



LAMAR COUNTY HAZARD MITIGATION PLAN DRAFT 2025



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CHAPTER 1 INTRODUCTION

1.1 INTRODUCTION

Situated in southeastern Mississippi, Lamar County spans approximately 498 square miles (316,800 acres) and is characterized by its steady growth, diverse communities, and a strong commitment to resilience. Bordered by Jefferson Davis, Covington, Forrest, Pearl River, and Marion counties, Lamar's landscape combines rural character with expanding urban development, making it a unique and strategically important area within the state.

Over the past three decades, Lamar County has experienced rapid population growth—more than doubling from 30,424 residents in 1990 to 64,222 in the 2020 Census. This surge reflects both the area's increasing economic opportunities and its attractiveness as a place to live, work, and raise families. The county is anchored by three incorporated municipalities: Lumberton (2,748), Purvis (2,697 and the county seat), and Sumrall (1,425), while a significant portion of the population lives in unincorporated communities and rural areas that support forestry, agriculture, and a growing commercial sector.

This sustained growth underscores the urgent need for proactive hazard mitigation planning. As Lamar County continues to expand, so too does its exposure to natural hazards such as severe storms, flooding, and tornadoes. Strategic investment in hazard mitigation is essential to protect the county's residents, infrastructure, and economic vitality—ensuring that future development is not only sustainable but also resilient in the face of increasing environmental risks.

1.2 PLAN ORGANIZATION

In collaboration with the Lamar County Planning Department, the Emergency Management Agency initiated the development of the Hazard Mitigation Plan. After reviewing the guidelines and requirements for establishing the plan, it was determined that forming a Hazard Mitigation Council would provide the necessary structure and representation to guide the process. All incorporated areas within Lamar County were invited to participate and were included as active members of the council.

To ensure a diverse and comprehensive planning body, formal outreach was conducted through emails and phone calls to the City of Purvis, City of Lumberton, and the Town of Sumrall, securing their involvement alongside unincorporated Lamar County in the creation of a Multi-Jurisdictional Hazard Mitigation Plan. Invitations were also extended to key stakeholders, including representatives from local businesses and industries, school officials, and neighboring communities. A complete list of participants and invitees is provided in Appendix 7.

Public engagement was a priority throughout the planning process. A notice was placed in the local newspaper, which included an explanation of the purpose and importance of the Hazard Mitigation Plan, encouraged community involvement, and provided details about the public meetings, including dates, times, and locations.

The Town of Sumrall, City of Purvis, City of Lumberton, and Lamar County played a critical role in the development of the Hazard Mitigation Plan. Each jurisdiction contributed valuable information, including the locations of critical infrastructure, updated mapping data, local disaster history, and an assessment of current and potential hazards. In addition, they collaborated in identifying strategies to reduce risk and strengthen the community's resilience to future disasters.

1.3 PURPOSE

The primary purpose of the Lamar County Hazard Mitigation Plan is to enhance the county's overall preparedness and resilience against both natural and human-caused disasters. Due to its geographic location and varied topography, Lamar County and its incorporated municipalities are vulnerable to a wide range of hazards.

This plan will help to reduce the risk of loss of life, injuries, economic disruption, and damage to natural, cultural, and built environments caused by hazardous events. It **assesses** the community's vulnerability to identified hazards and develop realistic, community-driven goals that guide effective and achievable mitigation strategies. The plan increases public awareness and understanding of local hazard risks, empowering residents and stakeholders to make informed decisions.

It also encourages public officials and county and city departments to adopt and enforce ordinances and policies that support long-term risk reduction and sustainable development. Such policies include but are not limited to comprehensive zoning ordinances, subdivision regulations, land use plans, and building and fire codes. By implementing this plan, Lamar County aims to build safer, stronger, and more disaster-resilient communities.

1.4 HAZARD MITIGATION and HAZARDS

Lamar County is committed to reducing its vulnerability to both natural and human-made hazards through coordinated hazard mitigation planning and emergency management initiatives. The Hazard Mitigation Plan identifies and addresses key risks, including flooding, severe weather events such as hurricanes and tornadoes, and hazardous materials incidents.

Flooding remains one of the county's most significant concerns. To mitigate this risk, Lamar County actively participates in the National Flood Insurance Program (NFIP) and enforces floodplain management regulations designed to protect residents, infrastructure, and property.

Given the presence of transportation routes and industrial facilities, the county also prioritizes preparedness for hazardous materials incidents. Emergency management and planning departments work collaboratively to integrate mitigation, preparedness, response, and recovery strategies—ensuring that public safety, infrastructure development, and land use decisions align with long-term risk reduction goals.

Through these proactive efforts, Lamar County continues to strengthen its resilience and protect the health, safety, and well-being of its residents against future disasters.

1.5 SCOPE

The Lamar County Hazard Mitigation Plan focuses on identifying, assessing, and mitigating risks from both natural and human-made hazards that threaten the county's residents, infrastructure, economy, and environment. This comprehensive plan applies to the entire geographic area of Lamar County, encompassing all incorporated municipalities, including Purvis, Sumrall, Lumberton (Lamar portion) and the unincorporated communities.

The plan addresses a wide spectrum of hazards, including floods, tornadoes, severe storms, hurricanes, drought, wildfires, extreme temperatures, and hazardous materials incidents. It outlines long-term

mitigation strategies that encompass land use planning, building code enforcement, infrastructure improvements, public education, and emergency coordination.

Additionally, the plan serves as a critical tool for guiding future development decisions, securing mitigation funding, and aligning local initiatives with state and federal hazard mitigation goals. Designed for ongoing relevance, the plan is scheduled for updates every five years, or more frequently as needed to incorporate new data, evolving hazards, and shifting community priorities.

1.6 PLAN GOALS & OBJECTIVES

The Lamar County Hazard Mitigation Plan aims to reduce the long-term impacts of both natural and human-made hazards by protecting lives and property. The plan identifies significant risks and implements strategies to minimize vulnerability, focusing on enhancing community resilience. This includes ensuring continuity of essential services and critical infrastructure during and after disasters.

The plan encourages sustainable development through land use policies and building practices that reduce exposure to hazards. Public awareness and education on hazard mitigation and personal preparedness are also key priorities. Collaboration among municipalities, emergency management agencies, and state and federal partners is emphasized to ensure coordinated efforts before, during, and after hazards. To maintain effectiveness and secure funding, the plan adheres to FEMA and MEMA guidelines, with objectives including regular risk assessments, targeted mitigation projects, and public outreach.

1.7 AUTHORITIES

The Lamar County Hazard Mitigation Plan was developed and managed by the Lamar County Emergency Management Agency (EMA) in partnership with the Lamar County Planning Department. These agencies worked closely with local municipalities—Purvis, Sumrall, and Lumberton—as well as regional emergency services, public works, and law enforcement departments. The planning process adhered to the guidelines set by the Federal Emergency Management Agency (FEMA) and the Mississippi Emergency Management Agency (MEMA), ensuring the plan meets both state and federal requirements for hazard mitigation and eligibility for grant funding. Public input was an integral part of the process, gathered through community meetings and stakeholder engagement sessions, providing residents, business owners, and local organizations an opportunity to influence mitigation priorities and actions.

CHAPTER 2 PLANNING PROCESS

2.1 PLANNING PROCESS

Organize Planning Team	Lamar County EMA led the effort. Team included representatives from county/municipal governments, emergency services, utilities, schools, and regional stakeholders.
Public and Stakeholder Involvement	Public meetings were held at key points. Notices were posted via local media, websites, and social media. Resident surveys gathered input on hazard concerns and mitigation preferences.
Data Collection and Risk Assessment	Collected data from hazard records, GIS maps, FEMA flood maps, census data, past plans, and many other sources identified in each chapter. Numerous hazards have been analyzed - floods, tornadoes, severe storms, winter weather, drought, wildfires, and dam failure, to name a few.
Capability Assessment	Reviewed existing tools and programs (e.g., building codes, zoning, floodplain management, emergency response). Identified gaps in resources and policies.
Mitigation Strategy Development	Created goals and mitigation actions for each jurisdiction. Actions are prioritized based on feasibility, cost-effectiveness, community support, and risk reduction impact.
Plan Review and Adoption	Draft plan shared for public review and comment. After revisions, submitted to MEMA and FEMA. Each jurisdiction formally adopted the final FEMA-approved plan.

2.2 PARTICIPATING JURISDICTIONS

Jurisdiction	Participation Type
Lamar County	County Government (Lead Agency)
City of Purvis	Municipality
Town of Sumrall	Municipality
City of Lumberton	Municipality
Lamar County School District	Public Schools
Lamar County Volunteer Fire Departments	Emergency Services

Lamar County Utility Authorities	Infrastructure & Utilities

2.3 LAMAR COUNTY LOCAL HAZARD MITIGATION PLANNING TEAM

Role / Organization	Representatives
Lamar County EMA (Lead Agency)	EMA Director & staff coordinating all phases of planning
Lamar County Board of Supervisors	County leadership members – involvement through planning approval and oversight
County Planning Department	Floodplain & stormwater experts providing technical support
County Emergency Services	E-911, Sheriff's Office, Volunteer Fire Departments in various districts
Municipal Representatives	Leadership and staff from Purvis, Sumrall, Lumberton
School Districts	Officials from Lamar County Schools
Utility & Public Works	Directors from water, power, and sanitation authorities
Public Health & Human Services	County Public Health Involvement
Regional Planning District	Southern Mississippi Planning & Development District staff providing guidance
State & Federal Liaisons	MEMA coordination staff, FEMA reviewers and support

2.4 LOCAL HAZARD MITIGATION PLANNING MEETINGS

- **October 12, 2024** – Meeting with Lamar County Administrator, Fire Coordinator, Planning Department
- **November 18, 2024** – All-day county tour with Brian Neuman, Lamar County Senior Planner
- **December 17, 2024** – Meeting with Mayor Lofton, Town of Sumrall
- **January 8, 2025** – Meeting with Pearl River Electric Power Cooperative
- **January 28, 2025**
 - Meeting with Mayor Quincy Rogers, City of Lumberton

- Meeting with Supervisor Mitch Brent (District 4) and Road Manager Tommy Jones
- **January 30, 2025**
 - Meeting with Supervisor Steve Lampton (District 1)
 - Meeting with Supervisor Warren Byrd (District 2)
- **February 13, 2025** - Meeting with Supervisor Terry Bass (District 3)
- **February 27, 2025**
 - Follow-up meeting with Brian Neuman, Lamar County Planning Department
 - Meeting with Tamica Hill, Director of Public Safety, Lamar County Public Schools
- **March 13, 2025** - Meeting with Todd Jackson Area Development Partnership
- **March 19, 2025** - Meeting with Mississippi Power
- **March 25, 2025** - Meeting with Walker Associates, Lamar County Engineers
- **April 22, 2025** – Meeting with Merit Health System
- **April 28, 2025** – Meeting with Idaho Forest Group
- **May 6, 2025** – Meeting with Mayor Herrin of Purvis

2.5 PUBLIC and STAKEHOLDER INVOLVEMENT

2.5.1 Public Meetings

Meetings held March 25 through April 2, 2025, at various community centers of Lamar County, located in every corner of the county, including Lumberton, Optimist Park, Midway, Sumrall, and Greenville area to gather public input.

