

# MULTI-JURISDICTIONAL HAZARD MITIGATION PLAN UPDATE



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## **Chapter 1 – Introduction**

### **I. Purpose and Need, Authority and Statement of Problem, Purpose of the Plan**

#### **a. Purpose and Need**

To encourage such pre-planning, Congress passed the Disaster Mitigation Act of 2000 (DMA 2000), which requires every community to have an approved Hazard Mitigation Plan in order to receive federal financial disaster assistance after November, 2004. To assist Tift County, Tifton, Ty Ty, and Omega, the same jurisdictions that participated in the previous plan, in meeting this requirement and ensuring their continued eligibility to receive federal disaster assistance, the Georgia Emergency Management Agency (GEMA) awarded the county a planning grant in November 2014, to develop a multi-jurisdictional plan complying with the requirements of DMA 2000. The Tift County Hazard Mitigation Plan Update is the result of many months of research, analysis, and discussion.

#### **b. Authority and Statement of Problem**

The development of the Tift County Hazard Mitigation Plan Update was authorized by the Tift County Board of Commissioners upon acceptance of the GEMA grant in December 2014. Following the guidelines set out by GEMA, the Commission hired H & H Resources, Inc (HHR). as a consultant to guide the County and Municipalities through the planning phases and to draft the updated report. A planning team was established and consisted of representatives from the municipalities.

The following mission statement best states both the problem and the challenge being addressed by this plan: “To make the citizens, businesses, communities and local governments of Tift County and its cities less vulnerable to the effects of natural hazards through the effective study of hazard mitigation, hazard risk assessments, wise floodplain management and a coordinated approach to mitigation policy through state, regional and local planning activities.”

#### **c. Purpose of the Plan**

The purpose of this plan is to serve as a guide for community leaders as they make decisions regarding the investment of resources to reduce the danger posed by natural hazards. Through the extensive planning process that has been utilized, the community’s goals, objectives, tasks, and action steps reflect the “plan of action” that community leaders can follow to best protect Tift County’s citizens and property from danger.

## **II. Local Methodology, Brief Description of the Planning Process, Participants in Planning Process**

### **a. Local Methodology**

To meet the requirements and goals of the GEMA planning grant, and the requirements of DMA 2000, the Tift County Board of Commissioners elected to utilize a consultant to assist with the planning and preparation of the plan. The Commissioners appointed the Director of Tift County Emergency Management Agency (EMA), to coordinate the work of the consultant (HHR) and the planning team. In addition to assisting the planning team in conducting research, HHR also assisted with hazard and critical facility data collection, input of critical facility data into the Critical Facility Inventory database developed for GEMA by the University of Georgia's Information Technology Outreach Services (ITOS) department, and drafting of the final plan document.

### **b. Brief Description of the Planning Process**

The Director of EMA and HHR met on March 30, 2015 to layout the planning approach and to begin gathering updated hazard information. This included examining the existing Critical Facilities list in GMIS and noting which facilities needed to be added since the adoption of the previous plan. In addition, the need for updated Repetitive Loss Properties (RLP), updated population counts, structure inventory, current value and updated hazard profiles were discussed.

The county-wide kick-off meeting was held on April 23, 2015 to review the requirements of DMA 2000 and the planning process that would be used to develop the county's plan. Representatives of the county and all three municipalities were invited, as well as neighboring communities, local and regional agencies involved in hazard mitigation activities, agencies that have authority to regulate development, and representatives of business, academia and private and non-profit organizations. Tift County EMA sent out several email invitations to various governmental agencies, businesses and academia to attend the planning meetings (see Appendix E). In addition, Tift County submitted the draft plan to Irwin, Turner, Berrien, Cook, Colquitt and Worth Counties for their comment. (See Appendix E)

The planning team met on May 21, 2015 to go over Mitigation Goals and to identify which hazards needed to be addressed in the plan. The planning team agreed that the Mitigation Goals from the previous plan should continue in the updated plan. The planning team also chose the same hazards which were used in the previous plan: Hurricanes, Tornadoes, Flood, Windstorms/Hailstorms/Lightning, Extreme Heat/Cold, Wildfires, and Drought. The only technological hazard identified by the planning team to be addressed in the plan was Hazardous Materials Release.

On June 9, 2015, the team met to begin reviewing the mitigation strategies from the previous plan. The goal was to identify which mitigation strategies had been completed and which had not been completed. This data was then used to determine if any of the mitigation strategies from the previous plan which were completed or ongoing should be included in the plan update. In addition, mitigation strategies which were not completed under the previous plan were evaluated to determine the feasibility of including them in the updated plan. At this meeting the 2028 Greater Tift County Comprehensive Plan, Local Emergency Operations Plan (LEOP), Tift County Flood Insurance Study, Community Wildfire Protection Plan and Georgia Hazard Mitigation Strategy were discussed to see how they could be incorporated into the planning process. The Comprehensive Plan and the LEOP were consulted but were not used in this plan. The Flood Insurance Study, the Community Wildfire Protection Plan and the Georgia Hazard Mitigation Strategy were incorporated into the plan as mitigation steps (Wildfire Plan) or historical data. See Appendix G for the average depth of flooding for the FEMA studied streams in Tift County per the Flood Insurance Study.

The planning team met once more on October 28, 2015 to determine which mitigation strategies to pursue. Worksheet #4 was filled out for each hazard in order to prioritize the action steps identified in the mitigation strategy.

A final planning team meeting was held on February 2, 2016 to review the report a final time before submitting to FEMA.

**c. Participants in the Planning Process**

The following participated in the planning process for this plan:

Jason Jones – Director, Tift County Department of Public Safety  
Vickie Hickman – Deputy Director – Tift County EMA  
Chad Branch – Com. Director, Tift County Dept of Public Safety  
Robby Dasher – Director of Operations – Tift Co. Board of Education  
Carl Fortson – Director, Tift County Development Support Services  
Russell Gay – Deputy Director - Tift County Code Enforcement  
Teresa Lupo – Chief Appraiser - Tift County Tax Assessors Office  
Wendall Lupo – Deputy Director - Tift County Building Inspections  
Donna Pate – Utilities Manager - ESG Operations  
Alan Sloan – Hazard Mitigation Planner – GEMA  
Craig Sowell – Director - Tift County Recreation Department  
Charles Taylor – Director of Operations - Triest  
John Wyatt – Georgia Power  
Yolanda Baker – City Clerk – City of Omega  
Sherry Boyett – City Clerk – City of Ty Ty  
Ralph Fletcher – Ranger – Georgia Forestry Commission  
Tim Spivey – GIS Specialist – Tift County Tax Assessors Office  
Eddie Senkbeil – EMA Coordinator - Tift Regional Hospital  
Hayward Becton – Real Property Appraiser - Tift County Tax Assessors

Troy Tapp – Real Property Appraiser - Tift County Tax Assessors  
Tim Sanders – Cartographer - Tift County Tax Assessors  
Ricky Sellars – Real Property Appraiser - Tift County Tax Assessors  
Dennis Reese – Captain - Tift County Sheriff's Office  
Danny Wallace – Fire Inspector - Tift County Fire Department  
Crystal Craft – City of Tifton – Public Works Administrator  
Jason Jordan – Director – Tift County Public Works Department

A Public Hearing was held on December 14, 2015 to gather input from citizens on the Draft Plan. No members of the public attended the meeting.

A Public Hearing was held on September 12, 2016 to gather input from citizens on the Final Plan.

The Final Plan was presented to the local municipalities and adopted on the following dates:

Tift County	September 12, 2016
City of Tifton	October 3, 2016
City of Ty Ty	October 3, 2016
City of Omega	October 4, 2016

### **III. Plan Update**

Chapter 1: The planning process was updated to reflect the current planning process used to prepare the updated plan.

Chapter 2: The hazard profiles for each identified hazard were updated. Critical Facilities were updated with facilities constructed since the previous plans adoption. Structure inventory and value were updated for each municipality. Each previously identified hazard was evaluated to see if the hazard was still applicable and should be included in the plan. This was based on information on any additional hazard events since the adoption of the previous plan.

Chapter 3: The hazard profile for technological hazards was updated. New analysis was conducted to determine the hazard profile over the past 4 years. The plan update and mitigation strategies reflect the most recent data from the previous 4 years.

Chapter 4 and 5: The mitigation strategies from the previous plan were reviewed and documented as to which strategies were completed, which were not completed and which were ongoing activities. A list was made of mitigation strategies from the previous plan which should be incorporated into the updated plan as well as new strategies.

Chapter 6: This chapter was reviewed and updated with current mitigation strategies. In addition the use of the STAPLEE Criteria for evaluating projects was utilized.

Chapter 7: The plan conclusion was updated

#### **IV. Organization of the Plan**

This plan is composed of seven chapters, beginning with this introductory chapter as Chapter 1. Chapter 2 is the natural hazard, risk and vulnerability (HRV) summary, while Chapter 3 is the technological hazard, risk and vulnerability summary. Chapter 4 details the local natural hazard mitigation strategy, with goals, objectives, tasks, and action steps for each hazard, and Chapter 5 addresses the technological hazard mitigation strategy. Chapter 6 is the implementation strategy for this plan, and Chapter 7 is the conclusion. The Appendices include additional data by hazard, including maps and critical facility data, and required documentation.

#### **V. Local HRV Summary, Local Mitigation Goals and Objectives**

##### **a. Local HRV Summary**

As noted above, Chapter 2 is the local natural hazard, risk, and vulnerability summary. The summary is intended to evaluate each hazard in terms of each jurisdiction's vulnerability to the hazard and the hazard's impact on the jurisdiction, based on the review of the historical record and probability of future occurrence. This review includes an analysis of assets exposed to the hazard, potential losses, land use and development trends, and jurisdictional differences. Chapter 3 is the technological hazard, risk and vulnerability summary.

##### **b. Local Mitigation Goals and Objectives**

Chapter 4 is the local mitigation strategy, composed of goals, objectives, tasks, and action steps developed for each hazard as a result of the HRV summary. The mitigation strategy is designed to include activities and projects that, when implemented, will reduce the threat of loss to property and life resulting from a natural hazard event. Chapter 5 is the mitigation strategy for the technological hazard identified in Chapter 3. The four Mitigation Goals are as follows:

1. Protect the public health and safety
2. Eliminate, or reduce, exposure of critical community facilities to the hazards identified in the community risk assessment
3. Where exposure to hazards cannot be limited, implement, to the extent resources are available, the action steps needed to reduce the potential loss of life and property
4. Maintain and/or enhance the community's capacity to issue warnings, and respond promptly and effectively in the event of a hazard event

## **VI. Multi-jurisdictional Special Considerations**

This plan has been developed for Tift County and the municipalities of Tifton, Omega, and Ty Ty. In general, all four of the jurisdictions are equally vulnerable to the natural hazards addressed in this plan, and the mitigation action steps are intended to be undertaken by all four jurisdictions. However, where applicable, special considerations unique to a jurisdiction are noted.

## **VII. Adoption, Implementation, Monitoring, and Evaluation**

Chapter 6 details an implementation action plan that identifies who will have authority and responsibility for implementing and coordinating this plan, and for prioritizing projects when applying for funding. This chapter also includes the methodology for evaluating the plan on an annual basis, and meeting the DMA 2000 requirement that the plan be updated every five years.

## **VIII. Community Data**

Included in Appendix B-III of this plan is a “community snapshot” of Tift County and its three municipalities, profiling the community’s history, demographics, points of interests, and economic data as compiled by the Georgia Department of Community Affairs.

## Chapter 2 – Local Natural Hazard, Risk and Vulnerability (HRV) Summary

In developing the local natural hazard, risk and vulnerability (HRV) summary, the planning team evaluated all natural hazards affecting Tift County and its municipalities: Tifton, Ty Ty, and Omega. Utilizing the available historic data, the planning team determined that Tift County and its municipalities are at risk from the following natural hazards: hurricanes and tropical storms; tornadoes; localized flooding; severe thunderstorms with hail and/or lightning; extreme heat and cold; wildfires; and drought. Snow and ice from severe winter storms are not normally a threat to Tift County, nor are earthquakes, landslides, avalanches, coastal erosion, tsunamis, or volcanoes.

For the updated plan, the hazard incidences were updated. No new hazards were added to the updated plan.

The Georgia Hazard Mitigation Strategy provided data on Presidential Major Disaster Declarations and Emergency Declarations for Tift County (Appendix C-IV).

There have been 6 Presidential Major Disaster Declarations in Tift County:

1833	4/23/2009	Severe storms, flooding, tornadoes and straight line winds
1560	9/24/2004	Tropical Storm Frances
1315	2/15/2000	Tornadoes
1209	3/11/1998	Severe storms, tornadoes and flooding
1042	10/19/1994	Heavy rains, tornadoes, flooding, high winds
425	4/5/1974	Tornadoes

There have been 3 Emergency Declarations in Tift County:

3218	9/5/2005	Hurricane Katrina Evacuation
3097	3/15/1993	Severe snowfall, winter storm
3044	7/20/1977	Drought

## **Natural Hazards:**

### **I. Hurricanes/Tropical Storms**

#### **a. Hurricane/Tropical Storm Identify**

A tropical cyclone above 74 miles per hour is considered a hurricane and poses threats such as storm surge, high winds, and rainfall. A cyclone develops over tropical waters, generally far removed from land areas, and usually moves westward under the influence of easterly winds. Over the Atlantic, Caribbean, and Gulf of Mexico, a storm may move westward until it strikes, moving under the influence of westerly winds of middle latitude and recurring northeastward. Most storms in Georgia approach from the southeast or southwest. Secondary effects, such as tornadoes and flooding, can result from a hurricane and greatly impact inland communities. The period of vulnerability extends from June through November. Mitigation includes activities to lessen the damage from such storms, including identification of floodplains for preservation of lives and property. The development of a plan to evacuate and shelter people ahead of the storm is a component of preparedness. Response and recovery involves assisting with damage assessment, debris removal, securing the perimeter, search and rescue, and providing health-related services along with re-entry into the community. Tift County, at its nearest point, is approximately 95 miles from the Gulf of Mexico coast. Generally, hurricanes in the Gulf present more of a threat to Tift County than Atlantic hurricanes.

Hurricanes threatening Florida and/or Coastal Georgia can also disrupt normal day-to-day activities in Tift County, due to the movements of evacuees from Florida along I-75 into Tift County. Coastal Georgia evacuees are normally directed to mid/northern Georgia cities. The task of providing shelter and feeding of these evacuees can be a major challenge for Tift County.

#### **b. Hurricane/Tropical Storm Profile**

Hurricanes or tropical storms can threaten all of Tift County and its municipalities. Those storms that move across Tift County from the Gulf of Mexico are the more threatening. In the recent past, hurricanes and tropical storms have caused considerable damage to government infrastructure, mainly roads, and created considerable debris.

The Saffir-Simpson Hurricane Wind Scale is a 1 to 5 rating based on a hurricane's sustained wind speed. This scale estimates potential property damage. Hurricanes reaching Category 3 and higher are considered major hurricanes because of their potential for significant loss of life and damage. Category 1 and 2 storms are still dangerous, however, and require preventative measures.

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph 64-82 kt 119-153 km/h	<b>Very dangerous winds will produce some damage:</b> Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph 83-95 kt 154-177 km/h	<b>Extremely dangerous winds will cause extensive damage:</b> Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph 96-112 kt 178-208 km/h	<b>Devastating damage will occur:</b> Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph 113-136 kt 209-251 km/h	<b>Catastrophic damage will occur:</b> Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher 137 kt or higher 252 km/h or higher	<b>Catastrophic damage will occur:</b> A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

<b>Saffir-Simpson Hurricane Scale</b>		
<b>Category</b>	<b>Wind Speed</b>	
	<b>mph</b>	<b>knots</b>
5	≥156	≥135
4	131-155	114-134
3	111-130	96-113
2	96-110	84-95
1	74-95	65-83
<b>Non-Hurricane Classifications</b>		
Tropical Storm	39-73	34-64
Tropical Depression	0-38	0-33

Tift County typically feels the effects of tropical storm level winds. However, per GEMA, if a Cat 4 hurricane were to strike the Georgia coast, then Tift County could experience Cat 2 level wind speeds.

Tropical storms (including tropical depressions) with less threatening winds may still cause considerable property damage from the storms' heavy rains and strong winds. During recent years, damage in Tift County has been caused by such storms. For example, a major portion of damage from Hurricane Frances and Hurricane Jeanne in 2004 was due to heavy rainfall and water runoff. In addition to government infrastructure damage, several homes were flooded from the local runoff during the storms of 2004.

In September, 1998, Tropical Storm Earl produced widespread moderate to heavy rain averaging three to six inches and strong winds with gusts of 40 to 50 mph as it moved from southwest to east-central Georgia. Local officials in the region reported county roads closed due to high water, flooding of low-lying areas, and sporadic power outages. Across Brooks, Grady, Miller, Tift, and Seminole counties, several county roads were closed to high water, downed trees and power lines. Total estimated damage regionally was \$650,000.

In 2004, Tropical Storm Frances caused over \$76,000 in damages in Tift County and Tropical Storm Jeanne caused approximately \$178,000 in damages (see Appendix A-I). The major costs were road repair and debris removal.

In 2005, Hurricane Dennis came ashore along the central Gulf coast. Heavy rain was reported in Tift County causing minor flooding.

In 2008, Tropical Storm Fay came ashore along the east coast of Florida, eventually making its way to Georgia. Heavy rain and winds were reported in Tift County.

There have been no Tropical Storms or Hurricanes which affect Tift County since 2008.

See Appendix A-I for the historical record.

According to the Hazard Frequency Table, Appendix D, Tift County and each municipality has a 35% chance of a hurricane wind event annually.

**c. Assets Exposed to Hurricanes/Tropical Storms**

All of Tift County is equally exposed to hurricanes and tropical storms. Manufactured homes are more vulnerable than properly built stick-built homes which are built to a wind-load of 95 mph sustained. Tift County is covered with dense tree vegetation. This plant cover creates considerable debris in wind storms. Falling trees and broken limbs disrupt electrical power and communication transmissions.

According to the GMIS Critical Facility Inventory database, Appendix A-II, the total replacement value of critical facilities in all of Tift County are as follows:

Tift County:	\$ 71,609,088
City of Tifton:	\$273,871,003
City of Omega:	\$ 5,149,273
City of Ty Ty:	\$ 1,010,953

All critical facilities within Tift County, City of Tifton, City of Omega and the City of Ty Ty are affected by hurricanes and tropical storms.

As for the potential impact of hurricanes/tropical storms on the total built community, GIS tax parcel data reveals the following information on structures and populations in each municipality:

<b>Tift County</b>		
	Count	Value
Residential	31,834	\$624,610,433
Commercial	1,779	\$82,598,114
Industrial	250	\$46,771,452
Agricultural	5,453	\$62,655,648
Religious/ Non-profit	359	\$28,989,471
Government	381	\$119,893,767
Education	51	\$30,881,771
Utilities	15	\$64,943,137
<b>Totals</b>	<b>40,122</b>	<b>\$1,061,343,793</b>

<b>City of Tifton</b>		
	Count	Value
Residential	11,235	332,340,081
Commercial	2,972	231,331,628
Industrial	40	3,012,697
Agricultural	15	110,040
Religious/ Non-profit	183	27,377,111
Government	367	59,103,736
Education	29	54,295,087
Utilities	7	21,411,672
<b>Totals</b>	<b>14,848</b>	<b>\$728,982,052</b>

<b>City of Omega</b>		
	Count	Value
Residential	1,036	11,309,262
Commercial	112	4,181,934
Industrial	5	306,404
Agricultural	7	52,062
Religious/ Non-profit	17	1,311,520
Government	24	2,321,070
Education	1	1,481,319
Utilities	4	1,714,317
<b>Totals</b>	<b>1,206</b>	<b>\$22,677,888</b>

<b>City of Ty Ty</b>		
	Count	Value
Residential	602	7,650,464
Commercial	77	2,208,787
Industrial	0	0
Agricultural	6	313,491
Religious/ Non-profit	18	1,027,299
Government	10	463,458
Education	0	0
Utilities	3	589,840
<b>Totals</b>	<b>716</b>	<b>\$12,253,339</b>

Each of these municipalities is equally at risk of damage from a hurricane or tropical storm.

**d. Estimated Potential Loss to Hurricanes/Tropical Storms**

The strength of the storm and/or the amount of rainfall will determine the loss from storms. Recent experience from Hurricane Jeanne in October 2004 indicated about \$178,000 in damages to government infrastructure with several thousand dollars in individual damages. Stronger storms, as indicated by the County's historical experience, will cause considerably more damage. All critical facilities within Tift County, City of Tifton, City of Omega and the City of Ty Ty are affected by hurricanes and tropical storms. GIS data shows that the value of the total built community exposed to hurricanes/tropical storms is as shown in Section C above. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

In 2015, a HAZUS report was generated based on a Category 1 Hurricane affecting Tift County (see Appendix F). It is estimated that 152 buildings would be damaged at a cost of \$10,542,360. Total economic losses would be \$11,328,220.

