Materials Release

A. Community Mitigation Goals

As previously indicated in Chapter 3, a hazardous materials release may cause substantial damage to life, property, and the economy in Clinch County. Such events can occur with little or no warning, giving the community no time to prepare and/or evacuate. The HMPUC believes that, because these events have the potential to cause great damage, injury, and loss of life, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 1: Protect the health and safety of residents of Clinch County.

Objective 1: Enhance the ability of the Clinch County Emergency Management Agency to coordinate effectively and efficiently the emergency response during and after a hazardous materials release.

Action Step 1: Implement the "Community Emergency Response Team" (CERT) program.	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2022
Priority	High
Status	New

Objective 2: Minimize the effect of hazardous material spills.

Action Step 2: Coordinate HazMat response training	
Responsible Department	EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2021
Priority	High
Status	New

Action Step 3: Seek funding to expand HazMat training to first responders (fire, sheriff, EMS)	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020
Priority	High
Status	New

Action Step 4: Increase public awareness and procedures to follow if a hazardous material spill event occurs by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools. Staff Time

Responsible Department

Clinch County FMA

Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 5: Train local government officials on proper response procedures for hazardous material	
spill events.	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 6: Investigate, implement and train in methods to relocate residents if event occurs.	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 7: Provide workplace training on decontamination steps.	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 8: Review annually all hazardous material transportation routes (relocate routes if	
necessary)	
Responsible Department	Clinch County EMA
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	General Funds, DOHS-GEMA/FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	New

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

Section II. Public Health Emergency

A. Community Mitigation Goals

As previously indicated in Chapter 3, a public health emergency may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle. Du Pont, Fargo and Homerville. Such events can occur with little or no warning, giving the community no time to prepare and/or evacuate. The HMPUC believes that, because these events have the potential to cause great damage, injury, and loss of life, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 1: Protect the health and safety of residents of Clinch County.

Objective 1.1: Enhance the ability of the Clinch County Emergency Management Agency to coordinate effectively and efficiently the emergency response during and after a hazardous materials release.

Action Step 1: Train Public Health Emergency responders	
Responsible Department	EMA, City & County Managers
Anticipated Cost	Staff Time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Objective 1.2: Minimize the effect of Public Health Emergencies.

Action Step 2: Maintain Public Health Emergency response training	
Responsible Department	EMA, City and County Managers, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 3: Seek funding to expand Public Health Emergency training to first responders (fire, police, sheriff, EMS)	
Responsible Department	EMA, City and County Managers, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	FEMA, GEMA, DHS and local budget
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 4: <i>Increase public awareness and procedures to follow if a Public Health Emergency event occurs by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools.</i>	
Responsible Department EMA	
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds, GEMA, FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 5: Train local government officials on proper response procedures for Public Health Emergency events.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 6: Adopt Standard Operating Procedures (SOP) for responding to a Public Health	
Emergency event.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 7: Provide workplace training on decontamination steps.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 8: Review annually all Public Health Emergency routes (relocate routes if necessary)	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, GDOT
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	New

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

Section III. CBRNE

A. Community Mitigation Goals

As previously indicated in Chapter 3, a CBRNE may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo and Homerville. Such events can occur with little or no warning, giving the community no time to prepare and/or evacuate. The HMPUC believes that, because these events have the potential to cause great damage, injury, and loss of life, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 1: Protect the health and safety of residents of Clinch County.

Objective 1.1: Enhance the ability of the Clinch County Emergency Management Agency to coordinate effectively and efficiently the emergency response during and after a CBRNE.

Action Step 1: Train CBRNE responders	
Responsible Department	EMA, City & County Managers
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Objective 1.2: Minimize the effect of CBRNE.

Status

Action Step 2: Maintain Public Health Emergency response training	
Responsible Department	EMA, City and County Managers, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 3: Seek funding to expand CBRNE training to first responders (fire, police, sheriff, EMS)	
Responsible Department	EMA, City and County Managers, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	FEMA, GEMA, DHS and local budget
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 4: Increase public awareness and procedures to follow if a CBRNE event occurs by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools.	
Responsible Department	EMA
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds, GEMA, FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High

New

Action Step 5: Train local government officials on proper response procedures for CBRNE events.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 6: Review and adopt Standard Operating Procedures (SOP) for responding to a CBRNE	
event.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 7: Provide workplace training on decontamination steps.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 8: Review annually all CBRNE routes (relocate routes if necessary)	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, GDOT
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	New

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

Section IV. Active Shooter

A. Community Mitigation Goals

As previously indicated in Chapter 3, an Active Shooter may cause substantial damage to life, property, and the economy in Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. Such events can occur with little or no warning, giving the community no time to prepare and/or evacuate. The HMPUC believes that, because these events have the potential to cause great damage, injury, and loss of life, a comprehensive range of Mitigation Goals, Objectives, and Action Steps (contained in Section C below) should be implemented to reduce this hazard's potential impact on the community.