2.5.2 Public Survey

Southern Mississippi Planning and Development District provided surveys to the public at the community meetings.

2.5.3 Stakeholder Participation

Individual meetings were conducted with each stakeholder to collect information.

2.6 EQUITY CONSIDERATIONS FOR UNDERSERVED COMMUNITIES & SOCIALLY VULNERABLE POPULATIONS

Lamar County’s hazard mitigation planning focuses on equity by including underserved and vulnerable populations, such as low-income residents, the elderly, people with disabilities, and communities of color. The county addresses these vulnerabilities through targeted outreach and strategies that prioritize access to safe housing, emergency services, and infrastructure in historically underserved areas. Public input from community leaders, school officials, and rural representatives ensures local voices are reflected in the plan. By incorporating social vulnerability data, the county aims to reduce disparities and enhance resilience for all residents, especially those most at risk.

2.7 EXISTING PLANS, STUDIES, REPORTS, & TECHNICAL INFORMATION REVIEWED FOR THE DEVELOPMENT OF THE PLAN

Lamar County Comprehensive Plan	Provided insight into land use, development trends, and growth projections.
Local Emergency Operations Plan (EOP)	Outlined emergency response procedures and identified critical facilities and infrastructure.
Flood Insurance Study (FIS) and Flood Insurance Rate Maps (FIRMs)	Used to assess flood risk areas and determine mitigation needs.
Mississippi State Hazard Mitigation Plan	Ensured alignment with state-level goals, objectives, and hazard assessments.
US Census Data	Provided demographic and housing data to evaluate population vulnerability.
Historical Hazard Event Records (NCEI, FEMA, and local records)	Offered information on past hazard occurrences and their impacts.
GIS Data and Mapping Resources	Used for spatial analysis of hazard-prone areas and infrastructure vulnerabilities.
Infrastructure and Capital Improvement Plans	Identified ongoing or planned infrastructure projects that intersect with mitigation goals.
Soil Surveys and Topographic Maps	Helped evaluate physical terrain and potential hazard impacts like erosion and flooding.

CHAPTER 3 LAMAR COUNTY PROFILE

3.1 COMMUNITY DESCRIPTION

Located in southeastern Mississippi, Lamar County spans approximately 500 square miles and is bordered by Jefferson Davis, Covington, and Forrest Counties to the north; Forrest County to the east; Pearl River County to the south; and Marion County to the west. The county seat is Purvis, with other incorporated municipalities including Lumberton and Sumrall. The northeastern section of the county also extends into the City of Hattiesburg.

One of the fastest-growing counties in Mississippi, Lamar County has seen steady population growth in recent decades. The latest US Census data reports a population of over 64,000 residents, and current estimates exceed 66,000 – a steady growth of over 4%, driven by its proximity to Hattiesburg and the availability of quality education, housing, and employment opportunities.

The county offers a blend of rural farmland, expansive forested areas, and expanding suburban neighborhoods. Major transportation routes, including Interstate 59, US Highway 98, and Mississippi Highways 11 and 13, connect the county to the broader region, making it a hub for commuting and commerce.

Part of the Pine Belt region, Lamar County is known for its rolling hills, pine forests, and abundant rivers and creeks. While the natural beauty is a defining feature, it also makes the area susceptible to natural hazards, such as flooding, severe thunderstorms, and tornadoes. Due to its proximity to the Gulf of Mexico, the county is also vulnerable to the impacts of hurricanes and tropical storms.

Lamar County is served by the Lamar County School District and is home to Pearl River Community College, with the University of Southern Mississippi nearby.

Given its growing population, diverse landscape, and mix of urban and rural development, proactive hazard mitigation planning is essential to safeguard the county's residents, infrastructure, and critical services.

3.2 LOCATION

Positioned in Mississippi's southeastern corner, Lamar County lies within the Pine Belt, a region defined by its lush pine forests and rolling terrain. Encompassing roughly 500 square miles (316,800 acres), the county blends natural beauty with growing infrastructure. The county includes a mix of incorporated jurisdictions like Purvis (the county seat), Sumrall, Lumberton, and a portion of Hattiesburg and numerous unincorporated communities. Its position along Interstate 59, US Highway 98, and other key routes enhances regional access and supports ongoing population and economic growth.

However, Lamar County's proximity to the Gulf of Mexico brings heightened exposure to weather-related threats, particularly hurricanes, tropical storms, and severe weather events. The area's blend of suburban expansion, rural landscapes, and critical transportation infrastructure makes it especially important to develop and maintain forward-thinking hazard mitigation strategies tailored to its unique geographic and socio-economic conditions.

3.3 TOPOGRAPHY and VEGETATION

Lamar County's landscape is defined by gently rolling hills, interspersed with flat-bottomed valleys and low-lying floodplains. Elevation ranges from approximately 100 to 400 feet above sea level, with the terrain gradually sloping from the northwest to the southeast. A network of creeks and small rivers flows across

the county, forming a complex watershed system. While these water features support the local ecosystem, they also increase the risk of flooding, particularly during periods of heavy rainfall.

Located in Mississippi's Pine Belt, the county is largely covered in pine forests, primarily loblolly and longleaf pine, mixed with hardwood species such as oak and hickory. The understory includes a variety of shrubs, grasses, and native ground cover, while agricultural fields, pastures, and managed timberlands are dispersed throughout the area.

This diverse vegetation adds to the county's natural beauty but also creates conditions conducive to wildfires, especially during extended dry spells. A thorough understanding of Lamar County's topography and vegetation is critical for identifying areas at risk and guiding the development of effective hazard mitigation strategies.

3.4 GEOLOGY

Lamar County is located within the East Gulf Coastal Plain geologic province, an area characterized by gently sloping layers of unconsolidated to semi-consolidated sedimentary rock. These deposits—formed from the Late Cretaceous through Quaternary periods—consist primarily of sand, silt, clay, and gravel, shaped over time by ancient marine and fluvial systems. Prominent geologic formations in the region include the Citronelle Formation, composed mainly of reddish sands and gravels, and the Hattiesburg and Pascagoula Formations, which are rich in clay. While Lamar County experiences minimal seismic activity and is not prone to landslides or other major geologic hazards, the composition of these sediments does influence erosion patterns, drainage behavior, and the stability of building foundations.

Geologic conditions also affect groundwater availability and surface water movement, making them important considerations in assessing hazard vulnerability—particularly in areas susceptible to flooding and heavy rainfall. Understanding these underlying features is essential for informed land use planning and effective mitigation efforts.

3.4.1 Soils

The soils of Lamar County are diverse, reflecting the area's geologic history and varied topography. Predominantly composed of sandy loams, silty loams, and clay loams, these soils exhibit a range of drainage capabilities depending on their location. Well-drained soils are typically found in upland areas and are well-suited for forestry, row crops, and pastureland. In contrast, poorly drained, clay-rich soils are more common in low-lying areas and floodplains, where they contribute to flooding risk and can pose challenges for construction and development.

These poorly drained soils often limit the effectiveness of septic systems and increase the likelihood of foundation settlement issues. According to the USDA Natural Resources Conservation Service (NRCS), understanding the distribution and characteristics of soil types is critical for land use planning, agricultural management, and hazard mitigation—particularly in relation to stormwater runoff, erosion control, and flood resilience.

3.5 CLIMATE

Lamar County experiences a humid subtropical climate, with long, hot, and humid summers and mild to cool winters. Summer temperatures regularly soar into the low to mid-90s°F, while winter temperatures

range from the upper 30s to mid-60s°F. Precipitation is fairly consistent throughout the year, averaging between 60 and 65 inches annually.

Thunderstorms are frequent, particularly in the spring and summer, often bringing heavy rainfall, high winds, and occasional hail. The county is also susceptible to tropical storms and hurricanes during the Atlantic hurricane season, which runs from June 1 to November 30. These storms can lead to severe flooding, damaging winds, and tornadoes. The risk of tornadoes is heightened during the spring, particularly from March through May.

The combination of high humidity, frequent heavy rainfall, and the potential for severe weather events makes climate a significant factor in Lamar County's hazard vulnerability. As climate patterns evolve, the risk of more frequent and intense weather events underscores the need for continued, proactive hazard mitigation planning.

3.6 LAND OWNERSHIP

In Lamar County, private land ownership dominates, with the majority of land dedicated to residential, agricultural, forestry, and commercial uses. Private individuals, families, and businesses hold most parcels, particularly in rural and suburban areas. Timber companies and private forestry interests control extensive tracts, especially in the northern and western regions, where managed pine forests are prevalent. Publicly owned lands include municipal properties, county facilities, public schools, parks, and rights-of-way for roads and utilities. State-owned lands are minimal but consist of public safety facilities and transportation infrastructure. The county does not have large federal land holdings.

Land ownership patterns significantly influence development trends, infrastructure placement, and hazard vulnerability. For instance, flood-prone areas along creeks and rivers are often privately owned, making coordination with landowners crucial for effective flood mitigation. Understanding the distribution of land ownership is vital for planning future growth, managing risks, and executing public mitigation initiatives like drainage improvements, open space preservation, and infrastructure strengthening.

3.7 LAND USE and NATURAL RESOURCES

Lamar County's land use is a mix of rural, suburban, and urban developments. The majority of the land is dedicated to forestry and agriculture, with extensive pine plantations and timber harvesting being vital to the local economy. Agricultural activities, such as crop farming and livestock production, are primarily concentrated on privately owned farms across the county. Residential development is concentrated around the county seat of Purvis, as well as the cities of Lumberton, Sumrall, and the portion of Hattiesburg within the county boundaries. These areas have experienced steady growth, driven by the county's proximity to metropolitan centers and key transportation routes like Interstate 59 and US Highway 98.

Commercial and industrial zones are typically located along major highways and within municipal areas, supporting local employment and services. Open spaces and recreational areas, such as public parks and wildlife management areas, are crucial for conservation and biodiversity. The county's rich natural resources, including extensive forestlands, rivers, wetlands, and diverse wildlife habitats, contribute to both the county's economy and its ecological health.