**e. Land Use and Development Trends Related to Hurricanes/Tropical Storms**

Tift County design-wind for properly constructed and properly anchored manufactured homes is 80 mph sustained winds, while design-wind for stick-built homes is 90-95 mph, with a 3 second 100 mph gust. Because the hurricane/tropical storm hazard zone is countywide, existing land use patterns and development trends will result in future development in the county that may be affected by hurricanes/tropical storms. The mitigation strategy in Chapter 4 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

Tift County includes the cities of Tifton, Omega, and Ty Ty. Each of these municipalities, as well as the unincorporated areas of Tift County, is equally vulnerable to hurricanes and tropical storms. The following countywide and municipal GMIS maps graphically show that all critical facilities in Tift County are located in areas affected by hurricanes and tropical storms.

**g. General Summary Hurricanes/Tropical Storms**

Hurricanes/tropical storms affect Tift County almost annually. During these events, both cause considerable disruption to normal activities in Tift County. Damages can run into the hundreds of thousands of dollars. Most damage has been to government infrastructure (washed out roads and culverts), flooding of some homes and debris removal.

When Florida is threatened by a hurricane, usually a considerable number of Florida evacuees seek shelter in Tift County with many more passing through Tift County on I-75. This influx of evacuees and the significant increase in vehicle traffic places considerable pressure on emergency response services several days before the storm directly threatens Tift County.

No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012. Current building/zoning regulations specify current wind speed designs. These will be updated as new industry standards are adopted in the future.

Per GMIS, the following hazard scores are possible for structures located within a wind hazard:

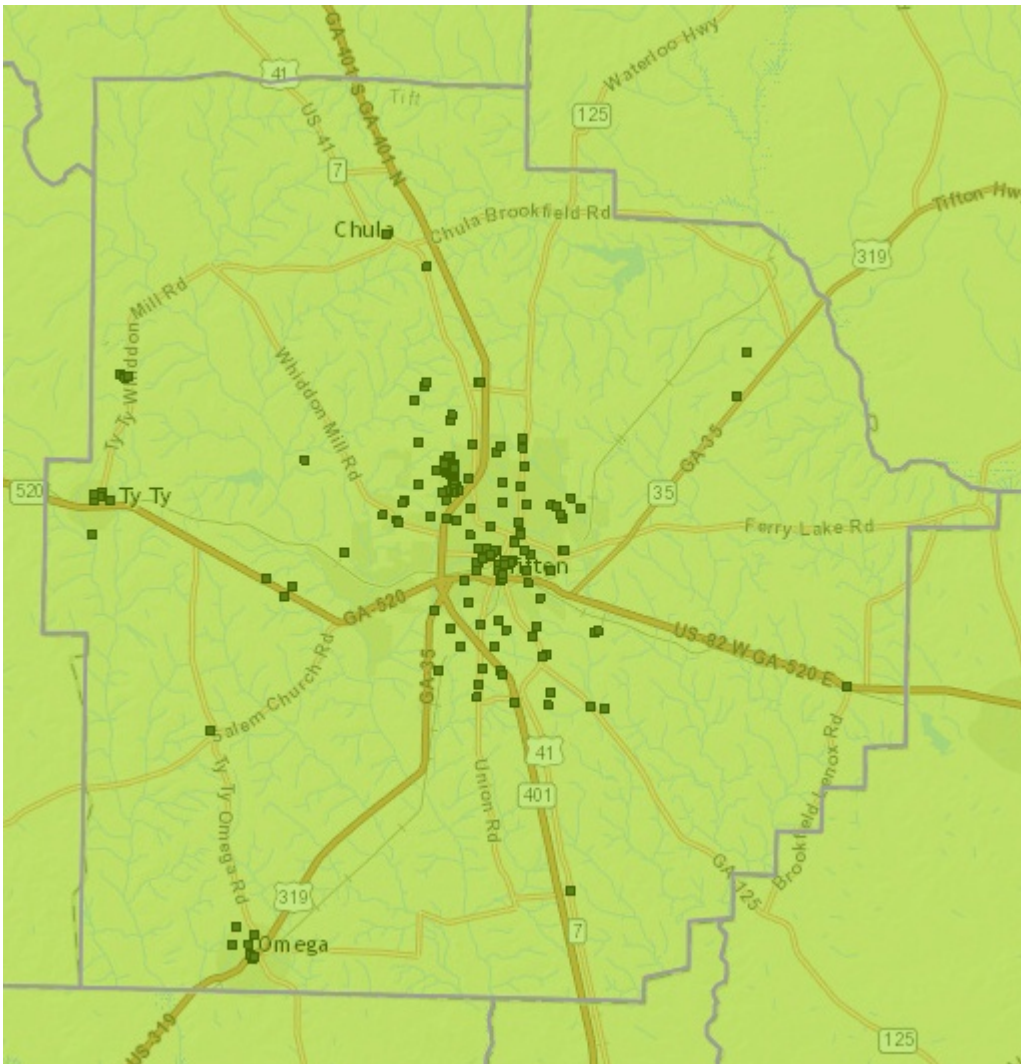
Table I-1

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

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# Tift County Critical Facility Inventory

Countywide:

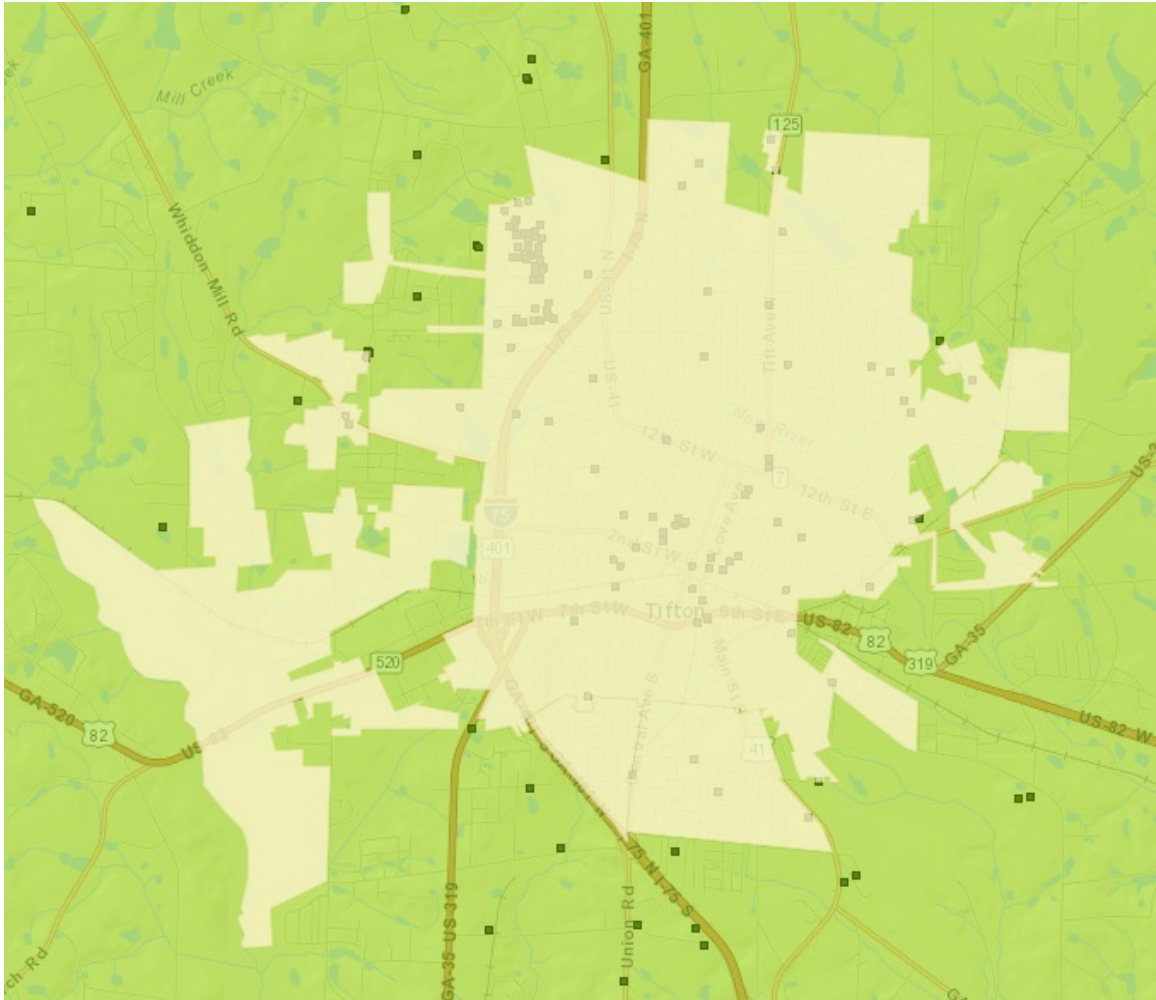


GEMA\_Hazard - GEMA.wind



See Table I-1 on page 19 for description of the hazard scores

**Tifton:**

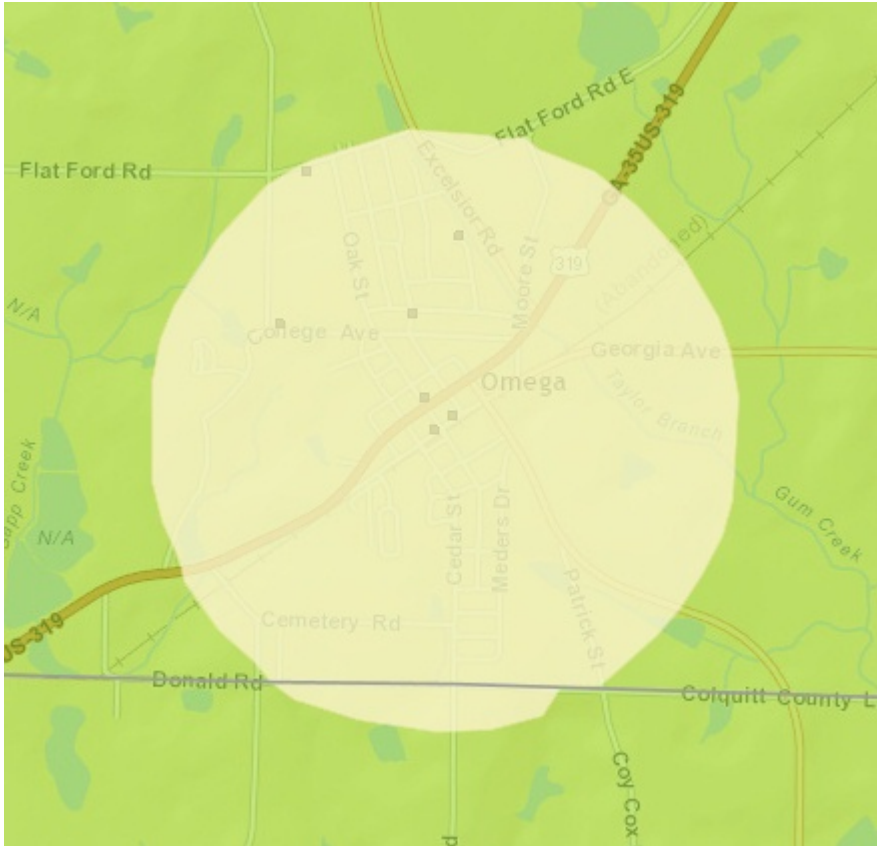


GEMA\_Hazard - GEMA.wind



See Table I-1 on page 19 for description of the hazard scores

**Omega:**



GEMA\_Hazard - GEMA.wind



See Table I-1 on page 19 for description of the hazard scores

**Ty Ty:**



**GEMA\_Hazard - GEMA.wind**



See Table I-1 on page 19 for description of the hazard scores

## II. Tornadoes

### a. Tornadoes Identify

Violent whirling wind accompanied by a funnel-shaped cloud is classified as a tornado. Severe weather conditions, such as a thunderstorm or hurricane, can produce a tornado. The extension may be up to 50 miles and move at speeds of 10 to 50 miles per hour. Through combined action of strong rotary winds and the impact of wind-born debris, destruction occurs. The official tornado season begins in March and continues through August, but may occur throughout the year. Weather band radios, tie-downs for mobile homes and warning systems are mitigating activities. Search and rescue damage assessment, and public information training are preparedness areas. Safe shelter-in-place is a key to response as well as assistance to persons injured, fires, and looting. After the tornado strikes, search and rescue, sheltering, provision of food and clothing to victims, and damage assessment are essential. Recovery may require total support to clear debris, repair utilities, rebuild, and return to a life of normalcy.

### b. Tornadoes Profile

Tornadoes have been classified by the Fujita Scale since 1971 based on wind speed. This scale was updated in 2007 as the Enhanced Fujita Scale. A comparison between the two classifications is listed below:

Fujita Scale		Enhanced Fujita Scale* <small>* In use since 2007</small>	
F-0	40-72 mph winds	EF-0	65-85 mph winds
F-1	73-112 mph	EF-1	86-110 mph
F-2	113-157 mph	EF-2	111-135 mph
F-3	158-206 mph	EF-3	136-165 mph
F-4	207-260 mph	EF-4	166-200 mph
F-5	261-318 mph	EF-5	>200 mph

In the past 63 years, National Climatic Data Center records show that Tift County has experienced 20 reported tornadoes. Most of the tornadoes are associated with fast-moving cold fronts. In recent years with the development of Doppler radar, Tift County has been placed under numerous tornado warnings by the National Weather Service due to cyclonic activities detected by the radar in thunderstorms passing over Tift County.

The break-out of reported tornadoes in Tift County 1952 to 2007 is:

- 5 F2 (113 – 157 mph)
- 9 F1 (73 – 112 mph)
- 2 F0 (40 – 72 mph)

The break-out of reported tornadoes in Tift County 2007-2015 is:

- 1 EF 0 (65-85 mph)
- 2 EF 1 (86-110 mph)

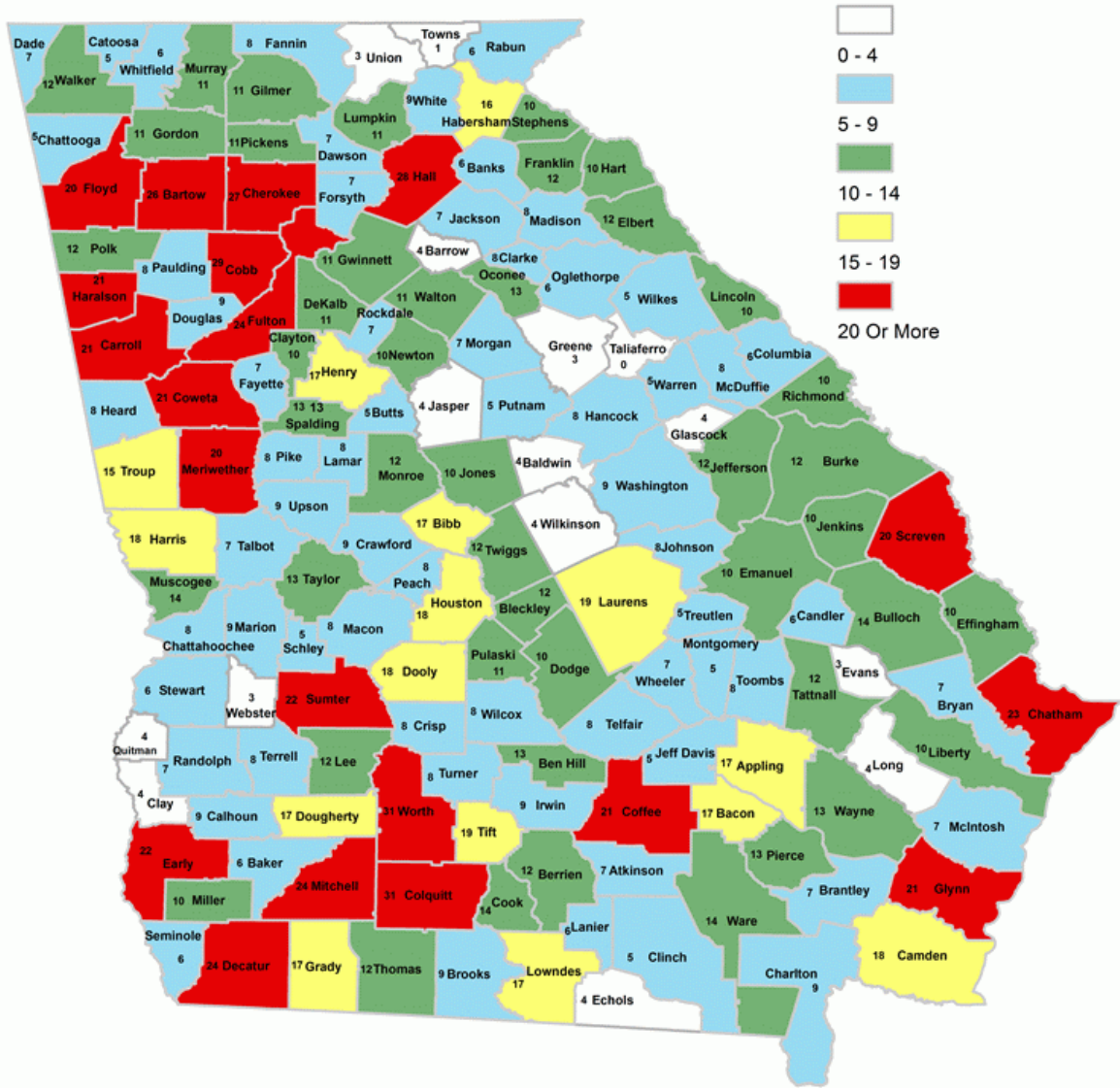
Since 2007, there have been 3 tornadoes to strike Tift County.

Generally, tornadoes associated with cold fronts passing through Tift County are about  $\frac{1}{4}$  to  $\frac{1}{2}$  mile wide and tend to travel about 10 miles on the ground. About 1% of the land area (2.7 square miles) of Tift County's 277 square miles is impacted by any one tornado. Tift County is most likely to be struck by an EF1 sized tornado. As Tift County becomes more urbanized, the probability of significant damage and loss of life grows. See Appendix A-II for the historical record.

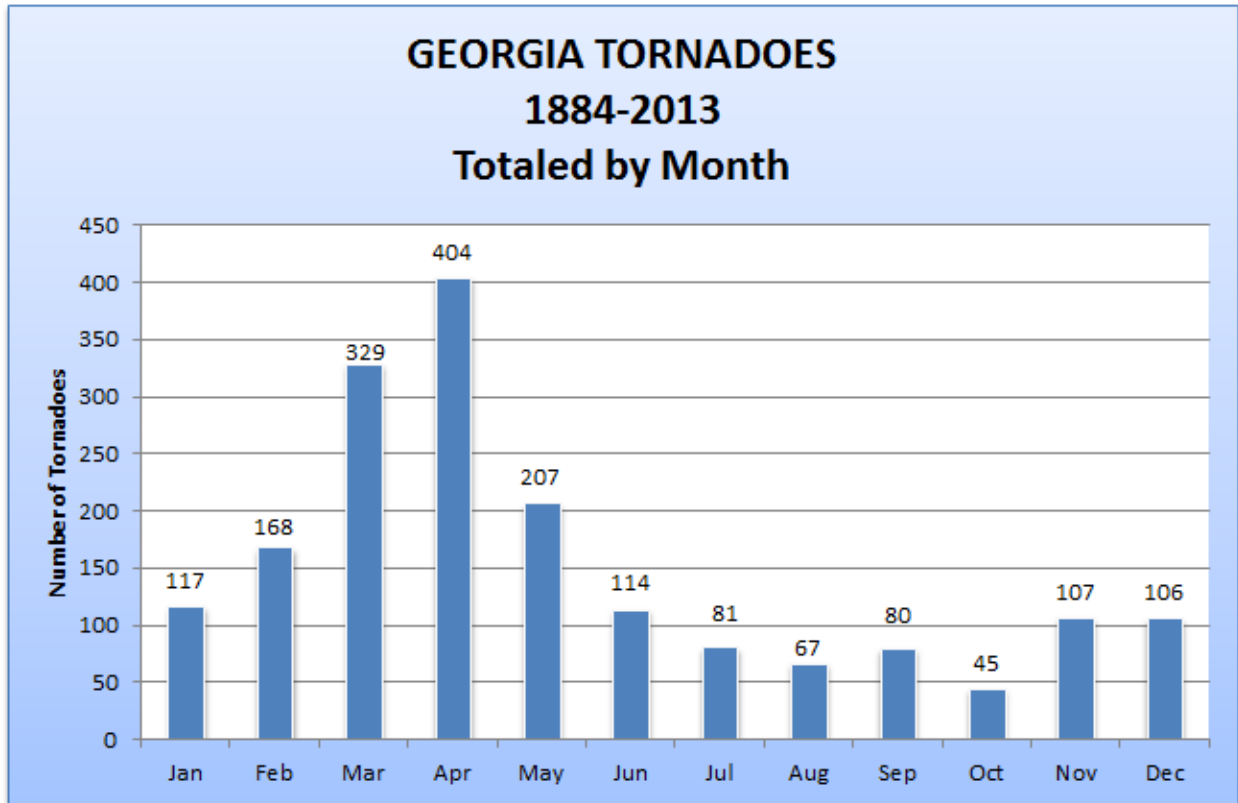
According to the Hazard Frequency Table, Appendix D, Tift County can expect a 32% chance of a tornado event each year. Tornadoes can affect all areas of Tift County. Data does not exist to predict the probability of a tornado by individual jurisdiction.