B. Identification and Analysis of Comprehensive Range of Mitigation Options

1. Structural and Non-Structural Mitigation:

This Hazard Mitigation Plan contains both structural and non-structural options. For more information, see the comprehensive range of Mitigation Goals, Objectives, and Action Steps contained in Section C below.

2. Existing Policies, Regulations, Ordinances and Land Use:

Chapter 2 of this plan contains information regarding existing policies, regulations, ordinances, and land use that are relevant to this hazard.

3. Community Values, Historic and Special Considerations:

Historic buildings exist in the community, a few of which are Critical Facilities. There are historic and special considerations that pose significant challenges with regard to the retrofitting of historic buildings in order to make them more resilient to natural hazards. The historic Clinch County Courthouse and Clinch County Jail are listed in the National Register of Historic Places.

4. New Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect new buildings and infrastructure from the effects of this hazard.

5. Existing Buildings and Infrastructure:

The mitigation strategy and recommendations that follow include action steps designed to protect existing buildings and infrastructure from the effects of this hazard.

C. Mitigation Strategy and Recommendations

Goal 1: Protect the health and safety of residents of Clinch County.

Objective 1.1: Enhance the ability of the Clinch County Emergency Management Agency to coordinate effectively and efficiently the emergency response during and after an Active Shooter.

Action Step 1: Train Active Shooter responders	
Responsible Department	EMA, City & County Managers
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Objective 1.2: Minimize the effect of CBRNE.

Action Step 2: Seek funding for Active Shooter training to first responders (fire, police, sheriff, EMS)	
Responsible Department	EMA, City and County Managers, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	FEMA, GEMA, DHS and local budget
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 3: Increase public awareness and procedures to follow if an Active Shooter event occurs by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools.	
Responsible Department	EMA
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds, GEMA, FEMA
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 4: Train local government officials on proper response procedures for Active Shooter	
events.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 5: Review and adopt Standard Operating Procedures (SOP) for responding to an Active Shooter event.	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, Fire Departments
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	High
Status	New

Action Step 6: Review annually all Active Shooter evacuation routes (relocate routes if necessary)	
Responsible Department	Local Emergency Operations Planning Committee,
	EMA, GDOT
Anticipated Cost	Staff time
Existing & Potential Funding Sources	Local Operating Funds
Jurisdiction	Clinch County, Cities of Argyle, Du Pont, Fargo, and
	Homerville
Timeframe	2020-2025
Priority	Medium
Status	New

D. Special Multi-Jurisdictional Strategy and Considerations:

Most of the strategies outlined above apply to and are intended to be carried out by each of the local jurisdictions. In certain cases, where the action step may not apply to all jurisdictions, the applicable jurisdictions are noted in the table.

E. Local Public Information and Awareness Strategy:

All sections of the Plan shall be monitored and evaluated annually by the County Emergency Management Agency. Incremental accomplishments of Mitigation Goals, Objectives, and Action Steps will be reported to the public through appropriate means (news media, social media, web pages, City Council and County Commission meetings, etc.). By utilizing available resources, each jurisdiction will keep the public constantly informed of the development of these strategies and of how citizens can best assist with and/or take advantage of these efforts.

The major criteria to measure plan success will be the number of Goals, Objectives, and Action Steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property. For further details on plan execution, see Chapter 6.

Chapter 6: Executing The Plan

Summary of changes:

• Revised and updated language.

Section I. Implementation of the Action Plan

A. Administrative Actions

The meetings and planning process of the HMPUC have been overseen by the Clinch County Emergency Management Agency. The Southern Georgia Regional Commission contracted with the Clinch County Commission to administer and facilitate the planning process. The Clinch County Commission and the Cities of Argyle, Du Pont, Fargo, and Homerville will adopt the Plan (on approval by GEMA and FEMA) by the resolutions contained in Appendix E.

B. Authority and Responsibility

The Clinch County Commission and the Cities of Argyle, Du Pont, Fargo, and Homerville have authorized the submission of this Plan to both GEMA and FEMA for approval.

As determined by the City and County governments and the HMPUC, the Clinch County EMA Director will be responsible for this Plan and its continued usage as a planning document. The EMA Director will oversee implementation, monitoring, and updates for all jurisdictions. The respective jurisdictions will be responsible for the implementation of their specific mitigation activities as proposed in this plan.