Water resources are provided by the Leaf and Bouie Rivers and their tributaries, which also create flood risks in low-lying areas. Wetlands and floodplains serve essential functions like water filtration and floodwater storage, but their management is crucial to mitigate potential hazards. The county relies on soil

conservation and sustainable forestry practices to preserve the health of these resources, reduce erosion, and combat sedimentation.

Balancing development, agriculture, forestry, and resource conservation is key to hazard mitigation planning. Protecting these resources is vital to enhancing community resilience, minimizing exposure to hazards, and ensuring the preservation of critical environmental functions.

3.8 HISTORY

Lamar County was created on February 19, 1904, from the Second Judicial District of Marion County. The county's boundaries also included the eastern half of Marion, a small portion of northern Pearl River County, and a segment of land that had originally been part of Hancock County. This land was acquired through the Treaty of Ghent at the conclusion of the War of 1812, during which Spain was involved.

Named after the distinguished L.Q. Lamar, Lamar County was officially established on April 1, 1904, following the proclamation of Governor James K. Vardaman on March 30, 1904. The governor appointed officers for the new county, and the election commissioners divided the area into five districts. The commissioners' appointment lasted until the first election in May 1904.

Purvis, the county seat, is located seventeen miles south of Hattiesburg along U.S. Highway 11. Before the town's establishment in 1883, the area was a dense pine forest with few inhabitants and abundant wildlife, including deer, turkey, and squirrels. The arrival of the New Orleans and Northeastern Railroad in 1883 sparked the development of several villages, including Purvis. The town was named after Thomas Melvin Purvis, a settler from Greene County who homesteaded 160 acres of land where the town now stands.

In 1888, the Mississippi Legislature incorporated Purvis as a municipality and held an election on the first Monday in May of that year to decide whether Lumberton or Purvis would serve as the county seat for the Second Judicial District of Marion County. Purvis won the election, and the town became the official seat. By 1892, a \$2,000 insurance policy was taken out on the frame courthouse, and in September of the same year, a contract was awarded to the Manley Manufacturing Company of Dalton, Georgia, to build a jail for \$2,945.

The first meeting of the Marion County Board of Supervisors for the Second Judicial District was held at the new courthouse in Purvis on June 30, 1890.

Following the establishment of Lamar County, the newly elected Board of Supervisors met in January 1905 to award a contract for a new courthouse in Purvis. The winning bid, \$43,516, was awarded to architect P.H. Weathers of Jackson, Mississippi. By the end of the year, a two-story brick and stone courthouse was completed. In the same year, the Mayor and Board of Aldermen declared Purvis a separate municipal school district and issued plans for a new two-story brick school building, which was completed in 1906.

3.9 DEMOGRAPHICS & POPULATION GROWTH

Lamar County, Mississippi, has experienced consistent population growth in recent years. As of 2023, the estimated population reached approximately 66,217, reflecting a 0.72% increase from the previous year. Projections indicate the county's population will grow to about 67,159 by the end of 2025. Since 2010, when the population was around 56,000, Lamar County has seen nearly 20% growth, averaging an annual increase of approximately 1.3%. While earlier years featured sharper spikes such as a notable 9.8% jump between 2009 and 2010 - more recent growth has been steadier, typically ranging from 0.5% to 1% annually.

The county's population is predominantly White, comprising about 72%, followed by Black or African American residents at 21–22%. People identifying as two or more races represent around 3%, and the Hispanic or Latino population is growing, currently standing at about 3.6%. The median age in Lamar County hovers between 37 and 38 years, with 24% of residents under 18 and nearly 16% aged 65 or older. Lamar County is home to approximately 26,300 households, with an average household size of 2.5 people. The median household income is around \$69,100, while per capita income is roughly \$33,200. Despite these figures, about 16% of the population lives below the poverty line, and 17.6% of children are affected by poverty. Homeownership in the county is relatively high at 68%, with a median property value of about \$218,700. Most residents commute an average of 26 minutes to work, with the majority driving alone and owning at least two vehicles per household.

3.10 ECONOMY

Lamar County's economy is steadily growing and diversifying, benefitting from its strategic location within the Hattiesburg metropolitan area and its robust transportation network. The economy is largely fueled by sectors such as services, education, healthcare, retail, and construction. Key employers include the Lamar County School District, Forrest General Hospital, and the University of Southern Mississippi, located nearby in Hattiesburg. Additionally, a variety of small-to-medium-sized manufacturing and logistics businesses contribute to the area's economic vitality. The county's accessibility is enhanced by major highways, including US Highway 98 and Interstate 59, facilitating regional market access and promoting continued commercial and residential development.

As of 2023, Lamar County's median household income stands at approximately \$69,100, surpassing the Mississippi state average. The county boasts a relatively low unemployment rate, generally between 3% and 4%, indicating a stable labor market. Small businesses and family-owned enterprises play a crucial role in the local economy, supported by economic development programs and local chambers of commerce. The construction and real estate sectors have also shown positive growth, with property values steadily increasing. Despite this growth, the county faces ongoing challenges, just like a lot of other areas in Mississippi, including low labor participation rate, inconsistent broadband access in some areas, and pockets of persistent poverty, particularly affecting children and low-income households.

3.11 COUNTY FACILITIES and CRITICAL INFRASTRUCTURE

Lamar County is equipped with a robust network of essential facilities and infrastructure that support its growing population and economy. Government buildings, including the courthouse, sheriff's office, and administrative complexes, are primarily located in the county seat of Purvis. Public safety is provided by the Lamar County Sheriff's Department, along with municipal police and fire departments, and volunteer fire services in rural areas. Healthcare needs are met by Forrest General Hospital in Hattiesburg, as well as local clinics and urgent care centers within the county.

The Lamar County School District oversees a comprehensive public education system, which includes multiple elementary, middle, and high schools. Higher education opportunities are available through nearby institutions such as Pearl River Community College and the University of Southern Mississippi, offering both education and workforce training programs.

Key transportation infrastructure includes US Highway 98 and Interstate 59, which are vital for regional connectivity, commerce, and emergency response. Ongoing investments in road maintenance, drainage, and traffic flow improvements ensure the county's infrastructure remains resilient. Utility services,

including water, wastewater treatment, electricity, and natural gas are provided by a mix of municipal and private companies, while broadband internet access is expanding through public and private partnerships. Critical infrastructure also includes stormwater management systems, solid waste disposal, and emergency communications networks, all of which play key roles during severe weather or disaster events. The Lamar County Emergency Management Agency coordinates preparedness, response, and mitigation efforts to safeguard life and property. These facilities and infrastructure collectively form the backbone of the county's resilience, public safety, and quality of life.

3.12 PUBLIC SERVICE FACILITIES

3.12.1 Sewer & Water

Lamar County delivers essential public services through a combination of county departments, municipal systems, and utility districts. Water and sewer services are provided by a range of local entities, including municipalities like Purvis, Lumberton, and Sumrall, as well as rural water associations such as the Oak Grove Water Association and Lamar County Water Association. These systems supply potable water and manage sanitary sewer services for both urban and rural areas, though some outlying communities still depend on private wells and septic systems.

For areas with centralized sewer systems, wastewater is treated at municipal facilities regulated by the Mississippi Department of Environmental Quality (MDEQ). Ongoing infrastructure improvements focus on replacing aging lines, expanding capacity for residential and commercial growth, and strengthening system resilience against severe weather events.

Public works departments are responsible for maintaining the county's water lines, sewer mains, lift stations, storm drains, and other critical infrastructure. These services are essential for ensuring health, sanitation, fire protection, and supporting local development. Water quality and service reliability are consistently monitored and meet both state and federal standards. Lamar County continues to seek state and federal funding for infrastructure upgrades, improved drainage systems, and expanded access to water and sewer services in underserved areas. These efforts ensure that all residents and businesses have access to clean drinking water and reliable wastewater management, which are key drivers of public health and economic growth.

3.12.2 Solid Waste Management

Lamar County's solid waste management system is a collaborative effort between county and municipal governments, along with private contractors. The Lamar County Board of Supervisors oversees waste management services in the unincorporated areas, while municipalities such as Purvis, Lumberton, and Sumrall either manage their own services or contract with private haulers. Residential waste collection occurs weekly, typically involving curbside pickup of household trash. Waste is transported to regional landfills, which are regulated by the Mississippi Department of Environmental Quality (MDEQ) to ensure compliance with environmental standards.

While recycling services are not universally available across the county, some areas offer drop-off locations or host seasonal cleanup events to encourage recycling. The county works to minimize illegal dumping through public outreach, enforcement measures, and surveillance. Bulky waste, such as debris from storms or construction, is handled through scheduled pickups or at designated transfer stations, depending on the service provider.

Public works departments also manage litter control along roadsides and coordinate special waste disposal events. Lamar County is exploring ways to improve waste diversion efforts, increase recycling participation, and foster environmental responsibility. These ongoing initiatives are vital for safeguarding public health, maintaining environmental quality, and enhancing the aesthetic appeal of the county's neighborhoods and roadways.

3.12.3 Public Utilities

Lamar County is supported by a range of public utilities that deliver essential services including electricity, natural gas, water, sewer, telecommunications, and broadband internet. Electric service is primarily provided by Mississippi Power and the Pearl River Valley Electric Power Association, serving both residential and commercial customers throughout the county. Natural gas is available in many areas through Delta Utilities (formerly CenterPoint Energy) and other regional suppliers.

Water and sewer services are delivered through a mix of municipal systems, such as those operated by the cities of Purvis, Lumberton, and Sumrall, and rural water associations, including the Lamar County Water Association and Oak Grove Water Association. In more remote or unincorporated areas not served by centralized utilities, residents often rely on private wells and septic systems.

3.13 WATER RESOURCES

3.13.1 Surface Water

Lamar County is rich in surface water resources, including rivers, creeks, lakes, and wetlands that are vital to the region's ecology, water supply, and flood management. The Leaf River, which borders the county's eastern edge, is a major waterway and part of the larger Pascagoula River Basin. Numerous tributaries—including Black Creek, Little Black Creek, and Baxter Creek—flow throughout the county, forming an essential part of the natural drainage network.

These waterways provide valuable wildlife habitat, support recreational activities like fishing, boating, and kayaking, and contribute to groundwater recharge. Lakes such as the Little Black Creek Reservoir serve as popular destinations for outdoor recreation. Additionally, the county's wetlands, riparian corridors, and floodplains play a crucial role in stormwater retention, erosion control, and maintaining biodiversity. Preserving and managing these natural assets is key to sustaining both environmental quality and community resilience.

3.13.2 Groundwater

Groundwater is a critical natural resource in Lamar County, serving as the primary source of drinking water for many residents, particularly in rural areas. The county is situated within the Gulf Coastal Plain aquifer system, which includes several productive groundwater sources such as the Miocene and Citronelle aquifers. These aquifers supply clean, dependable water to municipal utilities, rural water associations, and private wells.