# Number of Tornadoes Per County

## 1950-2013



Historical Tornado Data



**Tornadoes in Georgia by Month**

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**c. Assets Exposed to Tornadoes**

All of Tift County and its municipalities are threatened by tornadoes. According to the GMIS Critical Facility Inventory database, the total replacement value of critical facilities in all of Tift County are as follows:

Tift County: \$ 71,609,088  
 City of Tifton: \$273,871,003  
 City of Omega: \$ 5,149,273  
 City of Ty Ty: \$ 1,010,953

All critical facilities in Tift County are susceptible to being struck by tornadoes. Tornadoes are a county wide risk.

As for the potential impact of Tornadoes on the total built community, GIS tax parcel data reveals the following information on structures and populations in each municipality:

<b>Tift County</b>		
	Count	Value
Residential	31,834	\$624,610,433
Commercial	1,779	\$82,598,114
Industrial	250	\$46,771,452
Agricultural	5,453	\$62,655,648
Religious/ Non-profit	359	\$28,989,471
Government	381	\$119,893,767
Education	51	\$30,881,771
Utilities	15	\$64,943,137
<b>Totals</b>	<b>40,122</b>	<b>\$1,061,343,793</b>

<b>City of Tifton</b>		
	Count	Value
Residential	11,235	332,340,081
Commercial	2,972	231,331,628
Industrial	40	3,012,697
Agricultural	15	110,040
Religious/ Non-profit	183	27,377,111
Government	367	59,103,736
Education	29	54,295,087
Utilities	7	21,411,672
<b>Totals</b>	<b>14,848</b>	<b>\$728,982,052</b>

<b>City of Omega</b>		
	Count	Value
Residential	1,036	11,309,262
Commercial	112	4,181,934
Industrial	5	306,404
Agricultural	7	52,062
Religious/ Non-profit	17	1,311,520
Government	24	2,321,070
Education	1	1,481,319
Utilities	4	1,714,317
<b>Totals</b>	<b>1,206</b>	<b>\$22,677,888</b>

<b>City of Ty Ty</b>		
	Count	Value
Residential	602	7,650,464
Commercial	77	2,208,787
Industrial	0	0
Agricultural	6	313,491
Religious/ Non-profit	18	1,027,299
Government	10	463,458
Education	0	0
Utilities	3	589,840
<b>Totals</b>	<b>716</b>	<b>\$12,253,339</b>

Each of these municipalities is equally at risk of damage from a tornado

**d. Estimate Potential Losses to Tornadoes**

Depending on the route of a strong tornado, the potential loss could be significant in property damage, particularly to manufactured homes, and loss of life. As noted, the total replacement value of critical facilities in Tift County is:

Tift County: \$ 71,609,088  
 City of Tifton: \$273,871,003  
 City of Omega: \$ 5,149,273  
 City of Ty Ty: \$ 1,010,953

All critical facilities in Tift County are located in areas with wind hazard scores of 2, a low to moderate risk. See above for the location of these critical facilities by jurisdiction. The value of the total built community

exposed to tornadoes is listed in Section C above. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

In 2015, a HAZUS report was generated which simulated an EF3 tornado moving through a portion of Tift County (see Appendix F). The report showed that a total of 266 buildings would be damaged at a loss of \$14,320,524.

**e. Land Use and Development Trends Related to Tornadoes**

The land-use and development ordinances of Tift County and its municipalities do not specifically address tornadoes. Tift County design-wind for properly constructed and properly anchored manufactured homes is 80 mph sustained winds, while design-wind for stick-built homes is 90-95 mph, with a 3 second 100 mph gust. Because the tornado hazard zone is countywide, existing land use patterns and development trends will result in future development in the county that may be affected by tornadoes. The mitigation strategy in Chapter 4 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-jurisdictional Differences**

All of Tift County and its municipalities are equally threatened by tornadoes. The following GMIS countywide and municipal maps graphically show that all critical facilities in Tift County are located in areas susceptible to tornadoes. While wind zone maps are not indicative of where a tornado may strike, they are the most closely related maps to identify tornado risk available in the GMIS database. Regardless, tornadoes are a countywide hazard and can occur anywhere within the county.

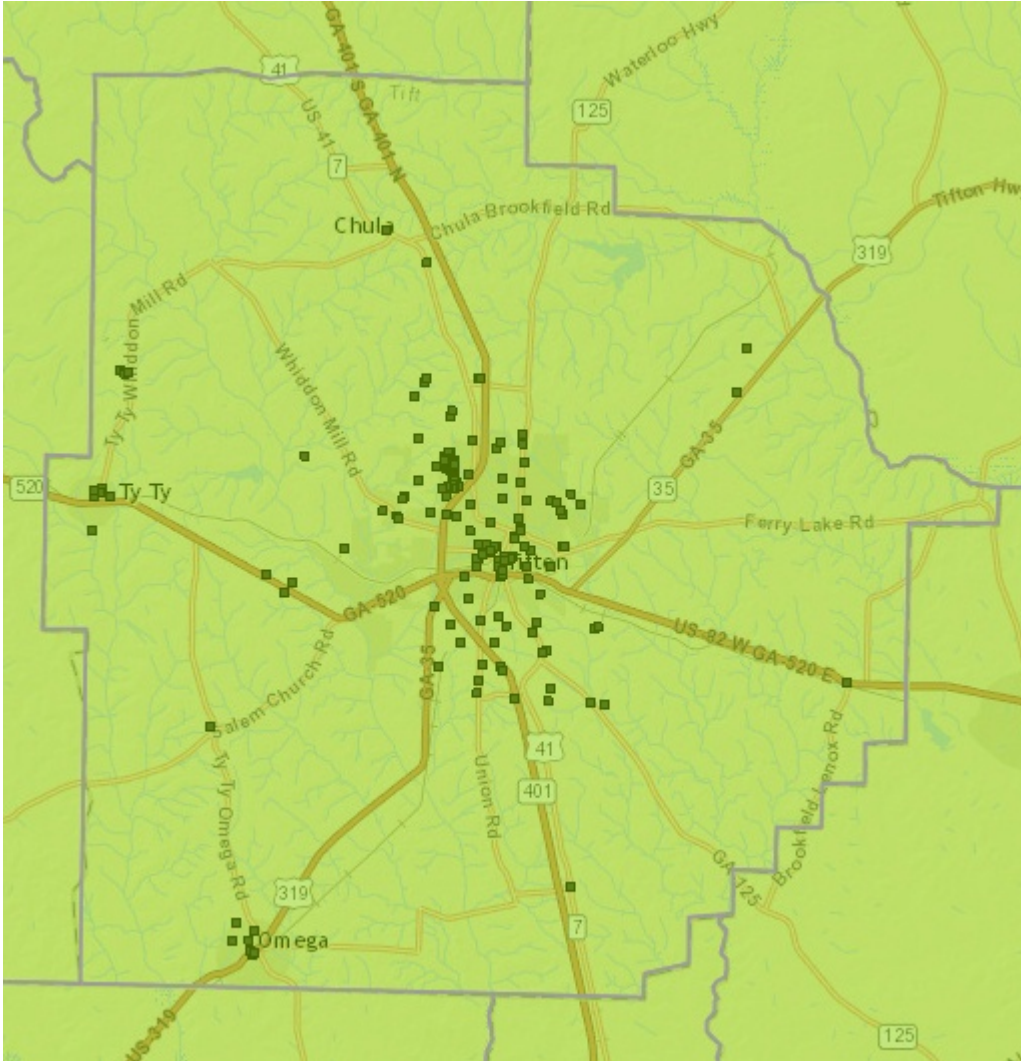
**g. General Summary of Tornadoes**

Tornadoes pose a real threat to Tift County. The vulnerability grows as Tift County becomes more urbanized. An EF1 or EF2 tornado in the more developed areas of Tift County could cause significant damage and loss of life.

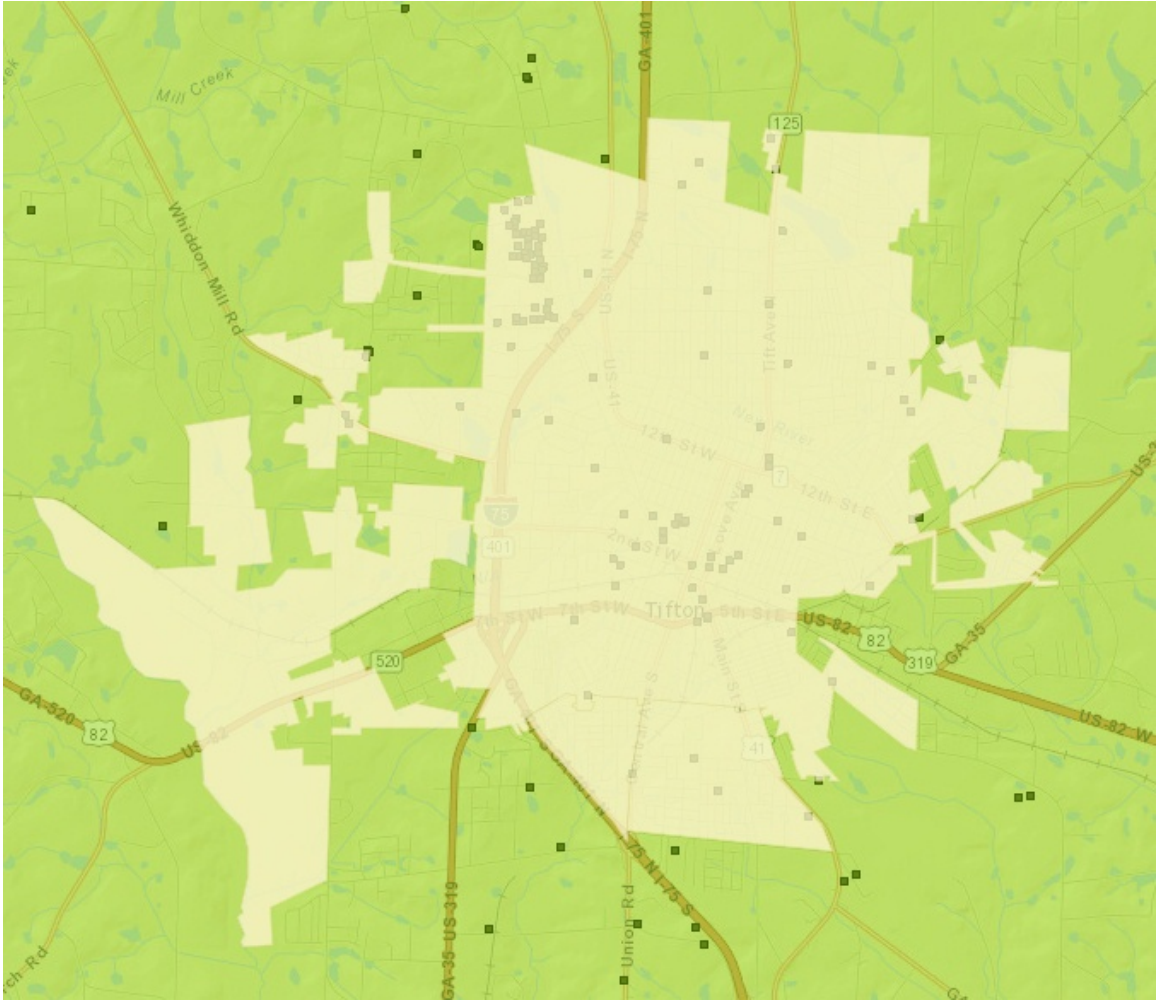
No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012. Current building/zoning regulations specify current wind speed designs. These will be updated as new industry standards are adopted in the future.

## Tift County Critical Facility Inventory

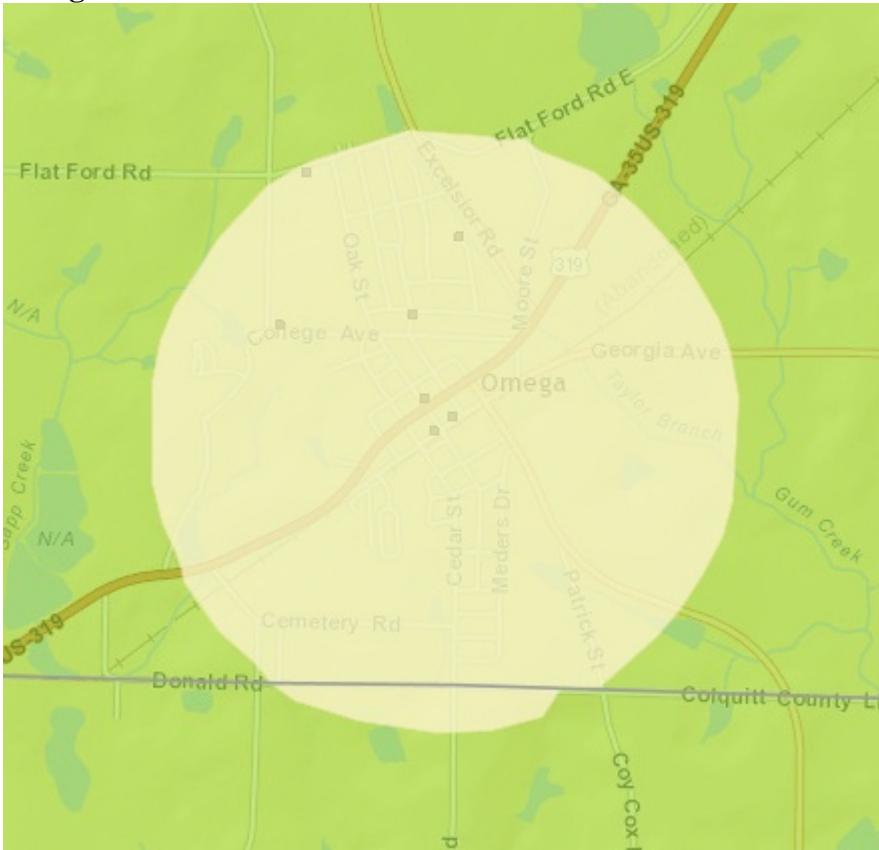
Countywide:



**Tifton:**



**Omega:**



**Ty Ty:**



### **III. Flood**

#### **a. Flood Identify**

Overflow of rivers and streams due to severe storms or torrential rains may result as a secondary effect of a tropical storm or hurricane. Different variables impact flooding: topography, ground saturation, previous rainfall, soil types, drainage, basin size, drainage patterns of streams, and vegetative cover. Georgia's red clay contributes to the problem in the piedmont area of the state. Flooding may occur slowly or become a flash flood, such as in the case of a dam failure. Mitigation of this hazard includes mapping floodplain areas. Preparedness is the process of identifying warning systems, evacuation routes, and shelters outside the floodplain. Response and recovery may encompass evacuation, search and rescue, sheltering, food, clothing, health and medical services, damage assessment, debris removal, dam repair, and temporary housing.

Flooding has been the costliest, repetitive natural hazard to Tift County and its municipalities. Localized flooding, which includes the overflow of streams and creeks designated as floodplains on the local FIRM maps, has caused the most damage to government infrastructure and to individual property. Considerable damage to roads with inadequate drainage is regularly experienced during periods of exceedingly heavy rain. River flooding has caused very little property damage because of the governments' restrictions to building in flood prone areas.

Tift County, the City of Tifton, the City of Omega and the City of Ty Ty all participate in the National Flood Insurance Program (NFIP).

#### **b. Flood Profile**

Torrential rainfall from thunderstorms can cause localized flooding damage throughout Tift County.

In January 2006, 5" of rain fell in a six-hour period, causing flooding and road closures. This flooding caused an estimated \$50,000 in damages.

According to the Tifton Gazette, heavy rainfall that occurred in March, 2005 caused considerable damage to residences and businesses in Tifton and throughout Tift County (see list of damages and copy of article in Appendix A-III). Then, on April 2, 2005, heavy rains required over \$262,000 in materials and \$478,000 in labor and equipment costs to repair damage.

In October, 1994, a flash flood occurred when South Park and South Ridge Avenue areas of Tifton flooded after 7 inches of rain fell in just a few hours. Waist high water forced evacuations to begin around 9:00 pm on October 2 and continued through 2:00 am on October 3.

During Hurricane Frances and Hurricane Jeanne in 2004, most of the storm recovery costs were related to government infrastructure damage due to wind and localized flooding. Many of the same roads were impacted by both storms, and homes and businesses were flooded by water from storm runoff. These homes were located in a variety of areas in Tift County and its municipalities. See Appendix A- III for a list of damages from the 2004 hurricanes/tropical storms and the 2005 heavy rains.

From March 26<sup>th</sup> through April 10 of 2009, Tift County was struck with a period of severe weather including Tornadoes, straight-line winds, hail, severe thunderstorms, flash flooding and flooding. FEMA classified 18 structures (all mobile homes) as completely destroyed, 44 as having major damage and 20 as having minor damage. Tift County was one of 15 counties declared a flood disaster area by Gov. Sonny Perdue. Since 2009, there have been 4 flooding events which affected Tift County.

See Appendix A-III for the historical flood record.

According to the Hazard Frequency Table, Appendix D, Tift County has a 40 % chance of a localized flooding event each year. Flooding is a county wide hazard. Each jurisdiction has designated floodplains, putting each jurisdiction at risk of flooding. There data does not exist to break down the probability by jurisdiction.

Appendix G contains information on the average depth of flooding for the FEMA studied streams located within Tift County per the Flood Insurance Study. This average depth can be expected for the 1% annual chance flood.

**c. Assets Exposed to Flood**

The road system is the major asset exposed to localized flooding. Repetitive damage is experienced due to inadequate drainage capacity under these roads. Some homes are threatened by the lack of storm runoff capacity. Very few critical facilities are threatened by localized flooding.

Per information received from FEMA Region IV, there are several repetitive loss residential structures located within Tift County:

Community	Repetitive Loss Properties
Tift County	0
City of Tifton	4
City of Omega	0
City of Ty Ty	0

All structures are residential structures

According to the GMIS Critical Facility Inventory database, Appendix A- III, the total replacement value of critical facilities in Tift County is:

Tift County: \$ 71,609,088  
 City of Tifton: \$273,871,003  
 City of Omega: \$ 5,149,273  
 City of Ty Ty: \$ 1,010,953

Per GMIS, the following hazard scores are possible for identified flooding hazards:

Table III-1

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

In Tift County there are two critical facilities, valued at \$521,500, located in areas with a flood hazard score of 3. In the City of Tifton there are three critical facilities, valued at \$1,976,073, located in areas with a flood hazard score of 3. In the City of Ty Ty there is one critical facility, valued at \$25,000, located in areas with a flood hazard score of 3. In the City of Omega there are no critical facilities located in areas with flood hazard scores of 3 or more. All other critical facilities within Tift County and the other municipalities are located in areas with a score of 1 or 0.

As for the potential impact of flooding on the total built community, GIS tax parcel data reveals the following information on the number, type and value of structures in the floodplain (Appendix A- III).

<b>Tift County</b>		
	Count	Value
Residential	365	\$8,119,900
<b>Totals</b>	<b>365</b>	<b>\$8,119,900</b>

<b>City of Tifton</b>		
	Count	Value
Residential	489	\$15,945,948
<b>Totals</b>	<b>489</b>	<b>\$15,945,948</b>

<b>City of Omega</b>		
	Count	Value
Residential	0	\$0
<b>Totals</b>	<b>0</b>	<b>\$0</b>

<b>City of Ty Ty</b>		
	Count	Value
Residential	30	\$492,713
<b>Totals</b>	<b>30</b>	<b>\$492,713</b>

**d. Estimated Potential Loss to Flood**

Recent experience in Tift County shows that localized flooding can cause thousands of dollars in water damages. As noted, six critical facilities are located in areas with a flood hazard score of 3. See above for the location of the three critical facilities by jurisdiction. Also, as detailed above, GIS data shows that the value of the total built community exposed to flooding is as shown above in Section C. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

In 2015, a HAZUS report was generated showing the impacts of the 1% flood event (100-year flood) within Tift County (see Appendix F). The report showed 543 buildings damaged by the 1% flood event with total damages estimated at \$15,655,493.

**e. Land Use and Development Trends Related to Flood**

While development has occurred in the past in the currently identified flood plain, future development in flood prone areas is limited by local ordinances in Tift County and the municipalities. Continuous review is provided by the Greater Tift County Planning Commission. Potential development in the Highway 82/Ramada Inn and the 10<sup>th</sup> Street project areas are the only known existing land use or development trends that could be affected by flood.

Tift County, City of Tifton, City of Omega and City of Ty Ty all are participating communities in the National Flood Insurance Program (NFIP)

**f. Multi-Jurisdictional Differences**

All of Tift County and its municipalities are subject to localized flooding. River flooding could impact areas of unincorporated Tift County and the Cities of Tifton and Ty Ty. The following countywide and municipal GMIS maps graphically show the location of all critical facilities in flood hazard areas in Tift County.