C. Prioritization

1. Methodology for Prioritization

In prioritizing the implementing of the action steps identified in this plan, those hazards deemed to pose the greatest threat will be given the primary consideration. In prioritizing the implementation feasibility of the action steps and projects, local governments will take into consideration the additional factors of cost and time. Those activities requiring smaller amounts of money and staff time to implement will be given highest implementation priority. Those steps requiring additional funding for equipment or staff time beyond the normal budgets of the communities will be incorporated into the budget process when possible based on the cost-benefit analysis described below. Action steps in the plan were given a priority rating of high, medium, or low, determined by discussion and consensus among the HMPUC members at the meetings. Action steps with high priority are those that are of the greatest importance to the community and to which financial resources will be allocated first. Low priority items will be implemented as resources allow and are of less importance to the community. Medium priority items rank in between the high and low items.

2. Use of Cost Benefit Analysis

The data provided in Worksheet 3a will be utilized to quantify the number of persons and/or property at risk from each hazard. Combined with the criteria in Worksheet 4 (see Appendix D), this will allow local governments to assess the potential value of at-risk properties and the resulting benefits from the proposed action steps.

In prioritizing projects, the local governments will also utilize cost benefit analysis (CBA) to evaluate the feasibility of a major project. CBA is a well-established method for quantitatively comparing the benefits and costs of mitigation projects. The end result is a Benefit-Cost Ratio (BCR), which is derived from a project's total net present value of benefits divided by the total project cost estimate, which must include all documented project and maintenance costs. The benefits of mitigation projects are avoided damages, disruptions, losses, and casualties. Examples of common benefits include avoided or reduced damages to buildings, contents, or infrastructure; avoided or reduced economic impacts of loss of function of buildings; avoided or reduced displacement costs for temporary quarters; avoided or reduced loss of public services; avoided or reduced loss of infrastructure; avoided or reduced road or bridge closures; avoided or reduced loss of utility services; and avoided or reduced deaths and injuries.

3. Use of Other Calculations

Additional calculations that were performed included: Availability of potential funding sources; overall feasibility; measurable milestones; public and political support for the proposed actions; and the STAPLEE criteria.

4. Use of Other Review Structure

In addition to the cost-benefit analysis, other factors that may affect the prioritization of projects include the availability of special tax, grant, and/or loan funds which become available on a limited basis to finance project implementation, such as SPLOST funds or FEMA Pre-Disaster Mitigation Program funds.

D. Incorporation of Local Hazard Mitigation Plan into Other Plans/Planning Measures

This Plan will be reviewed by Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville. 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, Capital Improvement Plans, Local Emergency Operations Plans, and all other such Plans as appropriate.

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

To facilitate inclusion of this Plan, the Clinch County Commission and the Cities of Argyle, Du Pont, Fargo, and Homerville will provide a copy of this Plan to the persons and/or committees responsible for writing and updating plans. The previous hazard mitigation plan was incorporated into the other planning mechanisms mentioned above through review of the previous HMP during

plan update processes, and inclusion of HMP goals, objectives, and action steps in other plans as appropriate. The mitigation action steps, goals, and objectives of this hazard mitigation plan will all be considered for inclusion in the other planning documents mentioned above, and will be included as appropriate.

Section II. Evaluation and Monitoring

A. Method

The Clinch County EMA Director will be charged with ensuring that this plan is monitored and periodically updated in subsequent years. The method that the Clinch County EMA will use to monitor the plan and evaluate implementation progress will be the following:

- The Clinch County EMA will conduct quarterly telephone interviews with the various local governments and area agencies in order to chart their plan progress.
- The EMA Director will hold formal public meetings at least once a year to monitor the progress of the plan implementation and allow the public a forum for expressing concerns, opinions, and ideas.
- Throughout the year, a series of informal meetings will be held in which various aspects of the plan, including monitoring and evaluation, are discussed.

B. Criteria Used To Monitor and Evaluate the Plan

The major criteria to measure plan success will be the number of goals, objectives, and action steps, or components thereof, that have been completed, which in turn will result in savings of life, money, and property.

Section III. Plan Update and Maintenance

A. Public Involvement

Because the Hazard Mitigation Plan is intended to help ensure a safe and livable environment for all Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville residents, it is imperative that public involvement be an integral part of the planning process.