Public water providers, including the Lamar County Water Association and Oak Grove Water Association, rely on deep wells to deliver groundwater to thousands of homes and businesses. Overall, groundwater quality in the region is considered good, with low levels of harmful contaminants. However, naturally

occurring minerals like iron and manganese may be present in certain areas, often requiring routine filtration or treatment to ensure water quality.

3.13.3 Irrigation

Irrigation in Lamar County is primarily used to support agricultural operations, though it is less prevalent than in Mississippi's Delta region due to differences in crop types, topography, and soil composition. Local farms typically cultivate pasture grasses, hay, timber, and small-scale row crops. Irrigation helps maintain crop productivity during dry spells, especially in areas with well-drained soils.

The primary sources of irrigation water are groundwater drawn from private wells and rural water systems, with some supplemental use of surface water from nearby creeks, ponds, or reservoirs. Most farms employ low-intensity irrigation methods, such as portable sprinklers or drip systems, which are well-suited to the county's moderate-scale agricultural operations.

3.14 TRANSPORTATION

3.14.1 Roadways

Lamar County boasts an extensive roadway network that plays a crucial role in both local mobility and regional connectivity. Major highways, such as US Highway 98, which runs east-west, and Interstate 59, which serves as a vital north-south corridor, connect Lamar County to Hattiesburg and beyond, facilitating commerce, commuting, and access to services. These highways, along with numerous state routes, county roads, and local streets, provide essential access to residential neighborhoods, schools, businesses, and rural areas.

Roadway maintenance and upgrades are managed collaboratively by the Mississippi Department of Transportation (MDOT) and the Lamar County Board of Supervisors. Key priorities include improving road safety, repairing pavement, maintaining bridges, and enhancing drainage to ensure the long-term reliability of the transportation system. In urban areas, infrastructure such as sidewalks, street lighting, and traffic control devices are installed to improve pedestrian safety and traffic flow. As the county experiences growth, plans for expanding existing roadways and constructing new routes are actively being developed to accommodate increasing traffic demands and support economic development. Additionally, transportation planning incorporates emergency response routes to ensure rapid access during natural disasters or emergencies.

3.14.2 Bridges

Lamar County is supported by a comprehensive network of bridges, crucial for crossing the area's rivers, creeks, and other waterways. Several of the county's major bridges, including those on US Highway 98 and along Interstate 59, are maintained by the Mississippi Department of Transportation (MDOT). These bridges facilitate heavy commercial and commuter traffic and are undergoing, or are scheduled for, upgrades to enhance both capacity and safety. The Lamar County Road Department is responsible for managing a large number of smaller bridges located on local and rural roads. Notable structures include the Bass Lane Bridge over the Prong of Dry Branch, several bridges along Purvis-Columbia Road that span Big Bay Creek and Hurricane Creek, and the Bob Lott Bridge near Sumrall. The Campbells Bridge, situated near West Hattiesburg, is also a vital link for connecting local communities.

In total, Lamar County has over 150 bridges that require regular maintenance and periodic improvements to ensure they meet safety standards. These bridges play a pivotal role in maintaining safe and efficient transportation for residents, businesses, and emergency services across the county.

3.14.3 Airports

Lamar County Airport, situated at an elevation of 463 feet, serves as a key facility for general aviation in the area. The airport features a single runway (17/35), which accommodates a variety of aircraft and is critical for local air travel and emergency response. Located at coordinates 31°13'37"N and 89°30'25"W, the airport plays a central role in connecting the county to broader transportation networks, supporting both recreational flying and small-scale business operations.

While Lamar County Airport caters primarily to general aviation, the Hattiesburg-Laurel Regional Airport, located about 19 miles to the east, provides a larger transportation hub for the region. This regional airport offers commercial flight services, including connections to major US cities, making it a vital resource for residents and businesses in Lamar County. The proximity of both airports enhances the county's accessibility, contributing to its economic growth and offering additional options for regional connectivity. In addition to its role in general aviation, Lamar County Airport supports the county's emergency response capabilities, providing a landing area for medical and law enforcement aircraft. The airport's continued development and upgrades are essential for accommodating future growth in both aviation demand and regional connectivity, making it an important asset to the county's infrastructure and resilience.

3.15 EDUCATIONAL FACILITIES

Lamar County is served by the Lamar County School District (LCSD), a large prominent public education provider headquartered in Purvis. The district spans several communities, including Purvis, Sumrall, Oak Grove, Lumberton, and Baxterville, as well as portions of Hattiesburg and surrounding rural areas in Lamar County, covering over 500 square miles. Additionally, LCSD extends into Pearl River County, serving the remainder of Lumberton. In the 2024–2025 school year, LCSD operated 17 schools, educating approximately 10,276 students.

The district has earned a strong reputation for academic excellence, as evidenced by its high standards of teaching. With 144 national board-certified teachers, LCSD ranks among the top districts in the state for teacher qualifications and dedication to professional growth. It also boasts an "A" rating from the Mississippi Department of Education, reflecting its consistent commitment to improving student achievement and educational outcomes.

In addition to its comprehensive academic offerings, Lamar County is committed to preparing students for the workforce through career and technical education. Lamar County Center for Technical Education in Purvis serves as a hub for vocational training and industry certifications. This center provides high school students with valuable opportunities to gain hands-on experience in fields that are in high demand in today's job market.

In addition to its academic success, LCSD offers a wide range of extracurricular activities, including sports, arts programs, and clubs, fostering well-rounded student development. The district's schools are equipped with modern technology and provide an inclusive environment to support the diverse needs of students. As part of its ongoing efforts to adapt to the changing educational landscape, LCSD continues to invest in innovative teaching strategies, professional development, and community engagement, ensuring that all students have the resources and support needed to succeed. This commitment to excellence makes LCSD

not only a cornerstone of Lamar County but also a key contributor to the broader region's educational and community development.

3.16 HIGHER EDUCATION

Lamar County benefits from proximity to several esteemed higher education institutions that cater to a wide range of academic and professional needs. Residents have easy access to the University of Southern Mississippi and William Carey University in nearby Hattiesburg, both of which offer a diverse selection of undergraduate and graduate degree programs. Additionally, Pearl River Community College and Jones College provide valuable associate degrees and certificate programs designed to support workforce development and offer pathways for further academic advancement. The Mississippi State University Extension Office in Lamar County plays a pivotal role in fostering community engagement, focusing on agriculture, youth development, and local initiatives. Together, these institutions form a robust educational network that strengthens Lamar County's foundation for higher learning, career preparation, and lifelong learning opportunities for its residents and the broader region.

3.17 RECREATION AREAS

Lamar County provides a diverse range of recreational opportunities that cater to both residents and visitors. The county maintains several community centers and parks, such as the Lumberton Community Center, Oak Grove Community Center, and Lamar Park in Hattiesburg, all of which host local events and provide ample spaces for gatherings, outdoor sports, and leisure activities. Nature enthusiasts and outdoor lovers can explore Little Black Creek Water Park near Baxterville, a popular destination within the Pat Harrison Waterway District. This park offers a variety of outdoor activities including camping, fishing, swimming, hiking, and picnic areas, providing a perfect spot for families to enjoy nature.

For those interested in water activities, Hickory Hills Lake, while privately owned, offers excellent sportfishing opportunities within a gated community in eastern Lamar County. The lake is an attractive option for anglers seeking a peaceful, well-maintained environment.

In addition to these local facilities, the county benefits from numerous hiking trails, nature reserves, and wildlife management areas that allow visitors to enjoy Lamar County's natural beauty while engaging in activities such as bird watching, wildlife photography, and trail running.

For sports enthusiasts, Lamar County is home to several sports complexes, including baseball, softball, and football fields, where local leagues and teams regularly compete. The growing recreational landscape in the county supports a healthy, active lifestyle and enhances the quality of life for its residents.

In line with community development, Lamar County also focuses on enhancing its recreational infrastructure, with plans for additional park spaces, playgrounds, and walking trails to encourage outdoor recreation and foster a sense of community. These investments in recreational amenities will continue to offer residents and visitors alike opportunities to stay active, connect with nature, and engage in fun, social activities.

3.18 CULTURAL and HISTORICAL SITES

Lamar County, Mississippi, is steeped in rich cultural and historical heritage, with several notable sites that offer a glimpse into the area's storied past. The Lamar County Courthouse, built in 1905, is an iconic landmark that stands as a testament to the county's architectural evolution. Its enduring presence reflects

the county's growth and civic importance. Another historically significant structure is the Baxterville School Gymnasium, constructed in 1949. This unique building is believed to have been partially constructed using materials repurposed from an aircraft hangar at the nearby Camp Shelby, adding a layer of historical intrigue to its design. Both the courthouse and gymnasium are recognized as Mississippi Landmarks, underscoring their cultural and historical significance.

Additionally, the Purvis War Memorial, located on the grounds of the Lamar County Courthouse, is a moving tribute to local veterans who served in national conflicts. This memorial serves as a poignant reminder of the sacrifices made by Lamar County residents in defense of their country, further solidifying the county's deep connection to the broader narrative of American history. Through these preserved sites, Lamar County continues to honor its past while fostering a deep sense of pride and identity among its residents.

3.19 MUNICIPALITIES

3.19.1 The City of Lumberton

Lumberton is a small city situated in Lamar and Pearl River counties. Strategic presence of Interstate 59, which bypasses the city to the east and has an interchange with MS Highway 13 close to the city's main district. This major north-south highway provides Lumberton with crucial connectivity to larger regional centers in Mississippi and beyond, facilitating commerce, tourism, and accessibility for its residents, while maintaining a distinct small-town atmosphere. The city spans a total area of roughly 7 square miles and has a population of approximately 1,700 residents. This modest size and population contribute to its close-knit community feel, further enhanced by the Lumberton's history is deeply rooted in the timber industry, which flourished in the late 19th and early 20th centuries, giving the city its name. The true growth of Lumberton began with the establishment of sawmills and the expansion of the railroad through the region, transforming it into a vital lumber hub. The city was officially incorporated in 1893, reflecting its rapid development during this period of industrial boom. While the timber industry has evolved, its legacy remains a significant part of Lumberton's identity, influencing its architecture and community spirit. The city continues to preserve its historical heritage while adapting to modern economic and social changes.

3.19.2 The City of Purvis

The City of Purvis spans approximately 4 square miles and has a population of approximately 1,900 residents. As the county seat, Purvis is home to major administrative and government facilities for Lamar County, including several courthouses, various county departments, the Sheriff's Office, and other vital public services, centralizing governmental functions for the surrounding areas. Its position is strategically important due to the direct access provided by Interstate 59, which runs through the area, offering vital north-south connectivity to larger cities like Hattiesburg and Slidell, Louisiana. This major highway significantly contributes to the city's accessibility and economic life.