**g. General Summary Flood**

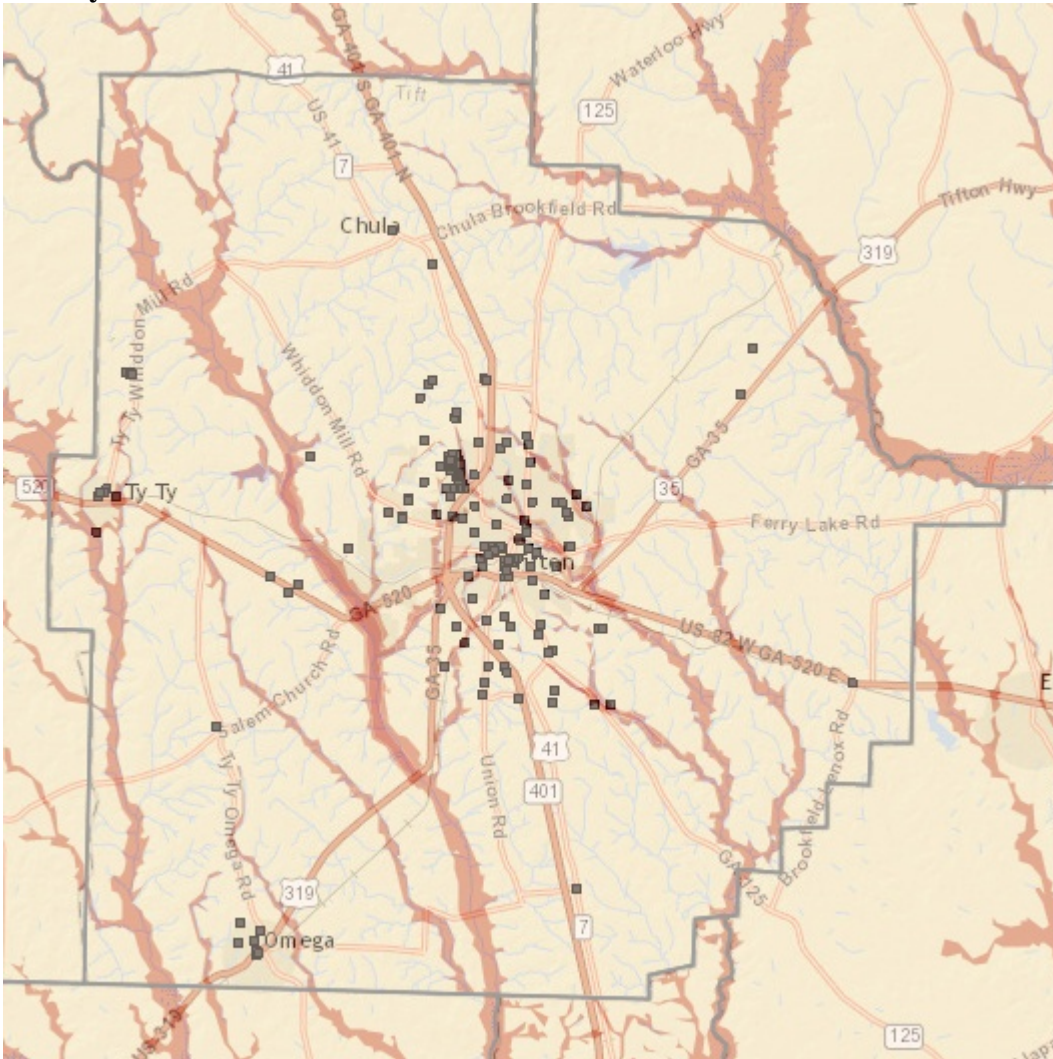
Localized flooding, caused by storm water runoff, is a major cause of damage in Tift County and its municipalities. Localized flooding, which includes the overflow of streams and creeks in designated floodplains, occurs during and after heavy thunderstorms, hurricanes, tropical storms and extended periods of rainfall.

River flooding, on the other hand, is much less frequent and much less severe due to the past limitations on building in flood prone areas.

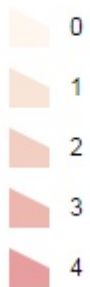
No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012. Current building/zoning regulations specify current FEMA flood zones. These will be updated as new flood maps are issued.

# Tift County Critical Facility Inventory – Flood Hazard Scores

Countywide:

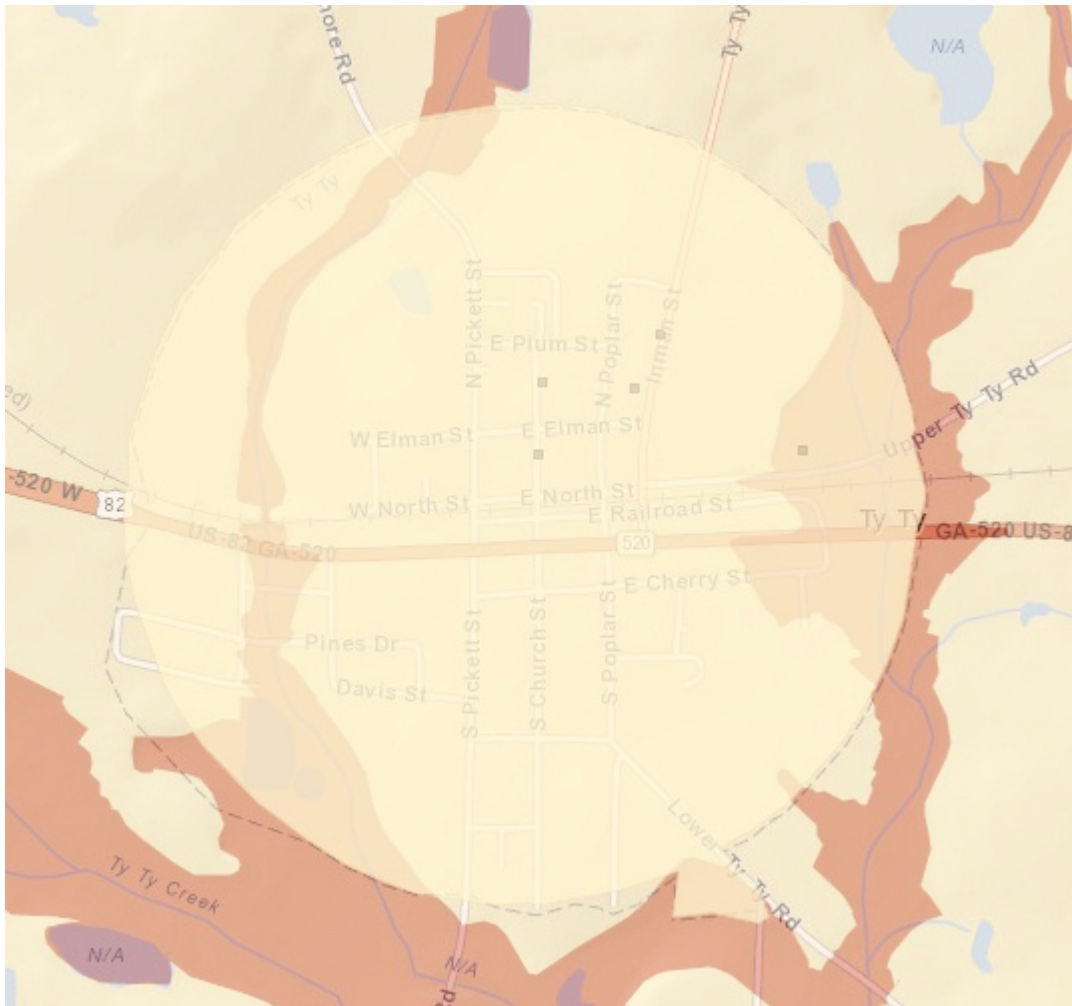


GEMA\_Hazard\_DFIRM -  
GEMA.flood

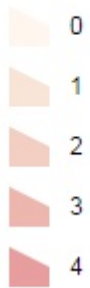


See Table III-1 on page 37 for description of the hazard scores

**Tifton:**

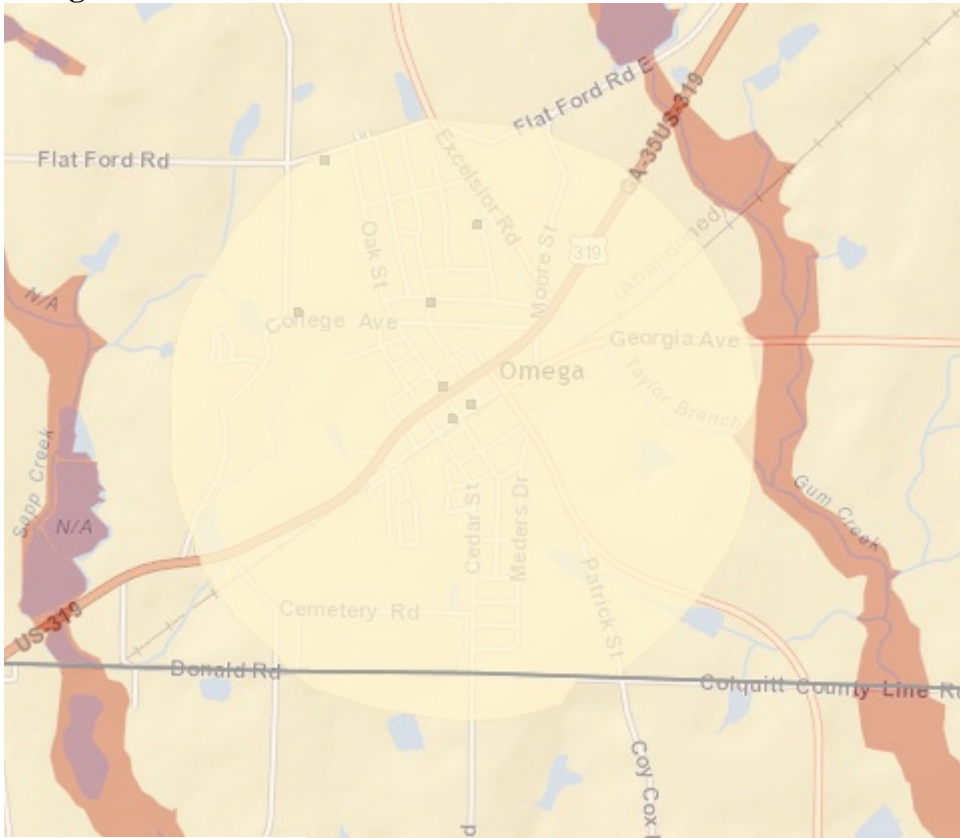


GEMA\_Hazard\_DFIRM -  
GEMA.flood

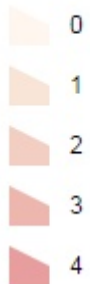


See Table III-1 on page 37 for description of the hazard scores

**Omega:**

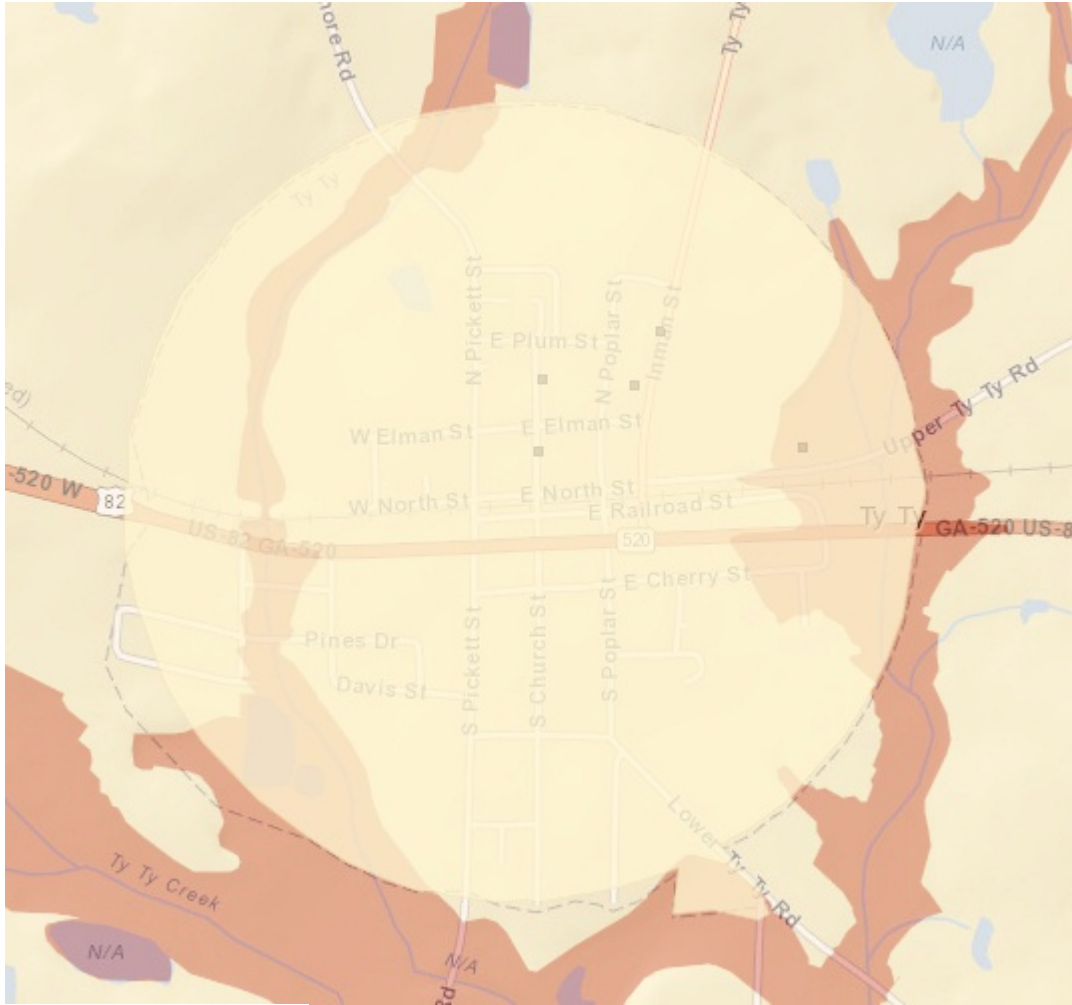


GEMA\_Hazard\_DFIRM -  
GEMA.flood

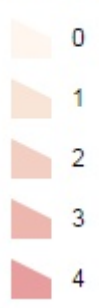


See Table III-1 on page 37 for description of the hazard scores

**Ty Ty:**



GEMA\_Hazard\_DFIRM -  
GEMA.flood



See Table III-1 on page 37 for description of the hazard scores

#### **IV. Windstorms/Hailstorms/Lightning**

##### **a. Windstorms/Hailstorms/Lightning Identify**

Severe thunderstorms, which occur mostly in the summer months, many times will bring strong wind, hail, and lightning, in addition to heavy rain, into Tift County. A severe windstorm is defined by the National Weather Service as convective winds exceeding 58 miles per hour. A hailstorm is precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, and lightning is the visible discharge of electricity between clouds, between the cloud and air, between a cloud and the ground or between the ground and a cloud. Such wind, hail, and lightning may cause a large amount of property damage, and are also a risk to the general public. Lightning is particularly dangerous to people, since although the bolt normally travels directly from cloud to the ground, it can also occur at angles away from the storm and at a great distance from the storm.

##### **b. Windstorms/Hailstorms/ Profile**

The NCDC record shows 87 thunderstorm events in Tift County since 1952. In addition, there have been 30 recorded hailstorms, with one storm in 1996 causing \$20,000 in damage when hailstones over 1.25 inches in size fell. This frequency of occurrence makes the risk to individuals and to property high. In April of 2009, hail stones of up to 1.75 inches were reported.

Since 2009 there have been 22 thunderstorm events in Tift County and 4 hail events.

The moderate climate in Tift County supports year-around outdoor activities, exposing many individuals, sometimes in large numbers, to the threat of lightning. Though not always reported, lightning frequently damages electronic equipment and electrical power transmissions.

According to the Georgia Insurance Commissioner's office and the 2000 International Building Code, Tift County is potentially exposed to 90-99 mph winds.

Hailstorms often occur during thunderstorm events. Typical hail storm sizes range from pea sized to nickel sized.

The Average Flash Density (ft/sq km/yr) for cloud to ground lightning in Tift County is between 6 and 8.

See Appendix A-IV for the historical record.

According to the Hazard Frequency Table, Appendix D, Tift County has a 100% chance of a strong thunderstorm with wind, and a 53% chance of a hailstorm. Windstorms/hailstorms/lightning storms are county wide hazards. The data doesn't exist to break the probability down by individual jurisdiction.

**c. Assets Exposed to Windstorms/Hailstorms/Lightning**

All critical facilities, structures and population in Tift County are equally exposed to windstorms, hailstorms, and lightning.

According to the GMIS Critical Facility Inventory database, Appendix A-IV, the total replacement value of critical facilities in all of Tift County are as follows:

Tift County:	\$ 71,609,088
City of Tifton:	\$273,871,003
City of Omega:	\$ 5,149,273
City of Ty Ty:	\$ 1,010,953

All critical facilities in Tift County are located in areas with wind hazard scores of 2, 90 to 99 mph. These facilities are located in the following jurisdictions: Tift County, 51 facilities with replacement value of \$71,609,088; Tifton, 89 facilities with replacement value of \$273,871,003; Omega, 7 facilities with replacement value of \$5,149,273; and Ty Ty, 6 facilities with replacement value of \$1,010,953 (Appendix A-IV).

As for the potential impact of windstorms/hail storms/lightning on the total built community, GIS tax parcel data reveals the following information on structures and populations in each municipality:

<b>Tift County</b>		
	Count	Value
Residential	31,834	\$624,610,433
Commercial	1,779	\$82,598,114
Industrial	250	\$46,771,452
Agricultural	5,453	\$62,655,648
Religious/ Non-profit	359	\$28,989,471
Government	381	\$119,893,767
Education	51	\$30,881,771
Utilities	15	\$64,943,137
<b>Totals</b>	<b>40,122</b>	<b>\$1,061,343,793</b>

<b>City of Tifton</b>		
	Count	Value
Residential	11,235	332,340,081
Commercial	2,972	231,331,628
Industrial	40	3,012,697
Agricultural	15	110,040
Religious/ Non-profit	183	27,377,111
Government	367	59,103,736
Education	29	54,295,087
Utilities	7	21,411,672
<b>Totals</b>	<b>14,848</b>	<b>\$728,982,052</b>

<b>City of Omega</b>		
	Count	Value
Residential	1,036	11,309,262
Commercial	112	4,181,934
Industrial	5	306,404
Agricultural	7	52,062
Religious/ Non-profit	17	1,311,520
Government	24	2,321,070
Education	1	1,481,319
Utilities	4	1,714,317
<b>Totals</b>	<b>1,206</b>	<b>\$22,677,888</b>

<b>City of Ty Ty</b>		
	Count	Value
Residential	602	7,650,464
Commercial	77	2,208,787
Industrial	0	0
Agricultural	6	313,491
Religious/ Non-profit	18	1,027,299
Government	10	463,458
Education	0	0
Utilities	3	589,840
<b>Totals</b>	<b>716</b>	<b>\$12,253,339</b>

**d. Estimated Potential Loss to Windstorms/Hailstorms/Lightning**

The risk of loss-of-life to individuals at outdoor events each year due to lightning strikes and the potential for high property damage due to strong windstorms and hailstorms is relatively high. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

**e. Land Use and Development Trends Related to Windstorms /Hailstorms/ Lightning**

The land-use and development ordinances of Tift County and its municipalities do not address windstorms/hailstorms/ lightning. Because the windstorm/hailstorm/lightning hazard zone is countywide, existing land use patterns and development trends will result in future development in the county that may be affected by these hazards. The mitigation strategy in Chapter 4 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

Windstorms/hailstorms/lightning are equal risks to persons and property in all jurisdictions in Tift County. The following GMIS countywide and municipal maps graphically show that all critical facilities in Tift County are located in areas with wind hazard scores of 2.

**g. General Summary Windstorms/Hailstorms/Lightning**

Strong winds from thunderstorms, hail, and lightning are very dangerous weather hazards in Tift County. Lightning particularly is a killer in Tift County and is very dangerous to those individuals outside during thunderstorms. The high frequency of thunderstorms in Tift County increases the risk of individuals being struck and of property being damaged.

No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012. Current building/zoning regulations specify current wind speed designs. These will be updated as new industry standards are adopted in the future.