Since adoption of the original Clinch County Pre-Disaster Mitigation Plan, citizens have been kept involved and apprised of plan progress through such forums as regularly scheduled County Commission meetings, public hearings, and applicable newspaper coverage. This same level of public education and awareness and citizen involvement will continue over the next five years until the next required update of the Hazard Mitigation Plan. When specific issues dictate, public hearings will be conducted, and all other community planning efforts (Comprehensive Plan, Regional Plan, etc.) will afford citizens the opportunity to participate in and comment on the need to incorporate hazard mitigation initiatives.

To facilitate the goal of continued public involvement in the planning process, the EMA will assure that the following steps are taken:

- The public will be directly involved in the update and review of the Plan.
- Copies of the plan will be kept on hand at appropriate agencies throughout the community.

- The plan will be available City, County, and/or Regional Commission websites, and will contain an e-mail address and phone number the public can use for submitting comments and concerns about the plan.
- A public meeting will be held annually to provide the public with a forum for expressing concerns, opinions, and ideas. The EMA will set meeting schedules and dates and use County resources to publicize and host this meeting.

B. Timeframe

Pursuant to the requirements set forth in the Disaster Mitigation Act of 2000, the community is again required to update and evaluate the plan no more than five years after its adoption. At least one year prior to the end of the required five-year update period, the EMA Director will begin the planning process for a new update to this plan. This will consist of establishing a new planning committee that will be tasked with completing the update following the same process used for this update.

No later than the conclusion of the five-year period following approval of the plan update, the EMA Director shall submit a revised Hazard Mitigation Plan to GEMA for its approval. It is important to note that the plan update process, as established by the planning committee, is subject to change, depending upon subsequent regulations and/or requirements set forth by GEMA and FEMA.

Chapter 7: Conclusion

Summary of changes:

• Revised and updated language.

Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville have suffered considerable damage in the past from natural hazards. Planning ahead and undertaking structural and nonstructural action steps before a disaster occurs can save lives and property. This philosophy has been the driving force behind the preparation of the Clinch County Hazard Mitigation Plan.

Education of the population and enhanced warning can decrease the vulnerability of the county's citizens and visitors. Continued and improved public information and communication with the population are important parts of this plan. Because of this planning process, Clinch County and Cities of Argyle, Du Pont, Fargo, and Homerville officials have gained a better understanding of the hazards affecting the community.

As a result of the planning process described in Chapter 1 and the hazard, risk, and vulnerability assessment in Chapter 2, Clinch County and the Cities of Argyle, Du Pont, Fargo, and Homerville have a realistic perspective on the hazards to which the community is exposed. With the mitigation strategy outlined in Chapter 4 and the implementation plan included in Chapter 6, the local leaders have an "action plan" to follow when allocating resources to reduce their community's vulnerability to such hazards.

References

Clinch County Board of Tax Assessors (http://www.qpublic.net/ga/Clinch County/)

Clinch County website (http://www.Clinchcountyga.com)

City of Homerville website (http://www.cityofhomerville.com)

Center for Agribusiness & Economic Development. 2017 Georgia Farm Gate Value Report (http://www.caes.uga.edu/content/dam/caes-website/research/centers-and-institutes/center-for-agribusiness-and-economic-development/publications/annual-reports-farm-gate-value-reports/2017-farm-gate-value-report.pdf)

Federal Emergency Management Agency (www.fema.gov)

FEMA National Flood Insurance Program Community Status Book (https://www.fema.gov/national-flood-insurance-program-community-status-book)

Georgia Data. "Agriculture." (https://georgiadata.org/agriculture.html)

Georgia Emergency Management Agency, Georgia Mitigation Information System (https://apps.itos.uga.edu/GEMA.GMIS/)

Georgia Emergency Management and Homeland Security Agency (http://www.gema.ga.gov/)

Georgia Forestry Commission (www.gatrees.org)

National Oceanic and Atmospheric Administration, National Centers for Environmental Information, Storm Events Database (http://www.ncdc.noaa.gov/stormevents/)

National Weather Service. Archived NWS Watch/Warnings at the Iowa State University Environmental Mesonet (https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml)

Southern Georgia Regional Commission (www.sgrc.us)

USDOT Pipeline and Hazardous Materials Safety Administration. Office of Hazardous Materials Safety database (https://hazmatonline.phmsa.dot.gov/IncidentReportsSearch/IncrSearch.aspx)

U.S. Drought Monitor (http://droughtmonitor.unl.edu/)

United States Census Bureau (www.census.gov)

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 - 4. Lightning/Thunderstorms/Wind/Hail NOAA data
 - 5. Wildfires GFC data

- 7. Drought NOAA data 8. Hazardous Materials Release USDOT data

II. Critical Facilities Inventory Appendix G. HAZUS Report