The history of Purvis dates back to its incorporation on February 25, 1888, named after its founder, Thomas Melville Purves. The town's growth was spurred by the arrival of the New Orleans and Northeastern Railroad in 1884. Purvis quickly became a sawmill town, thriving on the region's rich timber resources. In 1904, when Lamar County was established, Purvis was officially designated as its county seat. The city has faced challenges throughout its history, including the devastating 1908 Dixie tornado outbreak which

caused significant damage. Purvis continues to be the center of business and commerce, maintaining a strong sense of community and honoring its historical roots in the timber and railroad industries.

3.19.3 The City of Sumrall

Sumrall is a charming town located in Lamar County. The town spans an area of about 4 square miles and has a population of around 2,100 residents. Sumrall offers a rural feel to its residents, and is in close proximity to a broader metropolitan area of Hattiesburg. While not directly on an interstate, it has a well-developed network of county and Mississippi highways for convenient connectivity to larger regional centers. The history of Sumrall is deeply connected to the timber industry and the expansion of railroads in the late 19th and early 20th centuries. The community, which had a post office established in 1890, was named after Daniel Sumrall. Later, the JJ Newman Company chose Sumrall as the site for a large sawmill, leveraging its location in the heart of South Mississippi's pine belt. The town was officially incorporated in 1902. While the timber boom eventually receded, Sumrall has evolved into a quaint residential community that values its historical roots, benefitting from its proximity to Hattiesburg's growing metropolitan area. The Longleaf Trace, a popular recreational trail that follows the path of the old Mississippi Central Railroad, runs through the center of town.

CHAPTER 4 HAZARDS IDENTIFICATION & VULNERABILITY ANALYSIS

Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, and property damage resulting from natural hazards. It allows emergency management personnel to establish early response priorities by identifying potential hazards and vulnerable assets. The process focuses on the following elements:

- Hazard identification—Use all available information to determine what types of disasters may affect a jurisdiction, how often they can occur, and their potential severity.
- Vulnerability identification—Determine the impact of natural hazard events on the people, property, environment, economy, and lands of the region.
- Cost evaluation—Estimate the cost of potential damage or cost that can be avoided by mitigation.

The risk assessment for this hazard mitigation plan update evaluates the risk of natural hazards prevalent in the planning area and meets requirements of the DMA (44 CFR, Section 201.6(c)(2))

4.1 IDENTIFIED HAZARDS

There are countless hazards that pose a threat to human life, health, and well-being, and no attempt is made here to compile an exhaustive list. Those that are addressed in disaster planning are generally categorized as “natural” or “technological” (sometimes “manmade”). The FEMA website contains a thorough discussion and list of hazards in the section entitled “National Risk Index for Natural Hazards” (FEMA, 2023). Some hazards are a threat to all geographic areas while others (e.g., flooding) are more limited in their extent.

Lamar County hazards were identified and their frequency of occurrence evaluated using a number of resources, including:

- 2021 Lamar County Hazard Mitigation Plan
- Lamar County Comprehensive Plan
- Hazard planning documents developed by state, federal, and private agencies
- NOAA weather data from the past 50 years
- Data from the United States Geological Survey (USGS)

Hazards that have been identified as significant in this county and that will be considered in this plan are listed below.

Natural Hazards

- **Severe Summer Weather**
 - **Thunderstorms**
 - **Windstorms & Straight-Line Wind**
 - **Lightning**
 - **Extreme Heat**
 - **Hail**
 - **Drought**

- **Severe Winter Weather**
 - **Winter Storm**
 - **Extreme Cold**
- **Tornado**
- **Flood**
 - **Riverine & Stream Flooding**
 - **Dam Failure**
 - **Flash Flood**
- **Hurricane**
- **Wildfire**
- **Other Hazards**

Geological Hazards

Earthquake

Landslide

Problem Soils

Technological (Manmade) Hazards

Hazardous Material Incident

Per FEMA’s mandate to address all natural hazards, the following natural hazards were not included because these hazards do not directly impact Lamar County due to geographic location:

Avalanche

Sea Level Rise

Storm Surge

Tsunami

Volcanic Eruption

4.2 HAZARD PROFILE

The risk assessments in the following chapters describe the risks associated with each identified hazard of concern. The following sections were used to describe each hazard and communicate each respective level of risk:

Hazard Description—Each hazard profile contains a description of the general definition and causes of the hazard. It may also include background information for understanding the context of the hazard within Lamar County.

Location—The location or region in Lamar County where each hazard may occur is described.

Historical Frequency & Probability of Future Occurrence—This section identifies past hazard events of note that have occurred in Lamar County. It also includes the likelihood of each hazard occurring again if available.

Extent—The strength or magnitude of each hazard is defined, usually through a form of measurement, such as a formula, scale, chart, or graph.

Impacts & Loss Estimates—The potential impacts of each hazard on the county are discussed. This section also outlines the potential economic/monetary loss from a hazard event, in addition to loss of property, structures, facilities, systems, livestock, and life.

FEMA NRI Score—The hazard-specific FEMA National Risk Index scores for each natural hazard is included.

Related Hazards—The hazard profiles that fall under a greater hazard category can be found within this section.

4.3 RISK ASSESSMENT METHODOLOGY

Each hazard included in this plan was assessed and ranked based on a pre-defined hazard risk methodology consistent with FEMA’s mitigation plan requirements. Information from the hazard profiles and input from subject matter experts were used to inform the hazard risk assessment process. The following is a description of the key factors.

4.3.1 Probability or Likelihood of Occurrence

The probability of occurrence of a hazard is indicated by a probability factor based on the likelihood of annual occurrence:

High—Significant hazard event is likely to occur annually (Probability Factor = 3)

Medium—Significant hazard event is likely to occur within 25 years (Probability Factor = 2)

Low—Significant hazard event is likely to occur within 100 years (Probability Factor = 1)

Unlikely—There is little to no probability of significant occurrence, or the recurrence interval is greater than every 100 years (Probability Factor = 0)

The assessment of hazard frequency is generally based on past hazard events in the area.

4.3.2 Extent

Extent was assessed in two categories: extent/intensity and catastrophic potential of the hazard. Numerical impact factors were assigned as follows:

Extent/Intensity—Extent is defined as the range of anticipated intensities of the identified hazards. Extent is most commonly expressed using various scientific scales, such as the Saffir Simpson Scale or Enhanced Fujita scale.

High—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a high-intensity incident (Extent Factor = 3)

Medium—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a medium-intensity incident (Extent Factor = 2)

Low—Historical and/or probabilistic models/studies for this hazard indicate the possibility of a low-intensity incident (Extent Factor = 1)

Unlikely—Historical and/or probabilistic models/studies for this hazard indicate the possibility of little to no intensity (Extent Factor = 0)

Catastrophic—The potential that an occurrence of this hazard could be catastrophic.

High—High potential that this hazard could be catastrophic (Extent Factor = 3)

Medium—Medium potential that this hazard could be catastrophic (Extent Factor = 2)

Low—Low potential that this hazard could be catastrophic (Extent Factor = 1)

Unlikely—Virtually no potential that this hazard could be catastrophic (Extent Factor = 0)

Each category was assigned a weighting factor to reflect its significance, consistent with those typically used for measuring the benefits of hazard mitigation actions: a weighting factor of 3 was assigned for *Extent/Intensity* and its potential to be *Catastrophic*.

4.3.3 Vulnerability

Vulnerabilities were assessed in three categories: population exposure, property exposure, and exposure based on changes in development. Numerical impact factors were assigned as follows:

People—Values were assigned based on the percentage of the total population exposed to the hazard event.

High—30% or more of the population is exposed to this hazard (Vulnerability Factor = 3)

Medium—15% to 29% of the population is exposed to this hazard (Vulnerability Factor = 2)

Low—14% or less of the population is exposed to this hazard (Vulnerability Factor = 1)

No Vulnerability—None of the population is exposed to this hazard (Vulnerability Factor = 0)

Property Exposed—Values were assigned based on the percentage of the total property value exposed to the hazard event.

High—25% or more of the total assessed property value is exposed to the hazard (Vulnerability Factor = 3)

Medium—10% to 24% of the total assessed property value is exposed to the hazard (Vulnerability Factor = 2)

Low—9% or less of the total assessed property value is exposed to the hazard (Vulnerability Factor = 1)

No Vulnerability—None of the total assessed property value is exposed to the hazard (Vulnerability Factor = 0)

Changes in Development—Changes in development since the previous plan was approved have increased or decreased the community's vulnerability/exposure to this hazard.

High—Changes in development have significantly increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 3)

Medium—Changes in development have increased the vulnerability/exposure of the community to this hazard, but not significantly (Vulnerability Factor = 2)

Low—Changes in development have minimally increased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 1)

No Vulnerability—Changes in development have had no effect and/or have decreased the vulnerability/exposure of the community to this hazard (Vulnerability Factor = 0)

Each category was assigned a weighting factor to reflect its significance, consistent with those typically used for measuring the benefits of hazard mitigation actions: a weighting factor of 3 was assigned for *People*, and a weighting factor of 1 was assigned for *Property Exposed* and *Changes in Development*.

4.3.4 Impact

Hazard impacts were assessed in five categories: underserved/equity, property damages, economic and future development. Numerical impact factors were assigned as follows:

Underserved/Equity—Values were (1) assigned based on best available data for underserved populations vulnerable to the hazard event and (2) are likely to experience adverse/disproportionate impacts from the hazard incident resulting in greater disparity in equity.

High—Underserved populations exposed to this hazard are likely to experience significant adverse/disproportionate impacts (Impact Factor = 3)

Medium—Underserved populations exposed to this hazard are likely to experience some adverse/disproportionate impacts (Impact Factor = 2)

Low—Underserved populations exposed to this hazard are likely to experience minimal adverse/disproportionate impacts (Impact Factor = 1)

No impact—Underserved populations exposed to this hazard are not likely to experience significant adverse/disproportionate impacts (Impact Factor = 0)

Property Damages—Values were assigned based on the expected total property damages incurred from a hazard incident. It is important to note that values represent estimates of the loss from a major incident based on historical data or probabilistic models/studies.

High—More than \$5,000,000 in property damages is expected from a single major hazard event, or damages are expected to occur to 15% or more of the property value within the jurisdiction (Impact Factor = 3)

Medium—More than \$500,000 but less than \$5,000,000 in property damages is expected from a single major hazard event, or expected damages are expected to more than 5%, but less than 15% of the property value within the jurisdiction (Impact Factor = 2)

Low—Less than \$500,000 in property damages is expected from a single major hazard event, or less than 5% of the property value within the jurisdiction (Impact Factor = 1)

No impact—Little to no property damage is expected from a single major hazard event (Impact Factor = 0)

Economic—An estimation of the impact, expressed in terms of dollars, on the local economy is based on a loss of business revenue, crops, worker wages, and local tax revenues or on the impact on the local gross domestic product (GDP).