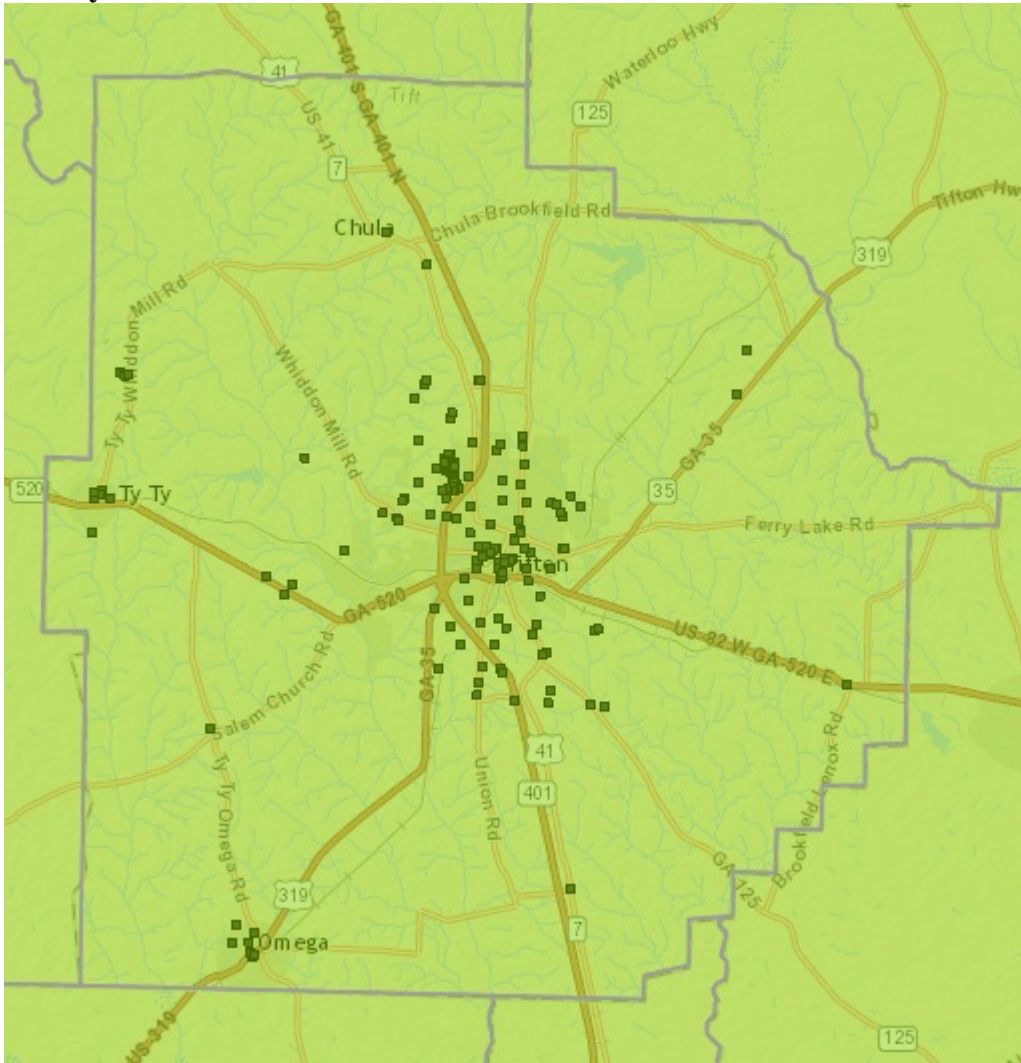
Per GMIS, the following hazard scores are possible for structures located within a wind hazard:

Table IV-1

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

# Tift County Critical Facility Inventory – Wind Hazard Scores

Countywide:

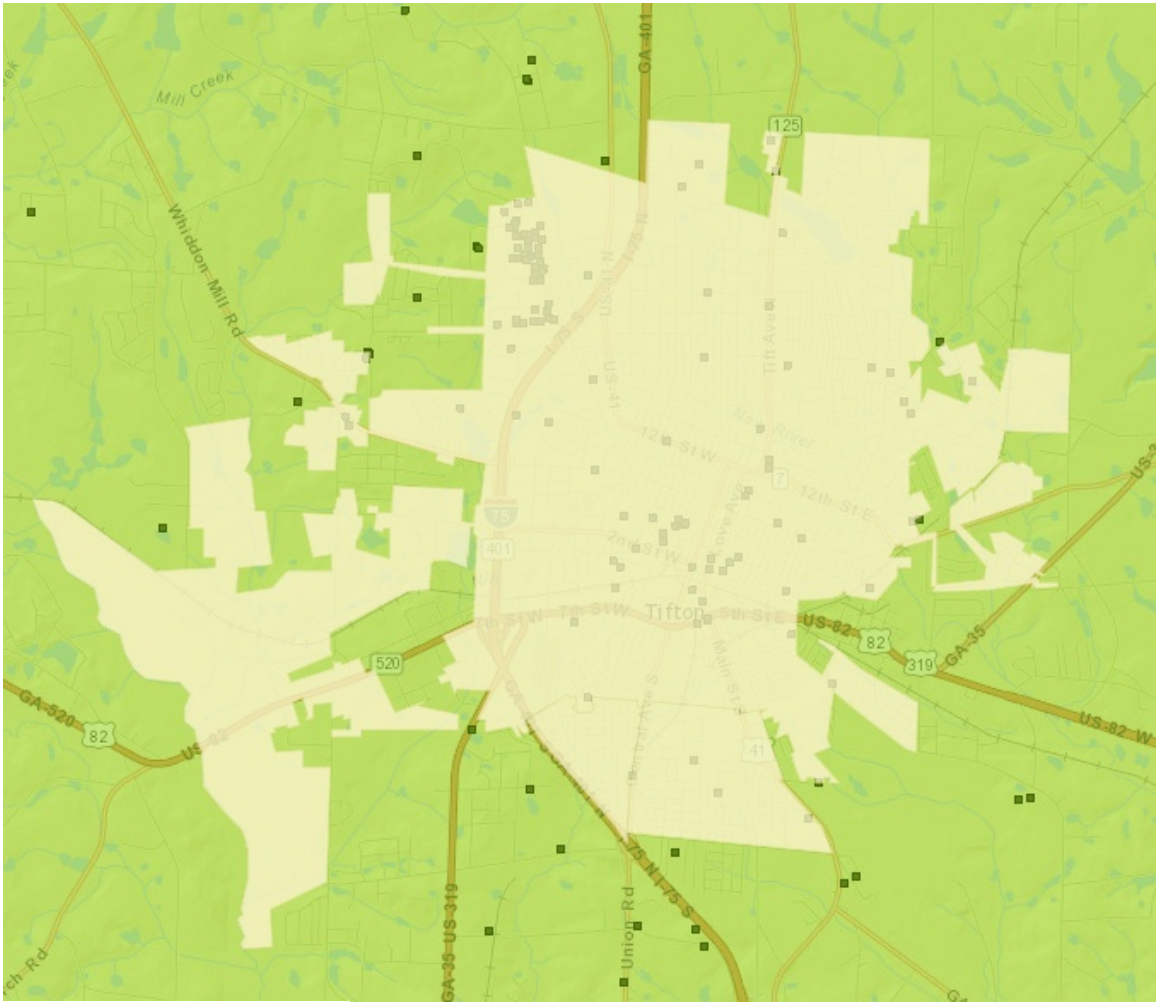


GEMA\_Hazard - GEMA.wind



See Table IV-1 on page 48 for description of the hazard scores

**Tifton:**

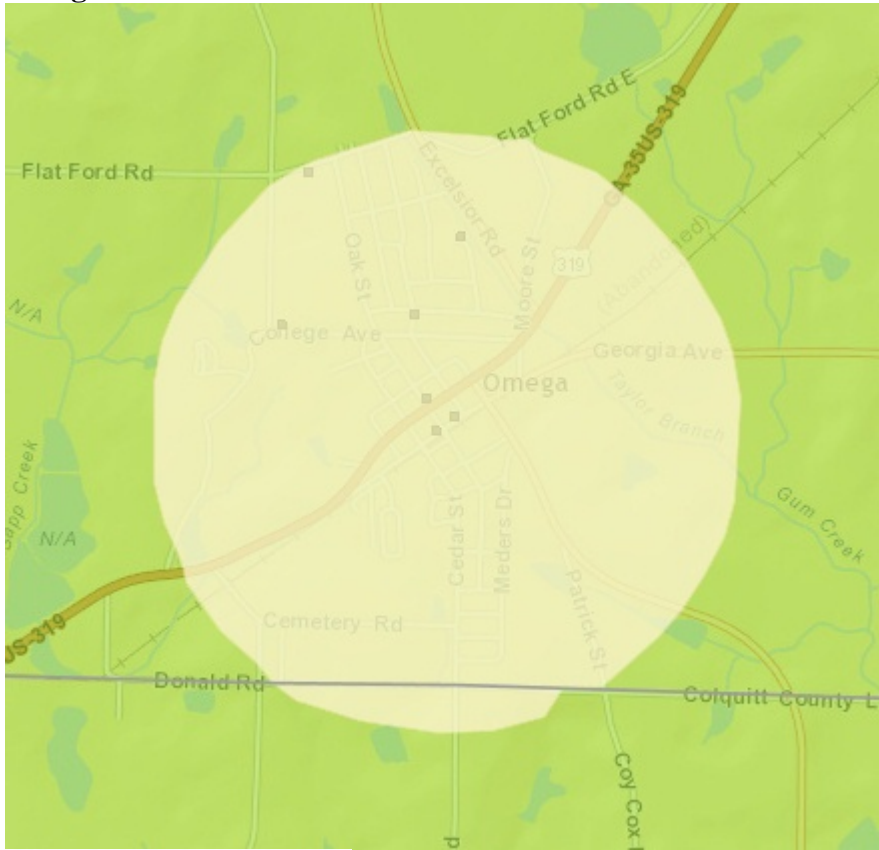


GEMA\_Hazard - GEMA.wind



See Table IV-1 on page 48 for description of the hazard scores

**Omega:**



**GEMA\_Hazard - GEMA.wind**



See Table IV-1 on page 48 for description of the hazard scores

**Ty Ty:**



**GEMA\_Hazard - GEMA.wind**



See Table IV-1 on page 48 for description of the hazard scores

**V. Extreme Heat/Cold**

**a. Extreme Heat/Cold Identify**

Extreme high/cold temperatures sustained over an extended period of time may cause injuries or deaths, especially to infants and young children, elderly, persons with disabilities, and migrant and/or seasonal farm workers. Mitigation may include initiating community awareness and public education, working with the media to develop warning systems, and requesting that utility companies reduce shut off during a severe heat or cold wave to prevent injury, illness or death. Preparedness involves identification of resources, such as fans, water, and heaters. Response and recovery include the protection of people from a severe heat index through the distribution of resources and care of individuals in properly equipped community shelters.

**b. Extreme Heat/Cold Profile**

Individuals who are outside for an extended period or who are elderly and/or weak and without air conditioning can be adversely affected by the heat and humidity. These same individuals can be adversely affected by extremely low temperatures if outside or without proper heating systems in their homes.

Based on historical data the extent of this hazard is shown in the table below

Year	# of Days Over 95° F	# of Days Below 32° F
2000	13	26
2001	0	15
2002	15	23
2003	0	26
2004	1	16
2005	0	13
2006	9	9
2007	12	14
2008	3	15
2009	5	19
2010	20	40
2011	29	19
2012	3	12
2013	0	12
2014	5	20
2015	8	10

The above table shows the number of days above 95° F and below 32° F for the past 15 years. On average, Tift County can expect 8 days above 95° F and 18 days below 32° F per year. Based on the available data, Tift County can expect to experience similar temperature patterns. Historically, Tift County has experienced temperatures as low as 0° F in the winter and as high as 106° F in the summer. For additional information, please see Appendix A-V.

There is a 14% chance of any given year having an extended period of temperatures over 90° F. There is an 11% chance of any given year having an extended period of temperatures below 32° F.

**c. Assets Exposed to Extreme Heat/Cold**

According to the GMIS Critical Facility Inventory database, Appendix A-V, the total replacement value of critical facilities in all of Tift County are as follows:

Tift County:	\$ 71,609,088
City of Tifton:	\$273,871,003
City of Omega:	\$ 5,149,273
City of Ty Ty:	\$ 1,010,953

However, as countywide non-spatially defined hazards, extreme heat/cold affects people more than structures. The elderly and very low income populations are most likely to not have air conditioning or adequate heating systems, making them the most vulnerable to extreme heat and high humidity and extreme cold weather. According to the 2010 Census, 4,934 persons (12.3%) in Tift County are aged 65 or higher and 10,952 individuals (27.3%) live below the poverty level.

**d. Estimated Potential Losses to Extreme Heat/Cold**

Data needed to estimate the potential loss of life or injury is not readily available. Census data shows that there are 4,934 persons (12.3%) in Tift County are aged 65 or higher and 10,952 individuals (27.3%) live below the poverty level that would be considered at high risk. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

**e. Land Use and Development Trends Related to Extreme Heat/Cold**

The land-use and development ordinances of Tift County and its municipalities do not deal with extreme heat and cold temperatures. Because the extreme heat/cold hazard zone is countywide, existing land use patterns and development trends will result in future development in the county that may be affected by extreme heat/cold. The mitigation strategy in Chapter 4

includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

All jurisdictions are equally affected.

**g. General Summary Extreme Heat/Cold**

Days of extreme heat with high humidity occur regularly in Tift County during the summer months, with days of extreme cold occurring during the winter months. The number of days is not readily available when vulnerable populations and those working outside should take precautions. Extreme heat/cold adversely affects the vulnerable population without air conditioned or heated shelter.

No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012.

DRAFT

## VI. Wildfire

### a. Wildfire Identify

Wildfire is an uncontrolled fire spreading through vegetative fuels, exposing and possibly consuming structures. Naturally occurring and non-native species of grasses, brush, and trees fuel the spread of wildfires. Of its 265 square miles, 124 square miles is forested (47%) Wildland-urban-interface occurs when homes come into contact with vegetative fuels for a wildfire to consume. These fires are generally the result of dry conditions combined with lightning or carelessness and spread unconstrained through the environment. Public awareness helps to mitigate such fires. Preparedness may include banning outdoor burning during the dry season. Local fire departments may be required to respond along with forestry services. Recovery may include debris removal and replanting of trees.

### b. Wildfire Profile

The Tift County Community Wildfire Protection Plan describes the wildfire threat Tift County faces:

On a year-to-year basis, the leading causes of wildfires in Tift County are Escaped Debris Fires (residential leaf piles or yard fires), followed by Incendiary Fires (Arson) and wildfires resulting from Machine Use. Tift County regularly experiences Critical Fire Weather. Critical Fire Weather is a set of conditions whose effects on wildfire behavior make control difficult and threaten firefighter safety.

Wildfire statistics for the past five years are shown below:

<u>Cause</u>	<u>5 Year Avg.</u>	<u>2010</u>
Debris	6.60/10.14 acres	6/17.00 acres
Incendiary	5.80/31.79 acres	8/6.34 acres
Machine Use	5.40/11.11 acres	5/12.24 acres

On average, Tift County can expect to experience around 6 fires per year with an average size of 18 acres.

Tift County land-base is primarily considered to be a heavy fuel, referred to as Southern Rough Fuel. There are many areas in Tift County where wildfire control efforts may be hampered due to the homes in and around the wildland area.

Considerable fire control assets and good citizen-public safety emergency communications help control the spread and threat of wildfires in Tift County. On average, Tift County can expect around 6 fires per year.

See Appendix C for a copy of the current Community Wildfire Protection Plan. On page 13 of the Wildfire Protection Plan there is a list of at risk communities within Tift County.

**c. Assets Exposed to Wildfire**

According to the GMIS Critical Facility Inventory database, Appendix A-VI, no critical facilities are located in areas with a wildfire hazard score above 0, the lowest risk. The total replacement value of critical facilities in all of Tift County are as follows:

- Tift County: \$ 71,609,088
- City of Tifton: \$273,871,003
- City of Omega: \$ 5,149,273
- City of Ty Ty: \$ 1,010,953

Per GMIS, the following hazard scores are possible for structures located within a wind hazard:

Table VI-1

Score	Original Value	Description
4	5	High
3	4	Moderate
2	3	Low
1	2	Very Low
0	1	No Houses
	7	Agriculture
	8	Water
	9	City

**d. Estimated Potential Losses to Wildfire**

While no critical facilities are at risk from wildfire, other significant assets, such as homes and other structures are at risk. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

**e. Land Use and Development Trends Related to Wildfire**

At this time, the land-use and development ordinances of Tift County and its municipalities do not address wildfires. Existing land use patterns and development trends will result in future development in the rural/urban interface area that may be affected by wildfire. The mitigation strategy in Chapter 4 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

According to the GMIS maps below, there is generally an equal risk of wildfire in the county and the municipalities. There are several small areas in the unincorporated portion of the county with a slightly higher risk of wildfire (2 on a scale of 5), with one of these areas falling within the extreme western city limits of Tifton. No critical facilities are located in wildfire hazard areas with hazard scores greater than 0.

**g. General Summary Wildfire**

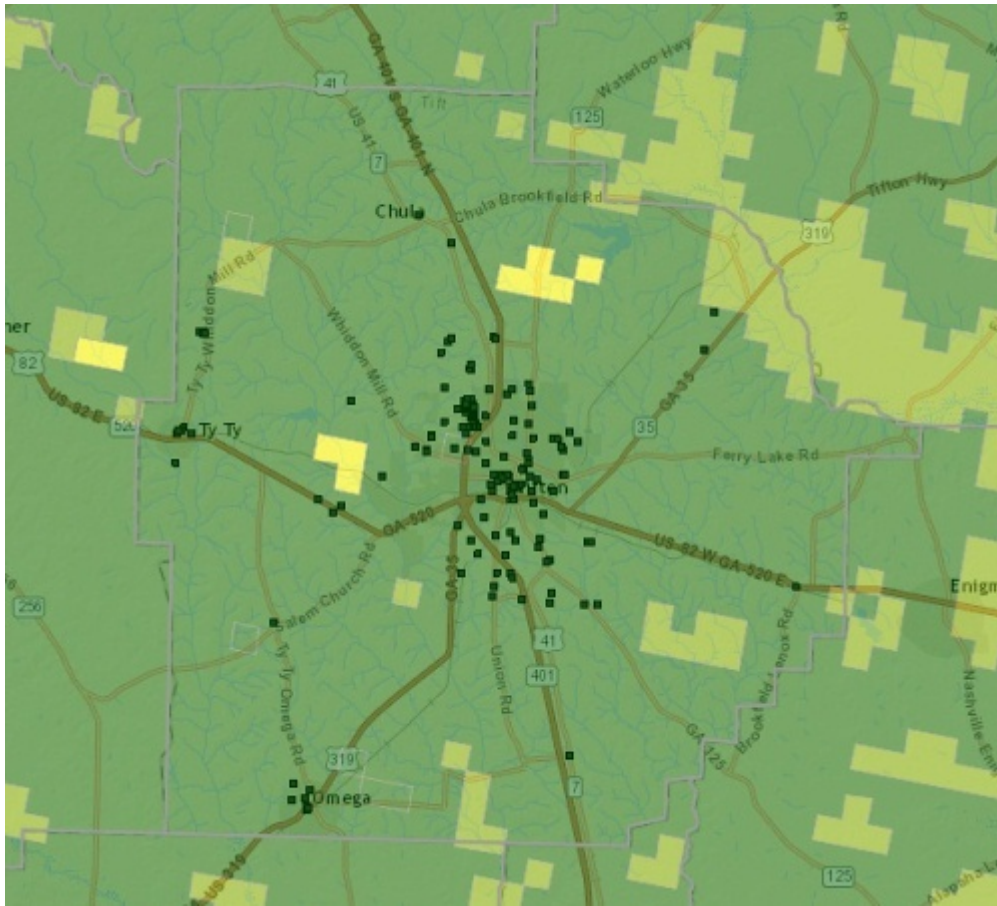
Tift County is heavily forested and experiences a significant number of wildfires each year. Moreover, Tift County averages 22 Critical Fire Weather days per year making control of a wildfire difficult and a much more dangerous hazard to people and property.

No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012.

DRAFT

# Tift County Critical Facility Inventory – Wildfire Hazard Scores

Countywide:



GEMA\_Hazard - GEMA.wildfire



See Table VI-1 on page 57 for description of the hazard scores

**Tifton:**

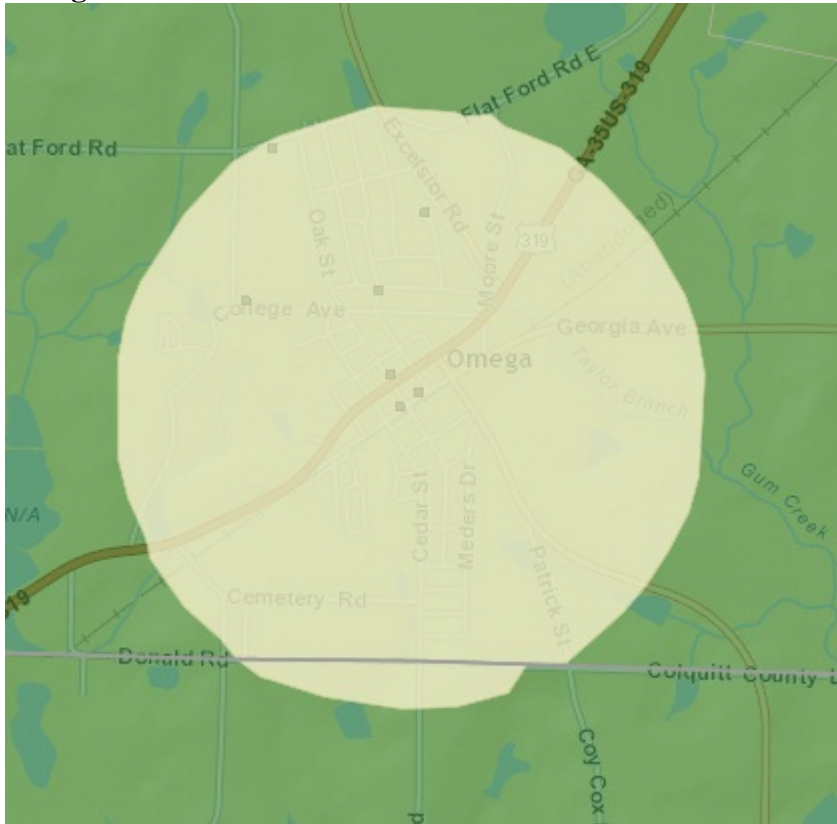


GEMA\_Hazard - GEMA.wildfire



See Table VI-1 on page 57 for description of the hazard scores

**Omega:**



GEMA\_Hazard - GEMA.wildfire



See Table VI-1 on page 57 for description of the hazard scores

**Ty Ty:**



**GEMA\_Hazard - GEMA.wildfire**



See Table VI-1 on page 57 for description of the hazard scores

## **VII. Drought**

### **a. Drought Identify**

A drought is a prolonged period without rain, particularly during the planting and growing season in agricultural areas. It can range from two weeks to six months or more and affects water availability and quality. In Georgia, droughts affect municipal and industrial water supplies, stream-water quality, recreation at reservoirs, hydropower generation, navigation, agricultural and forest resources. Farmland irrigation is a means of mitigation and preparedness. Additional sources of water may be identified to assist with individual and family consumption during time of response and recovery.

The primary source of domestic water in Tift County comes from underground sources. The Floridian Aquifer provides a significant amount of domestic water to the public in Tift County. Water levels in the aquifer vary depending on the amount of recharge. Thus, during long periods of drought, water levels may drop below the levels of the wells, causing disruption in the water supply.

### **b. Drought Profile**

Insufficient data and analysis are readily available to predict the degree of crop damage and domestic water shortages in Tift County caused by a long-term drought and continued high usage rates of the underground water supply. According to the Center for Agribusiness & Economic Development in Georgia, state wide crop losses for 2008 due to drought topped \$256 million. State wide crop losses for 2006 due to drought topped \$819 million. According to the National Climatic Data Center, a drought lasting only 4 weeks in 1997 caused an estimated \$66.5 million in crop damage statewide, with \$46.5 million in damage occurring in a twenty-five county region in south Georgia, including Tift County.

Per the US Drought Monitor, since the year 2000, there have been 73 months of drought in Tift County. Out of those 73 months, 52 months have been either “Moderate Drought” or “Severe Drought”. The remaining 21 months were either “Extreme Drought” or “Exceptional Drought” (See Appendix A-VII)

### **c. Assets Exposed to Drought.**

Practically every home and business in Tift County, including municipalities, receives their domestic water from underground sources. Agricultural interests also draw on the aquifer for irrigation.

The total replacement value of critical facilities in all of Tift County are as follows:

Tift County:	\$ 71,609,088
City of Tifton:	\$273,871,003
City of Omega:	\$ 5,149,273
City of Ty Ty:	\$ 1,010,953

However, as a countywide non-spatially defined hazard, drought affects people and the public health more than structures. Therefore all residents of the county are vulnerable.

**d. Estimated Potential Losses to Drought**

As a countywide non-spatially defined hazard, drought affects people and the public health more than structures. Long term drought could place added burden to underground aquifers which could lead to wells running dry which could lead to water shortages. However, it is impossible to project the severity of such a water shortage and to place a dollar figure on the loss to the community. At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

**e. Land Use and Development Trends Related to Drought**

The land-use and development ordinances of Tift County and its municipalities do not deal with the assurance of domestic water sources. Because the drought hazard zone is countywide, existing land use patterns and development trends will result in future development in the county that may be affected by drought. The mitigation strategy in Chapter 4 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

Every jurisdiction in Tift County is equally affected by drought.

**g. General Summary Drought**

Tift County is currently blessed with an abundance of underground water. As Tift County grows and demands on the underground sources of water continue to grow, the supply of underground water available for both domestic and agricultural uses in Tift County will diminish. An extended period of drought could jeopardize the health and welfare of Tift County citizens and have devastating effects on the agricultural economy.

No significant changes or development have occurred in Tift County since the adoption of the previous plan in 2012.

## **Chapter 3 – Local Technological Hazard, Risk and Vulnerability (HRV) Summary**

The planning team determined that Tift County and its municipalities are most at risk from the following technological hazard: hazardous materials release as a result of a transportation accident.

### **I. Hazardous Materials Release**

#### **a. Hazardous Materials (HAZMAT) Identify**

Hazardous materials are chemical substances that, if released or misused, can pose a threat to the environment or human health. These chemicals are used in industry, agriculture, medicine, research, and consumer goods. Hazardous materials come in the form of explosives, flammable and combustible substances, poisons, and radioactive materials. Jurisdictions with facilities that produce, process or store hazardous materials are at risk, as are facilities that treat, store, or dispose of hazardous wastes. A major source of hazardous material accidents are spills along roadways, railways, pipelines, rivers and port areas.

#### **b. Hazardous Materials Profile**

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 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 sorts hazardous materials into six categories:

1. Toxic Agents (irritants, asphyxiates, narcotics)
2. Other Toxic Agents (hepatotoxic, nephrotoxic)
3. Hazardous Wastes
4. Hazardous Substances
5. Toxic Pollutants
6. Extremely Hazardous Substances

Tift County is most at risk from an accidental release of hazardous materials due to a transportation incident because it is crisscrossed by inter/intra-state highways and rail track.

According to the Department of Transportation (DOT), for the period 2005 to 2014, there were 166,017 hazardous materials spills events in the United

States. Of these, 90.4% were highway or railroad events. During this same period DOT recorded 125 deaths and 2,648 injuries. Tift County is most at risk from an accidental release of hazardous materials due to a transportation incident because it is crisscrossed by inter/intra-state highways and rail track. Tift County has experienced 33 hazardous material release events from 2012-2015.

According to the Hazard Frequency Table (Appendix D), Tift County has experienced 33 hazardous material release events over the past 3 years. Based on this historic record, there is a 100% chance of events occurring each year. The available data is countywide. Event breakdown by individual jurisdiction is not possible. The event history is from the Tift County Fire Department records and include the following types of events:

- Fuel spills of 55 gallons or more in quantity
- Fuel spills that require clean up or preventive measures where the measures taken would prevent a danger to the community environmentally or pose a hazard to vehicular traffic.
- Propane or natural gas leaks or odors indicating a leak
- Any chemical spills from any container, mobile or stationary, identified or not, of any quantity requiring clean up or preventive measures
- Anthrax “scares”
- Any toxic odor complaint including, but not restricted to, herbicides, pesticides, or agricultural related substances

Information is not available on specific event locations. For the purposes of this report, the events are considered to be countywide.

The source and documentation of the data used in the previous plan could not be located or verified. As a result, only data available from the years since the adoption of the pervious plan were utilized in this report.

With several major trucking routes running through Tift County (Interstate 75, U.S. Highways 82, 41, 125, and 319), and with Norfolk Southern Railroad Company trains making several daily runs through the county, the potential for a dangerous release of hazardous materials as a result of a transportation accident is very high.

Hazardous material releases can happen at any time at any location within the county. Areas within 1 mile of major roads and rail lines are most at risk. It is impossible, with the data available, to determine the extent of this hazard. This is a countywide hazard.

**c. Assets Exposed to Hazardous Materials.**

Hazardous materials are transported on Tift County’s roadways and railways daily, so generally all people and structures in Tift County are exposed to a hazardous materials accident.

According to the GMIS Critical Facility Inventory database, the total replacement values of critical facilities in all of Tift County are as follows:

Tift County:       \$ 71,609,088  
City of Tifton:    \$273,871,003  
City of Omega:    \$ 5,149,273  
City of Ty Ty:     \$ 1,010,953

The overwhelming majority of these critical facilities are within one mile of a major highway or rail line.

As for the potential impact of hurricanes/tropical storms on the total built community, GIS tax parcel data reveals the following information on structures and populations in each municipality:

<b>Tift County</b>		
	<b>Count</b>	<b>Value</b>
Residential	31,834	\$624,610,433
Commercial	1,779	\$82,598,114
Industrial	250	\$46,771,452
Agricultural	5,453	\$62,655,648
Religious/ Non-profit	359	\$28,989,471
Government	381	\$119,893,767
Education	51	\$30,881,771
Utilities	15	\$64,943,137
<b>Totals</b>	<b>40,122</b>	<b>\$1,061,343,793</b>

<b>City of Tifton</b>		
	Count	Value
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Industrial	40	3,012,697
Agricultural	15	110,040
Religious/ Non-profit	183	27,377,111
Government	367	59,103,736
Education	29	54,295,087
Utilities	7	21,411,672
<b>Totals</b>	<b>14,848</b>	<b>\$728,982,052</b>

<b>City of Omega</b>		
	Count	Value
Residential	1,036	11,309,262
Commercial	112	4,181,934
Industrial	5	306,404
Agricultural	7	52,062
Religious/ Non-profit	17	1,311,520
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Utilities	4	1,714,317
<b>Totals</b>	<b>1,206</b>	<b>\$22,677,888</b>

<b>City of Ty Ty</b>		
	Count	Value
Residential	602	7,650,464
Commercial	77	2,208,787
Industrial	0	0
Agricultural	6	313,491
Religious/ Non-profit	18	1,027,299
Government	10	463,458
Education	0	0
Utilities	3	589,840
<b>Totals</b>	<b>716</b>	<b>\$12,253,339</b>

Each of these municipalities is equally at risk of damage from a hazardous material spill. Not all these properties are located within one mile of a major road or railroad, but given the transportation network in Tift County, the vast majority will fall within the one mile buffer.

**d. Estimated Potential Losses to Hazardous Materials**

As noted above, the critical facilities most at risk in Tift County are those located within a one mile buffer of the major highways and railways (see above for a breakdown of the number and value of these critical facilities by jurisdiction). At this time, there are no known buildings, infrastructure or critical facilities to be located in the hazard zone requiring special mitigation strategies.

**e. Land Use and Development Trends Related to Hazardous Materials**

Tift County and the municipalities at this time have no land use or development controls related to hazardous materials release events. Because the hazard zone is essentially countywide, existing land use patterns and development trends will result in future development in the county that may be affected by hazardous materials release. The mitigation strategy in Chapter 5 includes action steps intended to reduce the possible adverse effect on such development.

**f. Multi-Jurisdictional Differences**

Due to its greater population and location on Interstate 75 and several other major highways, and the route of Norfolk Southern trains through the city, Tifton is much more vulnerable to a hazardous materials release due to a transportation accident than Ty Ty, Omega, and the unincorporated areas of Tift County. Ty Ty is exposed due to its location on U. S. Highway 82, and Omega is vulnerable to accidents on U.S. Highway 319. The following GMIS maps show the critical facilities in Tift County most at risk of a hazardous material release due to their location within a one mile buffer of the major highways and railways.

**g. General Summary Hazardous Materials**

Human error is the most probable cause of most transportation incidents and associated consequences involving the release of hazardous materials. Varying quantities of hazardous materials are manufactured, used, or stored in Tift County, from major industrial plants to local dry cleaning establishments or gardening supply stores. Due to the county's location on several major truck and transportation routes, the potential exists for a catastrophic hazardous material release event due to a transportation accident.

## Chapter 4 – Local Natural Hazard Mitigation Goals and Objectives

### I. Overall Community Mitigation Goals, Policies, and Values

The purpose of the Tift County Disaster Mitigation Plan is to not only assess the vulnerability of the area to natural hazards, but to identify those action steps that may need to be undertaken to reduce the potential loss of life and property as a result of these hazards. To guide the development of this plan requires an overall set of community goals that clearly state the community's commitment to reducing or avoiding the long-term vulnerabilities to the identified hazards. With these overall goals in place, more specific goals, objectives, and action steps to protect the community from the identified hazards can then be developed. For the plan update, the planning team reviewed the goals from the previous plan and decided that the goals still fit the priorities of the County.

**Goal # 1: Protect the public health and safety;**

**Goal #2: Eliminate, or reduce, exposure of critical community facilities to the hazards identified in the community risk assessment;**

**Goal #3: Where exposure to hazards cannot be limited, implement, to the extent resources are available, the action steps needed to reduce the potential loss of life and property;**

**Goal #4: Maintain and/or enhance the community's capacity to issue warnings, and respond promptly and effectively in the event of a hazard event.**

The following Goals, Objectives, Tasks and Action Steps were developed by the planning team involving a very broad cross-section of Tift County and its municipalities (See Chapter 1 for membership). The Goals, Objectives, Tasks and Action Steps were designed to meet the specific natural hazards and to help mitigate past repetitive damages from natural hazards in Tift County and the cities of Tifton, Ty Ty, and Omega.

The STAPLEE Criteria (Social, Technical, Administrative, Political, Legal, Economic, Environmental) for each action step were developed to help rank each of the mitigation strategies. The following methodology was utilized in ranking the priority of each action step:

**High Priority – H      Medium Priority – M      Low Priority – L**

**High Priority – H** – is considered to be an **Action Step** that needs to be taken first due to the most harmful threat posed to Tift County and its municipalities and/or due to the greatest repetitive damages caused by natural hazards in Tift County and its municipalities.

**Medium Priority – M** - is considered to be an **Action Step** that needs to be accomplished after the High Priority Action Steps are met or when additional funding is available.

**Low Priority – L** - is considered to be an **Action Step** that is important but is the lowest priority in meeting the needs of Tift County and its municipalities.

In projecting a timetable for implementation of the action steps, Tift County and the municipalities will strive to meet the following schedule: High priority action steps will be implemented in the first eighteen months following adoption of this plan; Medium priority action steps will be implemented in eighteen to thirty-six months; and Low priority action steps will be implemented in thirty-six to sixty months. Action steps will be implemented utilizing a combination of resources from agencies such as OHS-GEMA, FEMA, NOAA, and others. The timetable for implementation will be highly dependent on the type of funding available.

Following each action step in the mitigation strategy, the plan identifies the responsible department, estimated cost, anticipated funding source(s), anticipated benefit, and projected timeline.

With the overall community mitigation goals in place, the following Goals, Objectives, Tasks, and Action Steps have been developed to specifically address the natural hazards identified in Chapter 2.

The following Mitigation Strategies all involve some sort of cost. For many, existing staff will continue to perform the action item or will begin to perform the action item. In those cases there is no direct project cost, but there is a time cost to each municipality. The action items with a cost associated with them will need to secure a funding source prior to implementing the action item. This may take the form of a loan or a grant, prioritized budget items or sales tax receipts.

Tift County, City of Tifton, City of Ty Ty and the City of Omega all have Public Works staff and other governmental staff to perform the action items assigned to them. For larger project, grants/loans or sales tax would need to be used to fund the project. Existing local ordinances allow staff the authority to perform these responsibilities.

Some of the action items are assigned to the Tift County Department of Public Safety – EMA. Existing staff will perform the action items assigned to them and funding will be sought for larger projects.

## **II. Hurricanes/Tropical Storms**

### **a. Community Mitigation Goals**

In 2004, Tropical Storm Frances caused over \$76,000 in damages in Tift County and Tropical Storm Jeanne caused approximately \$178,000 in damages. The major costs were road repair and debris removal.

In 2005, Hurricane Dennis came ashore along the central Gulf coast. Heavy rain was reported in Tift County causing minor flooding.

In 2008, Tropical Storm Fay came ashore along the east coast of Florida, eventually making its way to Georgia. Heavy rain and winds were reported in Tift County.

Reducing potential loss of life and property through early, effective warnings to the general public is a goal of highest priority of this plan. In addition, there is currently no hardened command center from which 911 and emergency personnel can coordinate and direct the communities' response to hurricanes other hazard incidents. In addition, steps should be taken to ensure that buildings and infrastructure are made more resistant to hurricane wind damage.

### **b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural - A hardened Emergency Operations Center should be constructed to allow proper emergency coordination during the event of a hurricane or tropical storm. Existing outdoor warning sirens should be updated. Non-structural options include making the public more aware of steps they can take to protect themselves and their property in the event of a hurricane event.
2. Existing policies, regulations, ordinances and land use - As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized.
3. Community values, historic, and special considerations – STAPLEE criteria for each action step was determined to help rank each action step.

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 hurricanes.
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 hurricanes.

**c. Mitigation Strategy and Recommendations**

**Mitigation Goal #1.** Reduce the risks and vulnerability of citizens and critical facilities to damage resulting from hurricanes.

**Objective #1.** Protect life, health and property of residents from force of hurricanes.

**Task A.** Advise the public about hurricane safety precautions.

**Action Steps**

- Educate homeowners and builders on individual safe rooms. **M**  
**Responsibility: EMA**  
**Est. Costs: Existing Staff**  
**Funding Sources: Local Operating Funds**  
**Benefit: Provide secure shelter in all severe weather conditions**  
**Timeline: 2016-2021**
- Distribute programs on personal emergency preparedness, i.e., emergency survival kits. **M**  
**Responsibility: EMA**  
**Est. Cost: \$500**  
**Funding Sources: Local Operating Funds**  
**Benefit: Encourage self-care for 14,000 families county-wide**  
**Timeline 2016-2021**
- Encourage the American Red Cross to teach the Citizen’s Disaster Course on a frequent basis. **M**  
**Responsibility: EMA**  
**Est. Cost: \$10,000**  
**Funding Sources: OHS-GEMA/FEMA**  
**Benefit: Encourage self-care for 14,000 families county-wide**  
**Timeline: 2016-2021**

- Encourage businesses to develop emergency plans **M**  
**Responsibility: EMA**  
**Est. Cost: Existing Staff**  
**Funding Source: Local Operating Budget**  
**Benefit: Encourage self-protection of 1600 businesses in the city and county**  
**Timeline: 2016-2021**
- Increase public awareness of the Early Warning Communication / Notification System, NOAA weather radios, and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings, and providing bulletins to local churches and the schools. **H**  
**Responsibility: EMA**  
**Est. Cost: Existing Staff**  
**Funding Sources: Local Operating Budget and OHS-GEMA/FEMA**  
**Benefit: Encourage self-care by having reliable weather information at all times and knowing the location of community shelters**  
**Timeline: 2016-2021**

**Task B.** Reduce the potential impact of hurricanes on new and existing facilities and infrastructure.

**Action Steps**

- Install auxiliary generators for all designated evacuation and emergency shelters and community water systems. **H**  
**Responsibility: EMA**  
**Est. Cost: \$750,000**  
**Funding Sources: OHS-GEMA/FEMA**  
**Benefit: Provide continuity of operations for shelters. There are 19 designated Red Cross shelters within the County. Generator study would need to be conducted to determine required power.**  
**Timeline: 2016-2021**

- Trim tree lines around roads, homes, utilities and businesses. **H**  
**Responsibility: Cities/County Utilities, Georgia Power, Colquitt EMC**  
**Est. Cost: \$100,000**  
**Funding Sources: Local Operating Funds, Georgia Power and Colquitt EMC**  
**Benefit: Reduce the likelihood of long-term power outage and damage to homes and businesses city and county-wide**  
**Timeline: 2016-2021**
- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations (T, TC) **H**  
**Responsibility: Development Support Services**  
**Est. Cost: Existing Staff**  
**Funding Sources: Local Operating Funds**  
**Benefit: Insure that local codes provide reasonable protection from anticipated wind threats for homes and other structures**  
**Timeline: 2016-2021**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan**

Completed Action Steps:

- Construct a hardened Emergency Operations Center, including necessary 911 communications and operational equipment – EOC is constructed and operational.

Deleted Action Steps:

- Upgrade the existing early warning systems - Replace aging outdoor warning sirens and add more for full county coverage – No longer a preferred option. Cheaper, more efficient solutions available

**g. Unchanged Action Steps**

- Educate homeowners and builders on individual safe rooms. – ongoing
- Distribute programs on personal emergency preparedness, i.e., emergency survival kits – ongoing
- Encourage the American Red Cross to teach the Citizen’s Disaster Course on a frequent basis – ongoing
- Encourage businesses to develop emergency plans – ongoing
- Increase public awareness of the Early Warning Communication / Notification System, NOAA weather radios, and available community safe shelters by publishing articles in the local newspaper, holding town hall meetings, and providing bulletins to local churches and the schools – ongoing
- Install auxiliary generators for all designated evacuation and emergency shelters and community water systems – generator study has not been initiated due to potential cost, but is planned
- Trim tree lines around roads, homes, utilities and businesses – ongoing
- Review building codes for proper wind strength and safety regulations and for consistency with state and federal regulations – ongoing

### **III. Tornadoes**

#### **a. Community Mitigation Goals**

In the period from 1951-2015, the Tift County area experienced 19 recorded tornado events. Public officials throughout Tift County realize that the ability to provide early, effective warnings to citizens of possible danger should be the highest priority of this mitigation plan. In addition, there is currently no hardened command center from which 911 and emergency personnel can coordinate and direct the communities' response to tornadoes and other hazard incidents. In addition, steps should be taken to ensure that buildings and infrastructure are made more resistant to tornado damage.