High—Total economic impact is likely to be greater than \$10,000,000 (Impact Factor = 3)

Medium—Total economic impact is likely to be greater than \$100,000 but less than or equal to \$10,000,000 (Impact Factor = 2)

Low—Total economic impact is not likely to be greater than \$100,000 (Impact Factor = 1)

No Impact—Virtually no significant economic impact (Impact Factor = 0)

Future Development—The potential that future development will have on increasing or decreasing the impact/consequence of this hazard.

High—Future development trends will significantly increase the impact/consequence of this hazard (Impact Factor = 3)

Medium—Future development trends will increase the impact/consequence of this hazard, but not significantly (Impact Factor = 2)

Low—Future development trends will minimally increase impact/consequence of this hazard (Impact Factor = 1)

No Impact—Future development trends will not increase the impact/consequence of this hazard and/or may even decrease the impact/consequence of this hazard (Impact Factor = 0)

4.4 FEMA NRI RISK SCORES

The National Risk Index (NRI) is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards: Avalanche, Coastal Flooding, Cold Wave, Drought, Earthquake, Hail, Heat Wave, Hurricane, Ice Storm, Landslide, Lightning, Riverine Flooding, Strong Wind, Tornado, Tsunami, Volcanic Activity, Wildfire, and Winter Weather. Because not all hazards are applicable to Lamar County, only those hazards with a defined risk to the county are included.

The National Risk Index leverages available source data for Expected Annual Loss due to these 18 hazard types, Social Vulnerability, and Community Resilience to develop a baseline relative risk measurement for each United States county and census tract (National Risk Index, 2023). These measurements are calculated using average past conditions, but they cannot be used to predict future outcomes for a community. The National Risk Index is intended to fill gaps in available data and analyses to better inform federal, state, local, tribal, and territorial decision makers as they develop risk reduction strategies.

4.4.1 Social Vulnerability

Social Vulnerability measures the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood.

Table 4-1. Social Vulnerability for Lamar County, MS | FEMA National Risk Index

Census Tract	Communities in Census Tract	Social Vulnerability	Vulnerability Score Rating
28073020305	Unincorporated Lamar County	99.7	Very High
28073020600	Unincorporated Lamar County	91.5	Very High
28073020401	City of Purvis & Unincorporated Lamar County	73.6	Relatively High
28073020402	City of Purvis & Unincorporated Lamar County	72.0	Relatively High
28073020304	Unincorporated Lamar County	70.3	Relatively High
28073020101	Town of Sumrall & Unincorporated Lamar County	63.2	Relatively High
28073020501	Unincorporated Lamar County	50.6	Relatively Moderate
28073020308	Unincorporated Lamar County	45.1	Relatively Moderate
28073020205	Unincorporated Lamar County	41.7	Relatively Moderate
28073020307	Unincorporated Lamar County	37.3	Relatively Low

28073020203	Unincorporated Lamar County	34.2	Relatively Low
28073020502	Unincorporated Lamar County	34.0	Relatively Low
28073020306	Unincorporated Lamar County	31.0	Relatively Low
28073020303	Unincorporated Lamar County	28.7	Relatively Low
28073020204	Unincorporated Lamar County	27.9	Relatively Low
28073020102	Town of Sumrall & Unincorporated Lamar County	17.9	Very Low
28073020206	Town of Lumberton & Unincorporated Lamar County	16.6	Very Low
<i>Social Vulnerability is measured using the Social Vulnerability Index (SoVI) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI). Source: National Risk Index, 2023</i>			

4.4.2 Community Resilience

Community Resilience measures a community's ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions.

Table 4-2. Community Resilience for Lamar County, MS | FEMA National Risk Index

Census Tract	Communities in Census Tract	Community Resilience Score	Rating
28073020101	Town of Sumrall & Unincorporated Lamar County	35.5	Relatively Low
28073020102	Town of Sumrall & Unincorporated Lamar County	35.5	Relatively Low
28073020203	Unincorporated Lamar County	35.5	Relatively Low
28073020204	Unincorporated Lamar County	35.5	Relatively Low
28073020205	Unincorporated Lamar County	35.5	Relatively Low
28073020206	Town of Lumberton & Unincorporated Lamar County	35.5	Relatively Low
28073020303	Unincorporated Lamar County	35.5	Relatively Low
28073020304	Unincorporated Lamar County	35.5	Relatively Low
28073020305	Unincorporated Lamar County	35.5	Relatively Low
28073020306	Unincorporated Lamar County	35.5	Relatively Low
28073020307	Unincorporated Lamar County	35.5	Relatively Low
28073020308	Unincorporated Lamar County	35.5	Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County	35.5	Relatively Low
28073020402	City of Purvis & Unincorporated Lamar County	35.5	Relatively Low
28073020501	Unincorporated Lamar County	35.5	Relatively Low
28073020502	Unincorporated Lamar County	35.5	Relatively Low
28073020600	Unincorporated Lamar County	35.5	Relatively Low
<i>Community Resilience is measured using the Baseline Resilience Indicators for Communities (HVRI BRIC) published by the University of South Carolina's Hazards and Vulnerability Research Institute (HVRI). Source: National Risk Index, 2023</i>			

4.4.3 Expected Annual Loss

The table below shows the overall expected annual loss score for the entire county based on all natural hazards. Hazard-specific scores are included in each hazard chapter under *Impacts & Loss Estimates*.

Table 4-3. Expected Annual Loss for Lamar County, MS | FEMA National Risk Index

Census Tract	Communities in Census Tract	Expected Annual Loss Score	Rating
28073020102	Town of Sumrall & Unincorporated Lamar County	84.79	Relatively Moderate
28073020205	Unincorporated Lamar County	83.22	Relatively Moderate

28073020402	City of Purvis & Unincorporated Lamar County	80.26	Relatively Moderate
28073020501	Unincorporated Lamar County	78.09	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	77.51	Relatively Moderate
28073020306	Unincorporated Lamar County	73.47	Relatively Moderate
28073020600	Unincorporated Lamar County	71.60	Relatively Moderate
28073020305	Unincorporated Lamar County	71.52	Relatively Moderate
28073020308	Unincorporated Lamar County	68.41	Relatively Moderate
28073020304	Unincorporated Lamar County	67.79	Relatively Moderate
28073020204	Unincorporated Lamar County	67.29	Relatively Moderate
28073020303	Unincorporated Lamar County	65.19	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	65.04	Relatively Moderate
28073020502	Unincorporated Lamar County	62.48	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	59.13	Relatively Moderate
28073020203	Unincorporated Lamar County	48.06	Relatively Low
28073020307	Unincorporated Lamar County	22.00	Very Low
<i>Expected Annual Loss scores are calculated using an equation that combines values for exposure, annualized frequency, and historic loss ratios (Expected Annual Loss = Exposure × Annualized Frequency × Historic Loss Ratio). Source: National Risk Index, 2023</i>			

4.4.4 Overall NRI Score

The table below shows the overall FEMA National Risk Index Score for the entire county based on all natural hazards. Hazard-specific scores are included in each hazard chapter under *FEMA NRI Score*.

Table 4-4. Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	FEMA National Risk Index Score	Rating
28073020402	City of Purvis & Unincorporated Lamar County	83.77	Relatively Moderate
28073020305	Unincorporated Lamar County	82.95	Relatively Moderate
28073020205	Unincorporated Lamar County	81.27	Relatively Moderate
28073020600	Unincorporated Lamar County	80.89	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	78.18	Relatively Moderate
28073020501	Unincorporated Lamar County	77.81	Relatively Moderate
28073020304	Unincorporated Lamar County	72.60	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	71.16	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	69.31	Relatively Moderate
28073020306	Unincorporated Lamar County	69.26	Relatively Moderate
28073020308	Unincorporated Lamar County	67.42	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	63.51	Relatively Moderate
28073020204	Unincorporated Lamar County	62.14	Relatively Moderate
28073020303	Unincorporated Lamar County	60.41	Relatively Low
28073020502	Unincorporated Lamar County	59.23	Relatively Low
28073020303	Unincorporated Lamar County	45.60	Relatively Low
28073020307	Unincorporated Lamar County	20.99	Very Low
<i>Risk Index scores are calculated using an equation that combines scores for Expected Annual Loss due to natural hazards, Social Vulnerability, and Community Resilience (Expected Annual Loss x Social Vulnerability / Community Resilience = Risk Index). Source: National Risk Index, 2023</i>			

CHAPTER 5 TROPICAL STORMS and HURRICANES

5.1 HAZARD DESCRIPTION

Table 5-1 Hazard Description - Hurricanes & Tropical Storms in Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Hurricane Season (June 1-Nov 30)
Duration	The effects might be felt for hours or even days
Analysis Source	NOAA, NHC

A hurricane is a powerful, rotating storm system characterized by strong winds, heavy rainfall, and a well-defined circulation center. It's the most severe type of tropical cyclone, forming over warm tropical or subtropical waters and capable of causing widespread damage through wind, storm surge, and flooding. Hurricanes feature sustained winds of 74 mph (119 km/h) or greater, with gusts reaching much higher speeds. They are low-pressure systems with organized thunderstorm activity. Hurricanes have a distinct spiral shape with a central eye, an eyewall (where winds are strongest), and outer rainbands. A significant threat is storm surge, which is a rise in sea level caused by the hurricane's winds pushing water inland, causing flooding. Hurricanes can produce torrential rainfall, leading to inland flooding, flash floods, and landslides. They can also spawn tornadoes, adding to the destructive potential. Hurricanes can vary in size, with some being relatively small and others extremely large, potentially hundreds of miles wide. The combination of strong winds, storm surge, and flooding makes hurricanes potentially destructive, with damage ranging from minor to catastrophic.

The Saffir-Simpson Hurricane Wind Scale is used to classify hurricanes based on their sustained wind speeds, ranging from Category 1 (least severe) to Category 5 (most severe). This scale helps estimate potential property damage and guides emergency preparedness efforts.

- Category 1 and 2 hurricanes can cause significant damage, particularly to unanchored mobile homes, trees, and shrubbery, while causing power outages. Although not as destructive as higher-category hurricanes, these storms still require robust preparedness and protective measures.
- Category 3 and higher hurricanes are considered major hurricanes and have the potential for catastrophic damage. Winds of 111 mph or more can result in extensive property damage, flooding, and risk to human life. Due to the coastal proximity, Lamar County is especially vulnerable to these high-intensity storms.