#### **b. Identification and Analysis of Range of Mitigation Options**

1. Structural and non-structural – See Section I, “Hurricanes/Tropical Storms”
2. Existing policies, regulations, ordinances and land use – See Section II, “Hurricanes/Tropical Storms”
3. Community values, historic, and special considerations – See Section II, “Hurricanes/Tropical Storms”
4. New buildings and Infrastructure – See Section II, “Hurricanes/Tropical Storms”
5. Existing Buildings and Infrastructure – See Section II, “Hurricanes/Tropical Storms”

#### **c. Mitigation Strategy and Recommendations**

See Section II, “Hurricanes/Tropical Storms”

#### **d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

#### **e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan**

See Section II, “Hurricanes/Tropical Storms”

**g. Unchanged Action Steps**

See Section II, “Hurricanes/Tropical Storms”

**IV. Flood**

**a. Community Mitigation Goals**

Throughout Tift County the greatest risk of flooding occurs during periods of heavy rainfall, as a result of thunderstorms, hurricanes or tropical storms. During these events storm water runoff causes creeks and tributaries to overflow and roadways are overtopped. The 1997 North Central Drainage Basin Improvements Study and the 1998 Master Drainage Study covering basins in the City of Tifton and portions of Tift County resulted in a ten year “game plan” to improve the drainage capacity of the communities. The goal of this plan is to further encourage implementation of that game plan, as well as continuing the review and updating of the drainage plans as needed. Due to budget constraints, the various projects proposed in these studies have not all been completed and are behind the original schedule. However, the studies are still used to design and prioritize projects within the City of Tifton.

**b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural – As noted, the implementation of the North Central Drainage Basin Improvements Study and the Master Drainage Study will require a large investment in structural improvements. In addition, to improve the community’s ability to issue warnings to the public during a flood event, the plan includes the purchase and installation of an Early Warning Communication/Notification System. While some non-structural options are included in this plan, they are limited to review of existing ordinances and land use restrictions.
2. Existing policies, regulations, ordinances and land use – As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized. As a result of the Master Drainage Study, the City of Tifton and Tift County adopted amendments to their ordinances in 1998 to require storm water management plans to be submitted and approved for any project involving single-family attached units, unit developments, churches, multi-family

developments, commercial developments, industrial developments, and planned developments. Omega and Ty Ty also enforce land use restrictions through their respective zoning ordinances.

3. Community values, historic & special considerations - STAPLEE criteria for each action step was determined to help rank each action step.
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 flooding. Properly enforcing the local floodplain ordinance is required for continued participation in the NFIP.
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 flooding.

**c. Mitigation Strategy and Recommendation**

**Mitigation Goal #1:** Minimize losses to existing and future structures, especially community critical facilities, due to flooding caused by excessive rainfall.

**Objective #1.** Improve capacity of the Tifton/Tift County existing drainage infrastructure to handle the 100 year flood event.

**Task A.** Fully implement the recommendations of the Tifton North Central Drainage Basin Improvements Study.

**Action Steps**

- Complete the remaining projects recommended in the NCDBI study (T, TC) **H**

**Responsibility:** City of Tifton/Tift County Engineering Departments

**Est. cost:** \$20,000,000

**Funding Sources:** Local funds, OHS-GEMA, FEMA

**Benefit:** Relieve flood threat and impact of flood damages to 11,000 structures in the North Central Drainage Basin.

**Timeline:** 2016 - 2021

**Task B.** Continue phased implementation of the Tifton Master Drainage Plan.

**Action Steps**

- Determine, in consultation with engineers, schedule for phased implementation of the Tifton Master Drainage Plan (T) H

**Responsibility: City of Tifton Engineering Department**

**Est. Cost: \$100,000**

**Funding Sources: SPLOST, OHS-GEMA, FEMA**

**Benefit: Relieve flood threat and impact of flood damages to 940 houses, businesses, and other structures in City of Tifton.**

**Timeline: 2016 - 2021**

- Seek funding for phased implementation of the Tifton Master Drainage Plan(T) H

**Responsibility: City of Tifton City Manager**

**Est. Cost: Existing Staff**

**Funding Sources: Local funds**

**Benefit: Relieve flood threat and impact of flood damages to 940 houses, businesses, and other structures in the City of Tifton.**

**Timeline: 2016 - 2021**

- Continue to review and update storm water run-off, watershed plans and effectiveness of present drainage ditching, culverts, storm water and sanitation network. (T) H

**Responsibility: City of Tifton Engineering Department**

**Est. Cost: Existing Staff**

**Funding Sources: Local funds**

**Benefit: Relieve flood threat and impact of flood damages to 940 houses, businesses, and other structures in the City of Tifton.**

**Timeline: 2016 - 2021**

**Task C.** Reduce exposure to flood hazards countywide.

**Action Steps**

- Develop a countywide master drainage plan to include Ty Ty and Omega. (TC, TT, O) M

**Responsibility: Tift County Engineering Department**

**Est. Cost: \$50,000**

**Funding Sources: OHS-GEMA, FEMA, local budget**

**Benefit: Relieve flood threat and impact of flood damages to 1831 structures outside Tifton.**

**Timeline: 2016 - 2021**

- Review all capital improvements plans to ensure that infrastructure improvements are not directed towards flood hazard areas. (TC, T, TT, O) M

**Responsibility: Development Support Services**

**Est. Cost: Existing Staff**

**Funding Sources: Local Budget**

**Benefit: Eliminate future development in known flood hazard areas.**

**Timeline: 2016 - 2021**

- Work with Georgia Department of Transportation to identify areas of frequent roadway flooding and develop mitigation strategies. M

**Responsibility: EMA**

**Est. Cost: Existing Staff**

**Funding Sources: Local Funds**

**Benefit: Reduce potential loss of life and property damage**

**Timeline: 2016 - 2021**

**Task D. Enforce floodplain management.**

**Action Steps**

- Continue to enforce floodplain ordinances. (TC, T, TT, O) M

**Responsibility: Development Support Services**

**Est. Cost: Existing staff**

**Funding Sources: Local Funds**

**Benefit: Eliminate future development in known flood hazard areas. Required for compliance with NFIP**

**Timeline: 2016 - 2021**

- Review and amend the Tifton/Tift County Building Codes as required due to mandatory changes in the National Flood Insurance Program (TC, T, TT, O) M  
**Responsibility: Development Support Services**  
**Est. Cost: Existing staff**  
**Funding Source: Local Funds**  
**Benefit: Reduction of property damage and increase in public safety during flood events.**  
**Required for compliance with NFIP**  
**Timeline: 2016 - 2021**

**Task E.** Implement floodway buyout program.

**Action Steps**

- Identify and buyout all structures most vulnerable to flooding in the floodplain. (TC, T, TT) M  
**Responsibility: Tifton, Ty Ty, Omega, Tift County governments**  
**Est. Cost: \$1,000,000**  
**Funding Sources: Local funds, FEMA, OHS/GEMA**  
**Benefit: Eliminate estimated 225 structures subject to high risk of flooding**  
**Timeline: 2016 - 2021**
- Distribute letters to all property owners in the county regarding potential flood hazards as required for participation in the Community Rating System (CRS). (TC, T, TT, O) M  
**Responsibility: Tifton, Ty Ty, Omega, Tift County governments**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds**  
**Benefit: Educate citizens on flood hazards**  
**Timeline: 2016 - 2021**
- Obtain updated information on the number of National Flood Insurance Program (NFIP) policyholders in Tift County. M  
**Responsibility: EMA**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds**  
**Benefit: Determine extent of uninsured property at risk of flooding**  
**Timeline: 2016 - 2021**

- Collect updated information of the number and location of all repetitive loss facilities throughout the county. **M**  
**Responsibility: EMA**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds**  
**Benefit: Determine more precise value of property at risk of flooding**  
**Timeline: 2016 - 2021**
- Develop a database of information on all repetitive loss facilities including maps. **M**  
**Responsibility: EMA**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds**  
**Benefit: Identify areas to better prioritize need for hazard mitigation**  
**Timeline: 2016 - 2021**

**Objective #2. Protect and conserve flood prone areas for community green space development.**

**Task A. Implement the 2002 Tift County Green space Program**

**Action Steps**

- Monitor comprehensive land use plans to ensure consistency with the green space program, including mapping of lands to be permanently protected. (TC, T, TT O) **M**  
**Responsibility: Tifton/Tift County, Keep Tift Beautiful**  
**Est. Cost: \$15,000**  
**Funding Sources: Local Budget, State and Federal Grant Funding**  
**Benefit: Eliminate future development in known flood hazard areas.**  
**Timeline: 2016 - 2021**
- Monitor existing subdivision regulations to promote conservation of floodplains, wetlands, and groundwater recharge areas. (TC, T, TT, O) **M**  
**Responsibility: Office of Developmental Services**  
**Est. Cost: \$20,000**  
**Funding Source: Local Budget, State and Federal Grant Funding**  
**Benefit: Eliminate future development in known flood hazard areas.**  
**Timeline: 2016 - 2021**

**Objective #3.** Ensure public health and safety during and following flood events.

**Task A.** Reduce the threat of water contamination caused by flooding.

**Action Steps**

- Cap wells not in use and increase wellhead waterproofing (TC, T, TT, O) M

**Responsibility: Tifton/Tift County, Local Extension Office**

**Est. Cost: \$100,000**

**Funding Sources: Local Budget, State Funding**

**Benefit: Reduce water contamination**

**Timeline: Ongoing**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan**

Completed Action Steps:

None

Deleted Action Steps:

- Upgrade existing outdoor warning sirens and add more for full county coverage – No longer a preferred option. Cheaper, more efficient solutions available

**g. Unchanged Action Steps**

- Complete the remaining projects recommended in the NCDDBI study - Ongoing
- Determine, in consultation with engineers, schedule for phased implementation of the Tifton Master Drainage Plan - Ongoing

- Seek funding for phased implementation of the Tifton Master Drainage Plan - Ongoing
- Continue to review and update storm water run-off, watershed plans and effectiveness of present drainage ditching, culverts, storm water and sanitation network. - Ongoing
- Develop a countywide master drainage plan to include Ty Ty and Omega. - Ongoing
- Review all capital improvements plans to ensure that infrastructure improvements are not directed towards flood hazard areas - Ongoing
- Work with Georgia Department of Transportation to identify areas of frequent roadway flooding and develop mitigation strategies. - Ongoing
- Continue to enforce floodplain ordinances. - Ongoing
- Review and amend the Tifton/Tift County Building Codes as required due to mandatory changes in the National Flood Insurance Program - Ongoing
- Identify and buyout all structures most vulnerable to flooding in the floodplain. - Ongoing
- Distribute letters to all property owners in the county regarding potential flood hazards as required for participation in the Community Rating System (CRS). - Ongoing
- Obtain updated information on the number of National Flood Insurance Program (NFIP) policyholders in Tift County - Ongoing
- Collect updated information of the number and location of all repetitive loss facilities throughout the county. - Ongoing
- Develop a database of information on all repetitive loss facilities including maps - Ongoing
- Implement the 2002 Tift County Green space Program - Ongoing
- Monitor existing subdivision regulations to promote conservation of floodplains, wetlands, and groundwater recharge areas. - Ongoing
- Cap wells not in use and increase wellhead waterproofing - Ongoing

## **V. Windstorms/Hailstorms/Lightning**

### **a. Community Mitigation Goals**

In the past 63 years, there have been 82 thunderstorm and high wind events in Tift County, along with 30 hailstorm events. While these hazards can cause significant property damage, the potential for personal injury is also high for an unprepared public. Ensuring that the citizenry is aware of these dangers and the community is able to quickly issue warnings of possible events is a very important component of the community's emergency preparedness.

### **b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural – See Section II, “Hurricanes/Tropical Storms”
2. Existing policies, regulations, ordinances and land use – See Section II, “Hurricanes/Tropical Storms”
3. Community values, historic, and special considerations – See Section II, “Hurricanes/Tropical Storms”
4. New buildings and Infrastructure – See Section II, “Hurricanes/Tropical Storms”
5. Existing Buildings and Infrastructure – See Section II, “Hurricanes/Tropical Storms”

### **c. Mitigation Strategy and Recommendations**

See Section II, “Hurricanes/Tropical Storms”

### **d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

### **e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance process

### **f. Completed/Deleted Action Steps From Previous Plan**

Completed Action Steps:

See Section II, “Hurricanes/Tropical Storms”

Deleted Action Steps:  
See Section II, “Hurricanes/Tropical Storms”

**g. Unchanged Action Steps**

See Section II, “Hurricanes/Tropical Storms”

**VI. Extreme Heat/Cold**

**a. Community Mitigation Goals**

The South Georgia area is subject to extreme high temperatures and humidity during the summer months, and heat induced illness can be very serious and even fatal for many population groups in the community. There is also the threat of severe cold during the winter months, which can be very dangerous for the homeless and elderly in the community. The goal of the community is to prevent such injuries and deaths by providing those with inadequate housing with access to air conditioned and heated shelters during periods of extreme heat and cold.

**b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural – There are no structural options considered, since there are appropriate facilities available throughout the county to serve as shelters when needed.
2. Existing policies, regulations, ordinances and land use - State regulations apply to the operations of emergency shelters. There are currently no local ordinances or regulations affecting emergency shelters.
3. Community values, historic & special considerations – STAPLEE criteria for each action step was determined to help rank each action step.
4. New buildings and Infrastructure – As noted in Chapter 2, the risk of extreme heat/cold is mainly to the citizens of Tift County, not structures or infrastructure. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of the general public from the effects of extreme heat/cold. The strategy includes adding auxiliary generators to ensure power to any new buildings and/or infrastructure to be utilized as emergency shelters.
5. Existing Buildings and Infrastructure - As noted in Chapter 2, the risk of extreme heat/cold is mainly to the citizens of Tift County, not structures or infrastructure. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of

the general public from the effects of extreme heat/cold. The strategy includes adding auxiliary generators to ensure power to any existing buildings and/or infrastructure to be utilized as emergency shelters.

**c. Mitigation Strategy and Recommendations**

**Mitigation Goal #1.** Prevent heat and cold related injuries and deaths.

**Objective #1.** Provide potential heat-stress and cold weather victims with emergency shelter.

**Task A.** Maintain a network of equipped emergency shelters throughout Tift County.

**Action Steps**

- Designate emergency shelters in consultation with appropriate organizations (Red Cross, Senior Citizen Centers, hospital, churches, health department, etc.) **H**  
**Responsibility: EMA, American Red Cross**  
**Est. Cost: Existing Staff**  
**Funding Sources: DFACS, Public Health, State funds**  
**Benefit: Provide emergency shelter**  
**Timeline: 2016-2021**
- Install auxiliary generators for all designated evacuation and emergency shelters and community water systems. There are 19 Red Cross shelters **H**  
**Responsibility: EMA**  
**Est. Cost: \$750,000**  
**Funding Sources: OHS-GEMA/FEMA**  
**Benefit: Provide continuity of operations during extended power outages.**  
**Timeline: 2016-2021**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan.**

Completed Action Steps:

None

Deleted Action Steps:

None

**g. Unchanged Action Steps**

- Designate emergency shelters in consultation with appropriate organizations (Red Cross, Senior Citizen Centers, hospital, churches, health department, etc.) – good house keeping procedures. Low cost and effective action step - Ongoing
- Install auxiliary generators for all designated evacuation and emergency shelters and community water systems – provide better capability for emergency shelters to operate – Deferred due to budget constraints

## **VII. Wildfire**

### **a. Community Mitigation Goals**

While most of Tift County remains a mostly rural community outside the city limits of Tifton, there is beginning to be substantial development in the county in areas surrounded by forests populated with pines, oaks and dense ground vegetation. Especially during prolonged periods of drought, the threat of wildfire is a disaster that could cause much property damage and injury. The plan addresses this threat by including options to improve the firefighting capacity of the community and reducing the threat through preventative measures.

### **b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural – Options to mitigate possible losses due to wildfires in Tift County range from non-structural actions steps designed to educate the public about the danger of wildfires to action steps that involve the acquisition of equipment to increase the wildland firefighting capacity of the community.
2. Existing policies, regulations, ordinances and land use - As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized.
3. Community values, historic, and special considerations – STAPLEE criteria for each action step was determined to help rank each action step.
4. New buildings and Infrastructure – All of the action steps under Objectives 1 and 2 are designed to protect new buildings and infrastructure from the effects of wildfire.
5. Existing Buildings and Infrastructure - All of the action steps under Objectives 1 and 2 are designed to protect existing buildings and infrastructure from the effects of wildfire.

**c. Mitigation Strategy and Recommendations**

**Mitigation Goal #1.** Prevent damage resulting from wildfires in Tift County, reduce the threat of wildfires, and protect the life and property of residents.

**Objective #1. Prevent destruction of forests and structures.**

**Task A.** Increase wildfire fighting capacity.

**Action Steps**

- Acquire all terrain vehicles (TC, T) M  
**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**  
**Est. Cost: \$200,000.00**  
**Funding Sources: State of Georgia Forestry Commission, State and Federal Grant Programs**  
**Benefit: Increased fire protection for structures in urban/rural interface areas**  
**Timeline: 2016-2021**
- Improve wildland fire training at the local fire department level. (TC, T) M  
**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**  
**Est. Cost: Training provided by Forestry Commission**  
**Funding Sources: Georgia Forestry, GPSTC**  
**Benefit: Train firemen**  
**Timeline: 2016-2021**
- Improve public awareness of wildfire fighting techniques and the importance of fire buffers around the home by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools (TC, T) M  
**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**  
**Est. Cost: \$15,000.00**  
**Funding Sources: State of Georgia Forestry Commission, State and Federal Grant Programs**

**Benefit: Increased level of public education and awareness regarding risk of wildfire to structures in urban/rural interface areas**

**Timeline: 2016-2021**

- Support Georgia Forestry Public Outreach efforts (TC, T) M

**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**

**Est. Cost: \$10,000.00**

**Funding Sources: State of Georgia Forestry Commission, State and Federal Grant Programs**

**Benefit: Increased level of public education and awareness regarding risk of wildfire to structures in urban/rural interface areas**

**Timeline: 2016-2021**

Enforce building, fire and safety codes. (TC, T, TT, O)

**H**

**Responsibility: Tifton/Tift County Fire Department, Tifton/Tift County Development Support Services**

**Est. Cost: Existing staff**

**Funding Sources: Local Budget**

**Benefit: Increased fire protection for structures in urban/rural interface areas**

**Timeline: 2016-2021**

- Enforce burn permits at the local level. (TC, T) M

**Responsibility: Tifton/Tift County Code Enforcement, Tift County Commission, Tifton City Council**

**Est. Cost: Existing Staff**

**Funding Sources: Local Budget**

**Benefit: Reduce illegal burning and reduce threat to structures in urban/rural interface areas**

**Timeline: 2016-2021**

- Educate public and provide information on nighttime burning and smoke management (TC, T) M

**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**

**Est. Cost: \$25,000.00**

**Funding Sources: Georgia Forestry Commission, State and Federal Grant Programs**

**Benefit: Increased level of public education and protection of structures in urban/rural interface areas**

**Timeline: 2016-2021**

- Improve communication with Georgia Environmental Protection Division in regard to illegal burning issues (TC, T) M

**Responsibility: Georgia Forestry**

**Est. Cost: Existing staff**

**Funding Sources: Existing budget and state funds**

**Benefit: Increased fire protection for structures in urban/rural interface areas**

**Timeline: 2016-2021**

**Objective #2.** Reduce threat of wildfire occurring during periods of drought.

**Task A.** Ensure adequate water supplies and raise public awareness of fire danger during drought.

**Action Steps**

- Seek funding to acquire more fire tankers (2000 to 3000 gallons) for local fire departments. (TC, T) H

**Responsibility: Tifton/Tift County Fire Department**

**Est. Cost: \$500,000**

**Funding Sources: Local Budget, SPOLST Funding, Safer Grants and other state and federal grant programs**

**Benefit: Increased fire protection for structures in urban/rural interface areas**

**Timeline: 2016-2021**

- 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 (TC, T, TT, O) **H**

**Responsibility: Georgia Forestry Commission, Tifton/Tift County Fire Department**

**Est. Cost: \$25,000.00**

**Funding Sources: State of Georgia Forestry Commission, State and Federal Grant Programs**

**Benefit: Increased level of public education and awareness regarding risk of wildfire to structures in urban/rural interface areas**

**Timeline: 2016-2021**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process

**f. Completed/Deleted Action Steps From Previous Plan.**

Completed Action Steps:  
None

Deleted Action Steps:  
None

**g. Unchanged Action Steps**

- Acquire all terrain vehicles – ongoing
- Improve wildland fire training at the local fire department level – ongoing
- Improve public awareness of wildfire fighting techniques and the importance of fire buffers around the home by publishing articles in the local newspaper, holding town hall meetings, radio announcements and providing bulletins to local churches and schools – ongoing
- Support Georgia Forestry Public Outreach efforts – ongoing
- Enforce building, fire and safety codes – ongoing
- Enforce burn permits at the local level. – ongoing
- Educate public and provide information on nighttime burning and smoke management – ongoing
- Improve communication with Georgia Environmental Protection Division in regard to illegal burning issues – ongoing
- Seek funding to acquire more fire tankers (2000 to 3000 gallons) for local fire departments. – ongoing
- 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 – ongoing

## **VIII. Drought**

### **a. Community Mitigation Goals**

To reduce the effects of long-term drought on the economy, public health and safety, and environmental resources.