Table 5-2 Hurricanes & Tropical Storms Magnitude

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
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1	74-95 mph 64-82 kt 119-153 km/h	Very dangerous winds will produce some damage: 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	Extremely dangerous winds will cause extensive damage: 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	Devastating damage will occur: 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	Catastrophic damage will occur: 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	Catastrophic damage will occur: 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.

5.2 LOCATION

Lamar County and its municipalities are highly vulnerable to tropical storms and hurricanes due to their proximity to the Mississippi Gulf Coast. While the full impact of a tropical storm or hurricane may not always be felt across the entire county, the severity of the storm—along with its strength and landfall location—can still result in significant impacts. These impacts may include strong winds, heavy rainfall, flooding, and extensive wind damage to infrastructure and property.

5.3 EXTENT

When hurricanes or tropical storms move inland, they can still cause significant damage despite weakening. Torrential rainfall often leads to flash flooding and river flooding, especially in low-lying or poorly drained areas. These storms can also spawn tornadoes, increasing the risk of localized destruction. Strong winds may down trees and power lines, leading to widespread power outages and blocked roads. Even well inland, Lamar County faces serious hazards from tropical systems—flooding, wind damage, tornadoes, and

infrastructure disruptions make planning, alert systems, and resilient infrastructure critical for community safety and recovery.

5.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

According to the Atlantic Oceanographic and Meteorological Laboratory's Tropical Cyclone Climatology, all jurisdictions within Lamar County have a 30% to 40% chance of experiencing the effects of a Tropical Storm or Hurricane in any given year. This probability underscores the region's vulnerability to these powerful and destructive storms.

Research from the National Hurricane Center reveals that 18 Tropical Storms or Hurricanes have impacted the Mississippi Gulf Coast since 1954. Of those, five storms have directly affected Lamar County since 1998, resulting in wind damage and flooding. These storms have caused widespread disruption and have highlighted the need for ongoing preparedness and mitigation efforts.

One of the most devastating events in recent history for Lamar County was Hurricane Katrina, which struck on August 29, 2005. As a Category 3 hurricane, it severely impacted the entire county, including all three municipalities. The storm caused widespread destruction, with tornadoes and floodwaters exacerbating the damage. The total damage estimates for the storm are as follows:

- 17,863 structures experienced minor damage.
- 5,617 structures sustained major damage.
- 137 structures were completely destroyed.

Fortunately, despite the widespread devastation, no fatalities were reported, though minor injuries were sustained by several residents.

The National Climatic Data Center (NCDC) provides detailed historical data on tropical storms and hurricanes, which is essential for identifying trends and improving future disaster planning and resilience efforts.

Table 5-3 Hurricanes & Tropical Storms in Lamar County, MS

LOCATION	DATE	TIME	TYPE
UNINCORPORATED LAMAR CO.	9/26/2002	200	Tropical Storm
UNINCORPORATED LAMAR CO.	6/30/2003	1300	Tropical Storm
UNINCORPORATED LAMAR CO.	9/16/2004	1500	Hurricane
UNINCORPORATED LAMAR CO.	7/6/2005	500	Tropical Storm
UNINCORPORATED LAMAR CO.	8/29/2005	800	Hurricane
UNINCORPORATED LAMAR CO.	9/1/2008	1000	Tropical Storm
UNINCORPORATED LAMAR CO.	8/29/2012	1300	Tropical Storm
UNINCORPORATED LAMAR CO.	10/28/2020	1800	Tropical Storm
UNINCORPORATED LAMAR CO.	8/29/2021	2130	Tropical Storm
UNINCORPORATED LAMAR CO.	9/12/2024	100	Tropical Storm

5.5 IMPACTS & LOSS ESTIMATES

The damage from hurricanes in Lamar County is consistent across all jurisdictions, with each area experiencing similar types of damage, such as wind damage and flooding. This pattern of impact necessitates a comprehensive approach to hazard mitigation and response, ensuring that all areas of the county are equally prepared for future storms.

5.6 FEMA NRI Score

Table 5-4 Hurricanes & Tropical Storms - Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020402	City of Purvis & Unincorporated Lamar County	90.36	Relatively High
28073020305	Unincorporated Lamar County	90.05	Relatively High
28073020600	Unincorporated Lamar County	88.8	Relatively High
28073020205	Unincorporated Lamar County	88.13	Relatively High
28073020102	Town of Sumrall & Unincorporated Lamar County	87.75	Relatively High
28073020501	Unincorporated Lamar County	86.68	Relatively High
28073020401	City of Purvis & Unincorporated Lamar County	86.16	Relatively High
28073020304	Unincorporated Lamar County	86.09	Relatively High
28073020206	Town of Lumberton & Unincorporated Lamar County	85.55	Relatively High
28073020306	Unincorporated Lamar County	83.39	Relatively Moderate
28073020204	Unincorporated Lamar County	83.17	Relatively Moderate
28073020303	Unincorporated Lamar County	82.93	Relatively Moderate
28073020502	Unincorporated Lamar County	82.93	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	82.67	Relatively Moderate
28073020308	Unincorporated Lamar County	81.91	Relatively Moderate
28073020203	Unincorporated Lamar County	78.46	Relatively Moderate
28073020307	Unincorporated Lamar County	65.05	Relatively Low
<i>Source: National Risk Index, 2023</i>			

CHAPTER 6 FLOOD

6.1 HAZARD DESCRIPTION

Flooding is defined by the National Weather Service (NWS) as “the inundation of normally dry areas as a result of increased water levels in an established water course.” River flooding, the condition where the river rises to overflow its natural banks, may occur due to a number of causes, including prolonged, general rainfall, locally intense thunderstorms, snowmelt, and ice jams. In addition to these natural events, there are a number of factors controlled by human activity that may cause or contribute to flooding. These include dam failure (discussed below) and activities that increase the rate and amount of runoff, such as paving, reducing ground cover, and clearing forested areas. Flooding is a periodic event along most rivers, with the frequency depending on local conditions and controls, such as dams and levees. The land along rivers that is identified as being susceptible to flooding is called the floodplain. Flooding is a dynamic natural process. Along rivers and streams, a cycle of erosion and deposition is continuously rearranging and rejuvenating the aquatic and terrestrial systems. Although many plants, animals, and insects have evolved to accommodate and take advantage of these ever-changing environments, property and infrastructure damage often occurs when people develop floodplains and natural processes are altered or ignored.

6.1.1 Jurisdiction-Specific Flood Hazards

Town of Sumrall

The Town of Sumrall is particularly susceptible to localized flooding due to its low-lying topography. Critical infrastructure, including City Hall and the Police Department, share a building that is periodically impacted by floodwaters resulting from poor drainage. Although flood events have been relatively minor—typically resulting in less than six inches of water inside affected structures and lasting no more than 12 hours—these events have affected a few commercial buildings and residences. Importantly, this flooding is due to drainage issues rather than proximity to a river or stream. As such, the affected structures are located outside the Special Flood Hazard Area (SFHA) and are not considered Repetitive Loss Properties. According to FEMA’s Flood Insurance Rate Maps (FIRMs), no structures within the city limits are located within the SFHA.

City of Lumberton

Lumberton also contains flood-prone areas, primarily near Red Creek. However, there are no recorded instances of structural flooding to date. While detailed flood depth information is unavailable due to the lack of river gauges in Lamar County, local records serve as the best available data. All structures in the potentially affected area are located outside the SFHA, and no structures within city limits are sited within an identified floodplain.

City of Purvis

The City of Purvis has a known flood-prone area in its western sector. Flooding in this area has been rare, and no significant flood damage has been reported. The SFHA within Purvis is composed entirely of forested land with no structures located within the mapped flood zone.

Unincorporated Lamar County

Flooding in unincorporated areas primarily affects the northeastern part of the county, particularly along Mixon and Turtle Creeks in the Westover area. These creeks are highly susceptible to flash flooding during periods of heavy rainfall. Local records suggest that rainfall totals of 3 to 4 inches within a two-hour period often result in flooding. This area has historically seen the greatest concentration of flood damage and Repetitive Loss Properties.

Interlocal Floodplain Management Agreements

The Town of Sumrall, the City of Purvis, and the City of Lumberton have in place an interlocal agreement with the Lamar County Board of Supervisors. This agreement authorizes the Lamar County Floodplain Manager to administer and enforce the Flood Damage Prevention Ordinances on behalf of these municipalities, ensuring continued compliance with NFIP standards. As part of this process, residents of these jurisdictions apply for flood permits through the Lamar County office, where applications are reviewed for compliance before being returned to the appropriate municipality for final approval and signature by the Mayor or Clerk. Recorded copies of these interlocal agreements are available at the Lamar County Chancery Clerk's office.

6.2 TYPES OF FLOODING

Flooding can occur in a number of ways and many instances are not independent of each other and can coincide with another flood-related or flood-causing weather event. Heavy rainfall, urban stormwater overflow, riverine and stream flooding, flash floods, and flooding from dam failure are some of the types of floods common to Lamar County.

6.3 RELATED HAZARDS

6.3.1 River & Stream Flood

Hazard Description

Flooding occurs when water accumulates more quickly than it can drain or disperse, often in areas near rivers or streams that may overflow their natural banks. It can be caused by various factors, including prolonged, widespread rainfall or intense, localized thunderstorms.

Table 6-1 River & Stream Flood Hazard Description - Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Anywhere in the county with poor drainage, near streams & bodies of water, low lying areas
Seasonal Pattern or Conditions	Can occur any time of the year
Duration	Can be short-term or last longer
Analysis Source	FIS, FIRM, Army Corp of Engineers Flood Study, GIS data, DEM Hazus, NOAA, NWS, NFIP

Location

Flooding occurs in the low-lying areas of the county, adjacent to streams and rivers, and areas with slower or poor drainage. Due to its geographic location in the Gulf Coast region, Lamar County and its municipalities are vulnerable to frequent flooding events, primarily caused by heavy rainfall and inadequate stormwater drainage. Creeks flowing through the county and surrounding areas are highly susceptible to flooding during periods of heavy rainfall, especially in the northeastern portion of the county. While the county participates in the National Flood Insurance Program (NFIP) and maintains active floodplain management, localized drainage issues and development patterns still contribute to occasional flood damage.

Extent

The NFIP classifies floods through the use of recurrence intervals as seen in the chart below. The federal standard for floodplain management under the National Flood Insurance Plan (NFIP) is the “100-year floodplain.” This area is chosen using historical data such that in any given year there is a 1% chance of a “base flood” (also known as “100-year flood” or “regulatory flood”). A base flood is one that covers or exceeds the 100-year floodplain. A “500-year floodplain” is an area with at least a 0.2% chance of flood occurrence in any given year (HUD Exchange, 2023).