### **b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural - Negating the effects of drought on the economy, public health and safety, and environmental resources will require mostly non-structural mitigation options. These options include equipping Tift County farmers with information on methods to offset severe drought conditions and informing the citizenry on the need to better manage existing water resources.
2. Existing policies, regulations, ordinances and land use - As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized. Currently, the Georgia Department of Natural Resources issues water use restrictions when conservation procedures are deemed necessary. Tift County, Tifton, Ty Ty, and Omega observe the DNR mandatory restrictions.
3. Community values, historic & special considerations – STAPLEE criteria for each action step was determined to help rank each action step.
4. New buildings and Infrastructure – As noted in Chapter 2, the risk of drought is mainly to the citizens of Tift County. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of the general public from the effects of drought, rather than new buildings and infrastructure.
5. Existing Buildings and Infrastructure - As noted above, the risk of drought is mainly to the citizens of Tift County. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of the general public from the effects of drought, rather than existing buildings and infrastructure.

**c. Mitigation Strategy and Recommendation**

**Mitigation Goal #1:** Educate the citizenry about the effects of drought on public health and safety, economic activity, and environmental resources.

**Objective # 1:** Manage available water resources.

**Task A.** Sustain the community's water supplies.

**Action Steps**

- Heighten public awareness on actions citizens can take to conserve water. (TC, T, TT, O) **M**  
**Responsibility: Local Extension Services, County/City governments**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds, state funds**  
**Benefit: Preserve water supplies during drought conditions**  
**Timeline: 2016-2021**
- Utilize the media for the distribution and publication of drought information. (TC, T, TT, O) **M**  
**Responsibility: Local Extension Services, County/City governments**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds, state funds**  
**Benefit: Preserve water supplies during drought conditions**  
**Timeline: 2016-2021**
- Update community websites to provide drought related information that is readily accessible. (TC, T, TT, O) **M**  
**Responsibility: Local Extension Services, County/City governments**  
**Est. Cost: Existing staff**  
**Funding Sources: Local funds, state funds**  
**Benefit: Increased to drought related information**  
**Timeline: 2016-2021**
- Target conservation alerts to individual households through an Early Warning Communication/Notification bulletin board. **H**  
**Responsibility: EMA**  
**Est. Cost: \$7000.00 annual expense**  
**Funding Sources: Local budget, OHS-GEMA and FEMA grant funding**

**Benefit: Immediate public notification of conservation alerts to households in Tift County**

**Timeline: 2016-2021**

- Ensure the reasonable allocation of supply during drought events through a coordinated and cooperative inter-agency response. **M**

**Responsibility: EMA, OHS-GEMA, FEMA**

**Est. Cost: \$150,000.00**

**Funding Sources: Local budget, OHS-GEMA, FEMA**

**Benefit: Ensure source of safe water for population**

**Timeline: 2016-2021**

- Enforce policies for conservation of water during times of water shortage and drought. (TC, T, TT, O) **M**

**Responsibility: Tift County, Tifton, TyTy, and Omega Governments**

**Est. Cost: Existing Staff**

**Funding Sources: Local budgets**

**Benefit: Ensure source of safe water for population**

**Timeline: 2016-2021**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency. While drought conditions are felt countywide, the emphasis on limiting the impact of drought on the economy will be focused in the unincorporated portions of Tift County, where most agricultural production takes place.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan.**

Completed Action Steps:

- None

Deleted Action Steps:

- None

**g. Unchanged Action Steps**

- Heighten public awareness on actions citizens can take to conserve water – ongoing
- Utilize the media for the distribution and publication of drought information – ongoing
- Update community websites to provide drought related information that is readily accessible – ongoing
- Target conservation alerts to individual households through an Early Warning Communication/Notification bulletin board. – ongoing
- Ensure the reasonable allocation of supply during drought events through a coordinated and cooperative inter-agency response – ongoing
- Enforce policies for conservation of water during times of water shortage and drought. – ongoing

## Chapter 5 - Local Technological Hazard Mitigation Goals and Objectives

### I. Overall Community Mitigation Goals, Policies, and Values

The purpose of the Tift County Disaster Mitigation Plan is to not only assess the vulnerability of the area to natural hazards, but to identify those action steps that may need to be undertaken to reduce the potential loss of life and property from identified technological hazards. As in the case of natural hazards, the development of this plan requires an overall set of community goals that clearly state the community's commitment to reducing or avoiding the long-term vulnerabilities to the identified hazards. With these overall goals in place, more specific goals, objectives, and action steps to protect the community from the identified hazards can then be developed. Using the findings from the Risk Assessment as a guide, the planning team has developed the following overall community mitigation goals:

**Goal # 1: Protect the public health and safety;**

**Goal #2: Eliminate, or reduce, exposure of critical community facilities to the hazards identified in the community risk assessment;**

**Goal #3: Where exposure to hazards cannot be limited, implement, to the extent resources are available, the action steps needed to reduce the potential loss of life and property;**

**Goal #4: Maintain and/or enhance the community's capacity to issue warnings, and respond promptly and effectively in the event of a hazard event.**

With these overall community mitigation goals in place, the following Goals, Objectives, and Action Steps have been developed to specifically address the technological hazard identified in Chapter 3.

The STAPLEE Criteria (Social, Technical, Administrative, Political, Legal, Economic, Environmental) for each action step were developed to help rank each of the mitigation strategies. The following methodology was utilized in ranking the priority of each action step:

**High Priority – H      Medium Priority – M      Low Priority – L**

**High Priority – H** – is considered to be an **Action Step** that needs to be taken first due to the most harmful threat posed to Tift County and its municipalities and/or due to the greatest repetitive damages caused by natural hazards in Tift County and its municipalities.

**Medium Priority – M** - is considered to be an **Action Step** that needs to be accomplished after the High Priority Action Steps are met or when additional funding is available.

**Low Priority – L** - is considered to be an **Action Step** that is important but is the lowest priority in meeting the needs of Tift County and its municipalities.

In projecting a timetable for implementation of the action steps, Tift County and the municipalities will strive to meet the following schedule: High priority action steps will be implemented in the first eighteen months following adoption of this plan; Medium priority action steps will be implemented in eighteen to thirty-six months; and Low priority action steps will be implemented in thirty-six to sixty months. Action steps will be implemented utilizing a combination of resources from agencies such as OHS-GEMA, FEMA, NOAA, and others. The timetable for implementation will be highly dependent on the type of funding available.

Following each action step in the mitigation strategy, the plan identifies the responsible department, estimated cost, anticipated funding source(s), anticipated benefit, and projected timeline.

## **II. Hazardous Materials Release**

### **a. Community Mitigation Goals**

Although addressing technological hazards is not required by the Disaster Mitigation Act of 2000, the Tift County Mitigation Planning Team elected to address the possibility of a hazardous materials release resulting from a transportation accident in this plan. Several major trucking routes run through Tift County: Interstate 75, and U.S. Highways 82, 41, and 319, and Georgia Highway 125. Norfolk Southern Railroad Company trains also make several daily runs through the county. The plan's goal is to promote awareness of the importance of being prepared in the event of a transportation accident that results in the release of hazardous materials.

### **b. Identification & Analysis of Range of Mitigation Options**

1. Structural and non-structural mitigation – The options offered in this plan are both structural and non-structural. The possibility of disaster occurring as a result of an accidental hazardous materials release further strengthens the need for an emergency county-wide notification system to quickly warn residents who are in danger. The non-structural options are designed to promote awareness of the importance of being prepared for such an event.
2. Existing policies, regulations, ordinances and land use – As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community

Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized. In the case of hazardous materials handling, existing federal and state policies and regulations and local land use restrictions and ordinances apply and are strictly enforced throughout Tift County.

3. Community values, historic, and special considerations - The possibility of a hazardous materials release while being transported through the Tift County community would be devastating to the quality of life that the community offers its citizens.
4. New buildings and Infrastructure – As noted in Chapter 3, the risk of a hazardous materials release is mainly to the citizens of Tift County. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of the general public from the effects of a hazardous materials release, rather than new buildings and infrastructure.
5. Existing Buildings and Infrastructure - As noted above, the risk of a hazardous release is mainly to the citizens of Tift County. Therefore, the mitigation strategy and recommendations that follow include action steps designed to protect the health and safety of the general public from the effects of a hazardous materials release, rather than existing buildings and infrastructure.

**c. Mitigation Strategy and Recommendations**

**Mitigation Goal #1** – Protect the health and safety of residents of Tift County.

**Objective #1.** Minimize the effect of hazardous material spills.

**Task A.** Facilitate training in response policies and procedures for hazardous material spills.

**Action Steps**

- Continuously train and update HazMat team and equipment (TC, T) M  
**Responsibility: Tifton/Tift County Fire Dept.**  
**Est. Cost: \$50,000**  
**Funding Sources: Local budget**  
**Benefit: Maintain training and equipment for 30 team members**  
**Timeline: 2016-2021**
- Seek HazMat training for First Responders, fire, police, sheriff, EMS, and 911 (TC, T) M  
**Responsibility: Tifton/Tift County Fire Dept.**  
**Est. Cost: \$50,000 per department**  
**Funding Sources: FEMA, OHS-GEMA, DHS and local budget**  
**Benefit: Expand availability of trained responders to approximately 175**  
**Timeline: 2016-2021**
- Increase public awareness of the Early Warning Communication/Notification System 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. H  
**Responsibility: EMA**  
**Est. Cost: Existing Staff**  
**Funding Sources: Local Operating Budget and OHS-GEMA/FEMA**  
**Benefit: Encourage self-care by having reliable weather information at all times and knowing the location of community shelters**  
**Timeline: 2016-2021**

- Train local government officials on proper response procedures for hazardous material spill events. (TC, T, TT, O) **H**  
**Responsibility: Local Emergency Operations Planning Committee, Tifton/Tift County EMA, Tifton/Tift County Fire Department**  
**Est. Cost: \$20,000**  
**Funding Sources: Local budget**  
**Benefit: Ensure proper and life-saving response during hazardous material spill events**  
**Timeline: 2016-2021**
- Provide workplace training on decontamination steps and reviewing MSDS sheets (TC, T, TT, O) **H**  
**Responsibility: Local Emergency Operations Planning Committee, Tifton/Tift County EMA, Tifton/Tift County Fire Department**  
**Est. Cost: \$20,000**  
**Funding Sources: Local budget**  
**Benefit: Ensure proper and life-saving response during hazardous material spill events**  
**Timeline: 2016-2021**
- Review annually all hazardous material transportation routes (relocate routes if necessary) (TC, T, TT, O) **H**  
**Responsibility: State DOT, Local Emergency Operations Planning Committee, Tifton/Tift County EMA, Tifton/Tift County Fire Department**  
**Est. Cost: \$20,000**  
**Funding Sources: Local budget**  
**Benefit: Ensure proper and life-saving response during hazardous material spill events**  
**Timeline: 2016-2021**

**d. Special Multi-Jurisdictional Strategy**

When applicable, the specific jurisdiction responsible for the action steps that follow each goal, objective and task is identified as follows: (T) for Tifton, (TC) for Tift County, (TT) for Ty Ty, and (O) for Omega. Otherwise, the action steps are intended to be undertaken countywide, either through the individual efforts of all four jurisdictions, or jointly through the Tifton/Tift County Emergency Management Agency.

**e. Public Information and Awareness**

As noted in Chapter 6, Tifton, Ty Ty, Omega, and Tift County will ensure continued public participation in the plan maintenance and update process.

**f. Completed/Deleted Action Steps From Previous Plan.**

Completed Action Steps:

- Construct a hardened Emergency Operations Center, including necessary 911 communications and operational equipment

Deleted Action Steps:

- Upgrade the existing early warning systems - Replace aging outdoor warning sirens and add more for full county coverage – No longer a preferred option. Cheaper, more efficient solutions available

**g. Unchanged Action Steps**

- Continuously train and update HazMat team and equipment – ongoing
- Seek HazMat training for First Responders, fire, police, sheriff, EMS, and 911 – ongoing
- Increase public awareness of the Early Warning Communication/Notification System 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. – ongoing
- Train local government officials on proper response procedures for hazardous material spill events – ongoing
- Provide workplace training on decontamination steps and reviewing MSDS sheets – ongoing
- Review annually all hazardous material transportation routes (relocate routes if necessary) – ongoing

## **Chapter 6 – Executing the Plan**

### **I. Implementation Action Plan**

#### **a. Administrative Actions**

Following the approval of the Tift County Hazard Mitigation Plan Update by the -Georgia Emergency Management Agency and the Federal Emergency Management Agency, the Director of the Tifton/Tift County Emergency Management Agency (EMA) or his designee will meet with the chief elected and appointed officials of each unit of government to review the plan and the process of implementation as described below.

#### **b. Authority and Responsibility**

The Tifton/Tift County Emergency Management Agency (EMA) has been designated by the local governments in Tift County as the local entity with the overall responsibility for emergency planning and response in Tift County. This responsibility includes the coordination of federal, state and local resources in the event of a disaster in Tift County. Accordingly, the EMA was responsible for the convening of the Tift County Hazard Mitigation Planning Team to guide the development of the Tift County Hazard Mitigation Plan. However, the chief elected officials (Mayors of Tifton, Ty Ty, and Omega, and Chairman of the Tift County Board of Commissioners), through their chief appointed officials (Tift County Manager, Tifton City Manager) are responsible for the day-to-day administrative operations of their respective local governments, and for the implementation of the mitigation activities proposed in this plan. The EMA Director will assume responsibility for coordinating and supporting these activities and overall plan implementation.

#### **c. Prioritization**

##### **i. Methodology for prioritization**

In prioritizing the need for action steps identified in this plan, the factor of highest threat was given the primary consideration. In prioritizing the implementation feasibility of the action steps and projects, the Tift County local governments will take in consideration the additional factors of cost and time. Those activities requiring little cost 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 as necessary, based on the cost benefit analysis described below.

As noted in Chapter 4, Tift County and the municipalities will strive to meet the following implementation schedule: High

priority action steps will be implemented in the first eighteen months following adoption of this plan; Medium priority action steps will be implemented in eighteen to thirty-six months; and Low priority action steps will be implemented in thirty-six to sixty months. The final implementation schedule will ultimately be determined by the availability of resources such as federal and state grant funds and local funds.

**ii. Use of cost benefit analysis**

Detailed cost/benefit analysis should be undertaken prior to beginning any sizable action step to see if the funding is being appropriated in a reasonable manner. For the action steps listed in this plan the STAPLEE Criteria was used to rank each action step. The STAPLEE Criteria is a way to objectively score each project based on impact in the following areas: Social, Technical, Administrative, Political, Legal, Economic and Environmental.

**iii. Use of other calculations**

None.

**iv. Use of other review structure**

In addition to the STAPLEE Criteria, 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 implementation, such as SPLOST funds or FEMA Pre-Disaster Mitigation Program funds.

**d. Incorporation of Local PDM Plan into other plans/planning measures**

As required by Georgia law, Tift County, and the cities of Tifton, Ty Ty, and Omega have each adopted comprehensive plans in accordance with the Minimum Planning Standards promulgated by the Georgia Department of Community Affairs. In addition, other measures to guide development, including flood plain management ordinances, capital improvement planning, zoning ordinances and building codes are utilized. After the Tift County Hazard Mitigation Plan is approved, a review will be conducted to identify any changes that need to be incorporated into these existing plans.

Within six months of adopting the Hazard Plan, Tift County will set up meetings with the various municipalities to go over the existing plans to see if these existing plans need to be modified to include items from the Hazard Plan. Any modifications will be evaluated to determine if the modification should take place immediately or during any plan updates. This evaluation will be presented to each group responsible for the specific plan the modification applies to. The actual modification will be left to the group responsible for the specific plan in question.

The Comprehensive Plan, Community Wildfire Protection Plan, Abraham Baldwin College Hazard Mitigation Plan and LEOP were consulted during this plan update. Various mitigation actions from the previous plan were meant to compliment the LEOP such as: proposed hardened 911 center, early warning systems, and the CERT program.

The previous Hazard Plan was not utilized by other planning groups working on other planning mechanisms. The goal will be to utilize this updated Hazard Plan as other planning mechanisms are updated.

## **II. Evaluation and Monitoring**

During the previous plan cycle, the plan was not updated or reviewed as anticipated in the original plan. Steps will be taken within the local governments to ensure that the EMA Director makes a priority to review and update the plan as required.

### **a. Method**

The Tifton/Tift County EMA Director is responsible for monitoring and evaluating the progress of implementing the plan. The Director will convene the Tift County Hazard Mitigation Planning Team yearly to evaluate the status of the plan in terms of action steps taken, and revisions to the plan required as a result of new information, hazard incidents, changes in state and federal regulations, policy changes, new technology, etc.

### **b. Responsibility**

As stated above, the Tifton/Tift County EMA Director will convene the Tift County Hazard Mitigation Planning Team on an annual basis for the purpose of evaluating and monitoring the plan.

### **c. Timeframe**

The Tift County Hazard Mitigation Planning Team will meet at least annually to evaluate and recommend revisions to the plan.

### **d. Reporting**

The EMA Director will issue a written report to the chief elected officials and chief appointed officials of each local government of the Planning Team's findings and recommendations.

### **III. Multi-Jurisdictional Strategy and Considerations**

Through representation on the Tift County Hazard Mitigation Planning Team, Tift County and the cities of Tifton, Ty Ty, and Omega were each provided an opportunity to participate in the development of the Tift County Hazard Mitigation Plan. As noted, the Tifton/Tift County EMA Director is responsible for monitoring and coordinating the implementation of the plan. The chief appointed officials (county administrator, city manager) and the chief elected officials (mayor, county commission chairman) of the four local jurisdictions are responsible for the administrative and day-to-day operations of their respective local governments, the mitigation activities proposed in the plan, and their respective jurisdiction's responsibilities for plan implementation. It is these individuals who will present and recommend to their respective governing bodies any policy changes, ordinance or budget amendments, or revisions in administrative procedures necessary to accomplish the goals of the mitigation plan. These individuals are responsible for ensuring that action steps specific to their respective jurisdictions are implemented, and reporting progress to the EMA Director.

### **IV. Plan Update and Maintenance**

#### **a. Public Involvement**

Notice of future meetings of the Tift County Hazard Mitigation Planning Team will be advertised in the local newspaper, and the public will be encouraged to attend. When the five year update to the plan is initiated, a public hearing will be held at the beginning of the update process to inform the public of the purpose of the update and to solicit public participation. A second hearing will be held near the end of the update process for public comment.

#### **b. Timeframe**

In addition to the annual revisions to the plan, the Tift County Hazard Mitigation Planning Team will undertake a complete review and update of the plan on a five year cycle. In order to update the Hazard Plan in five years, a grant will be applied for from FEMA. This grant will be used to hire a consultant to follow similar planning procedures that this plan followed. Any updated requirements or guidelines will be used in the plan update.

**c. Reporting**

The Director will issue a written report to the chief elected officials and chief appointed officials of each local government of the Planning Team's findings and recommendations.

## **Chapter 7 – Conclusion**

### **I. Conclusion Summary**

The definition of mitigate is “...to relieve; to alleviate; to temper.” Natural hazards cannot be prevented; technological hazards, despite rigorous laws and regulations, are still going to occur. However, with proper planning, the destruction that often accompanies a hazard event can be mitigated. 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 Tift County Hazard Mitigation Plan.

Tift County and its municipalities have suffered considerable repetitive damages due primarily to localized flooding. Hurricanes, tornadoes and severe thunderstorms have affected Tift County. Very strong winds have caused damage in Tift County in the past and continue to threaten Tift County. In addition, heavy rains from thunderstorms can create damaging flooding. Because of a favorable outdoor environment, several individuals each year are struck by lightning; large numbers are affected by extreme heat and cold. Tift County’s location on many major trucking routes makes it vulnerable to accidents resulting in hazardous materials release.

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.

Several gaps exist in our understanding of the threats facing Tift County. These include a lack of understanding of the effect of drought on the subsurface water supply and the impact of historically high river flood levels. Efforts to refine our understanding are included in this plan.

Because of this planning process, Tift County officials have gained a better understanding of the hazards affecting our county.

As a result of the planning process described in Chapter 1 and the natural/technological hazard, risk, and vulnerability assessments in Chapters 2 and 3, Tift County and its municipalities now have a much more realistic perspective on the hazards that the county is exposed to everyday. And with the mitigation strategy outlined in Chapters 4 and 5 and the implementation plan included in Chapter 6, the local leaders of Tift County, Tifton, Ty Ty, and Omega now have an “action plan” to follow when allocating resources to reduce their communities’ vulnerability to such hazards.

## II. References

### a. Publications

- FEMA State and Local Mitigation Planning How-to Guides
- The 2028 Greater Tift County Comprehensive Plan
- The Tift County Local Emergency Operations Plan
- Community Wildfire Protection Plan
- Abraham Baldwin College Hazard Mitigation Plan

### b. Websites

- National Oceanic and Atmospheric Administration (NOAA) ([www.noaa.gov](http://www.noaa.gov))
- National Climatic Data Center ([www.ncdc.noaa.gov](http://www.ncdc.noaa.gov))
- National Weather Service Climate Prediction Center ([www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov))
- FEMA ([www.fema.gov](http://www.fema.gov))
- Georgia Office of Homeland Security – OHS-GEMA ([www.ohs-gema.state.ga.us](http://www.ohs-gema.state.ga.us))
- Georgia Forestry Commission ([www.gfc.state.ga.us](http://www.gfc.state.ga.us))
- FireWise Communities ([www.firewise.org/usa](http://www.firewise.org/usa))