Figure 6-2 NFIP Flood Recurrence Intervals

Flood Recurrence Interval	Chance of occurrence during any given year
5 year	20%
10 year	10%
50 year	2%
100 year	1%
500 year	0.20%

Historical Frequency & Probability of Future Occurrence

Lamar County has experienced flooding events across its 500-square-mile area long before the onset of formal record-keeping. These events are driven by a range of contributing factors, including heavy thunderstorms, prolonged periods of rainfall, hurricanes, and tropical storms—all of which can result in flash flooding and widespread water accumulation. Below is the table listing most significant flooding events from 1998 to 2024.

Table 6-3 Flood Related Events Lamar County, MS

FLOOD RELATED EVENTS		
LOCATION	DATE	TYPE
WESTOVER	Sep-98	Hurricane George
WESTOVER	Jan-99	Thunderstorms
WESTOVER	Sep-00	Thunderstorms
WESTOVER	Mar-01	Thunderstorms
WESTOVER	Jun-01	Thunderstorms
WESTOVER	Sep-01	Thunderstorms
WESTOVER	Dec-01	Thunderstorms
WESTOVER	Sep-02	Thunderstorms
WESTOVER	Jun-03	Thunderstorms
WESTOVER	Feb-04	Thunderstorms
WESTOVER	Jun-04	Thunderstorms
SUMRALL	Mar-05	Thunderstorms
SUMRALL	Apr-05	Thunderstorms
WESTOVER	Apr-07	Thunderstorms
WESTOVER	Mar-08	Thunderstorms
WESTOVER	Mar-09	Thunderstorms
WESTOVER	Mar-11	Thunderstorms
WESTOVER	Mar-12	Thunderstorms
COUNTYWIDE	Aug-12	Thunderstorms
WESTOVER	Sep-12	Thunderstorms
WESTOVER	Jan-13	Thunderstorms
COUNTYWIDE	Feb-14	Thunderstorm
COUNTYWIDE	Dec-14	Thunderstorm
COUNTYWIDE	Mar-16	Thunderstorm
COUNTYWIDE	Jan-17	Thunderstorm
LUMBERTON	Mar-19	Thunderstorm

Impacts and Loss Estimates

The damage to the homes in this area of Lamar County has been minor damage (6" of water) to major damage (6' of water). 19 of 34 homes in this area have been mitigated by being removed from the properties through a Buy-Out Program in Lamar County. One additional property was demolished when a commercial developer purchased an entire subdivision for a new development, which does not fall into the Special

Flood Hazard Area any longer per the FIRM maps (adopted March 2, 2010). Most of these homes were rental properties.

Lamar County does not have any commercial nor industrial facilities that are considered repetitive loss properties. This leaves Lamar County with a total of 15 residential structures that are listed as repetitive loss properties that are still susceptible to flooding.

There are many vulnerable populations in Lamar County, including those in the table below. People particularly susceptible to the threat of flooding are the elderly, small children, persons with chronic illnesses, and those in unstable structures.

Table 6-4 Vulnerable Populations in Lamar County, MS

Vulnerability Category		Data Point
Persons Over 65 Years of Age		15.9%
Persons with Disabilities Under 65		14.1%
Persons in Poverty		16.1%
Households Receiving Food Stamps		10.1%
Persons Experiencing Difficulty with English		1.7%
Households with No Access to a Vehicle		4.4%
Households in Mobile Homes		11%
Households Without Internet		11.4%
Source: US Census Bureau, 2020 & JobsEQ, 2025		

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies.

Flooding may lead to power outages depending on its cause and amount of damage. The following table lists types of critical facilities that could be negatively affected by power outages, including places like hospitals and dialysis centers that rely on power to operate lifesaving equipment. Any damage to any of these locations due to lightning could delay critical resources to those in need.

Table 6-5 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis

Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 6-6 Riverine & Stream Flooding - Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020308	Unincorporated Lamar County	93.32	Relatively High
28073020205	Unincorporated Lamar County	92.36	Relatively High
28073020206	Town of Lumberton & Unincorporated Lamar County	92.21	Relatively High
28073020501	Unincorporated Lamar County	90.86	Relatively High
28073020600	Unincorporated Lamar County	87.09	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	84.58	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	76.30	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	68.31	Relatively Low
28073020206	Town of Lumberton & Unincorporated Lamar County	66.33	Relatively Low
28073020307	Unincorporated Lamar County	63.04	Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County	60.04	Relatively Low
28073020204	Unincorporated Lamar County	56.88	Relatively Low
28073020303	Unincorporated Lamar County	55.58	Relatively Low
28073020502	Unincorporated Lamar County	50.2	Relatively Low
28073020304	Unincorporated Lamar County	45.98	Relatively Low
28073020305	Unincorporated Lamar County	42.22	Relatively Low
28073020203	Unincorporated Lamar County	29.45	Very Low
Source: National Risk Index, 2023			

6.3.2 Flash Flood

Hazard Description

Table 6-7 Flash Flood Hazard Description - Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Anywhere in the county with poor drainage, low lying areas
Seasonal Pattern or Conditions	Can occur any time of the year
Duration	Can be short-term or last longer
Analysis Source	FIS, FIRM, Army Corp of Engineers Flood Study, GIS data, DEM Hazus, NOAA, NWS, NFIP

Flash flood is defined by the NWS as “a rapid and extreme flow of high water into a normally dry area or a rapid water level rise in a stream or creek above a predetermined flood level, beginning within six hours of the causative event (e.g., intense rainfall, dam failure, ice jam). Ongoing flooding can intensify to flash flooding in cases where intense rainfall results in a rapid surge of rising flood waters.” Flash floods differ from floods (discussed above in River or Stream Flood) in the rapidity with which they develop. Floods generally develop over a period of several days, providing more warning time and time for preparation and evacuation. Flash floods occur with little or no warning. They may occur during thunderstorms due to rapid runoff from steep terrain, from areas where the soil is already saturated, or in urban areas where vegetation has been removed and pavement has replaced exposed soil. Flash floods may also arise as the result of dam failure (discussed below).

Location

Due to its geographic location in the Gulf Coast region, Lamar County and its municipalities are vulnerable to frequent flooding events, primarily caused by heavy rainfall and inadequate stormwater drainage. Creeks flowing through the county and surrounding areas are highly susceptible to flooding during periods of heavy rainfall, especially in the northeastern portion of the county. Flooding affects the majority of Utah due to heavy mountain precipitation and runoff.

Extent

Flash floods occur suddenly within six hours of intense rainfall from a thunderstorm or several thunderstorms. Flash floods are common in various parts of Lamar County, especially in the northeastern part of the county, making that area especially hazardous during rainfall.

Figure 6-8 NOAA Excessive Rainfall Risk Categories



How is a flash flood different from a standard flood?

Flash floods are characterized by rapid rise of water on the order of a few minutes to 6 hours that can occur anywhere. A flood watch or warning pertains to larger streams and rivers that take much longer to respond (3 hours to weeks) but move much larger amounts of water through sensitive areas

Historical Frequency & Probability of Future Occurrence

The Storm Events Database from the NOAA lists most significant flash flood events that affected people and property.

Flash flooding will occur again in the future. According to Neighborhoods at Risk, Lamar County is expected to experience heavy precipitation that may exceed average annual precipitation. Heavy precipitation can lead to flash flooding as the ground fails to absorb the high volume of precipitation that falls in a short period. Increasing annual precipitation can contribute to sustained flooding.

Table 6-9 Flash Flood Related Events - Lamar County, MS

FLOOD RELATED EVENTS			
LOCATION	DATE	TIME	TYPE
TATUMS CAMPS	4/18/2019	1608	Flash Flood
PURVIS	5/11/2019	154	Flash Flood
NORTH LUMBERTON	5/11/2019	200	Flash Flood
NORTH LUMBERTON	5/11/2019	845	Flash Flood
PURVIS	7/14/2019	645	Flash Flood
WARDWELL STATION	8/2/2019	1800	Flash Flood
WARDWELL STATION	2/10/2020	1710	Flash Flood
WARDWELL STATION	2/10/2020	1805	Flash Flood
PURVIS	5/26/2020	1500	Flash Flood
LUMBERTON	7/15/2020	1620	Flash Flood
SUMRALL	8/25/2020	1115	Flash Flood
OAK GROVE	4/10/2021	140	Flash Flood

WARDWELL STATION	6/24/2021	1815	Flash Flood
PURVIS	8/2/2021	1525	Flash Flood
OAK GROVE	8/14/2021	1928	Flash Flood
WARDWELL STATION	9/15/2021	1000	Flood
BAXTERVILLE	2/3/2022	1207	Flash Flood
PURVIS	2/3/2022	1245	Flash Flood
TATUMS CAMPS	4/5/2022	800	Flash Flood
SUMRALL	4/5/2022	830	Flood
SUMRALL	4/5/2022	1100	Flood
WARDWELL STATION	12/14/2022	1525	Flash Flood
WARDWELL STATION	3/8/2024	1625	Flood
EPLEY	3/8/2024	1645	Flash Flood

Impacts and Loss Estimates

Because flash floods develop so rapidly, people on foot or in automobiles may be stranded or may be swept away and injured or drowned. They are characterized by high velocity water flow and large amounts of debris, both of which cause damage to or destroy structures and other objects in their path.

Human death and injury sometimes occur as a result of flooding but are not common. Human hazards during flooding include drowning, electrocution due to downed power lines, leaking gas lines, fires and explosions, hazardous chemicals, and displaced wildlife. Economic loss and disruption of social systems are often enormous. Floods may destroy or damage structures, furnishings, business assets including records, crops, livestock, roads, and highways. They often deprive large areas of electric service, potable water supplies, wastewater treatment, communications, and many other community services, including medical care, and may do so for long periods of time.

There are many vulnerable populations in Lamar County, including those in the table below. People particularly susceptible to the threat of flooding are the elderly, small children, persons with chronic illnesses, and those in unstable structures.

Table 6-10 Vulnerable Populations in Lamar County

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies.

Flooding may lead to power outages depending on its cause and amount of damage. The following table lists types of critical facilities that could be negatively affected by power outages, including places like hospitals and dialysis centers that rely on power to operate lifesaving equipment. Any damage to any of these locations due to lightning could delay critical resources to those in need.

Table 6-11 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar

Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

6.3.3 Dam Failure

Hazard Description

Table 6-12 Dam Failure Hazard Description - Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Wherever there are dams in Lamar County
Seasonal Pattern or Conditions	Rainy Day Failure happens mainly during heavy precipitation events and can have some warning time. Sunny Day Failure happens with no warning at all and can happen at any time.
Duration	Hours, days. Depends on spillway type and area, maximum cfs discharge, overflow or breach type, dam type. Refer to Dam Inventory for more information.
Analysis Source	BOR inundation maps and plans, local input, National Inventory of Dams, MS Dept of Environmental Quality

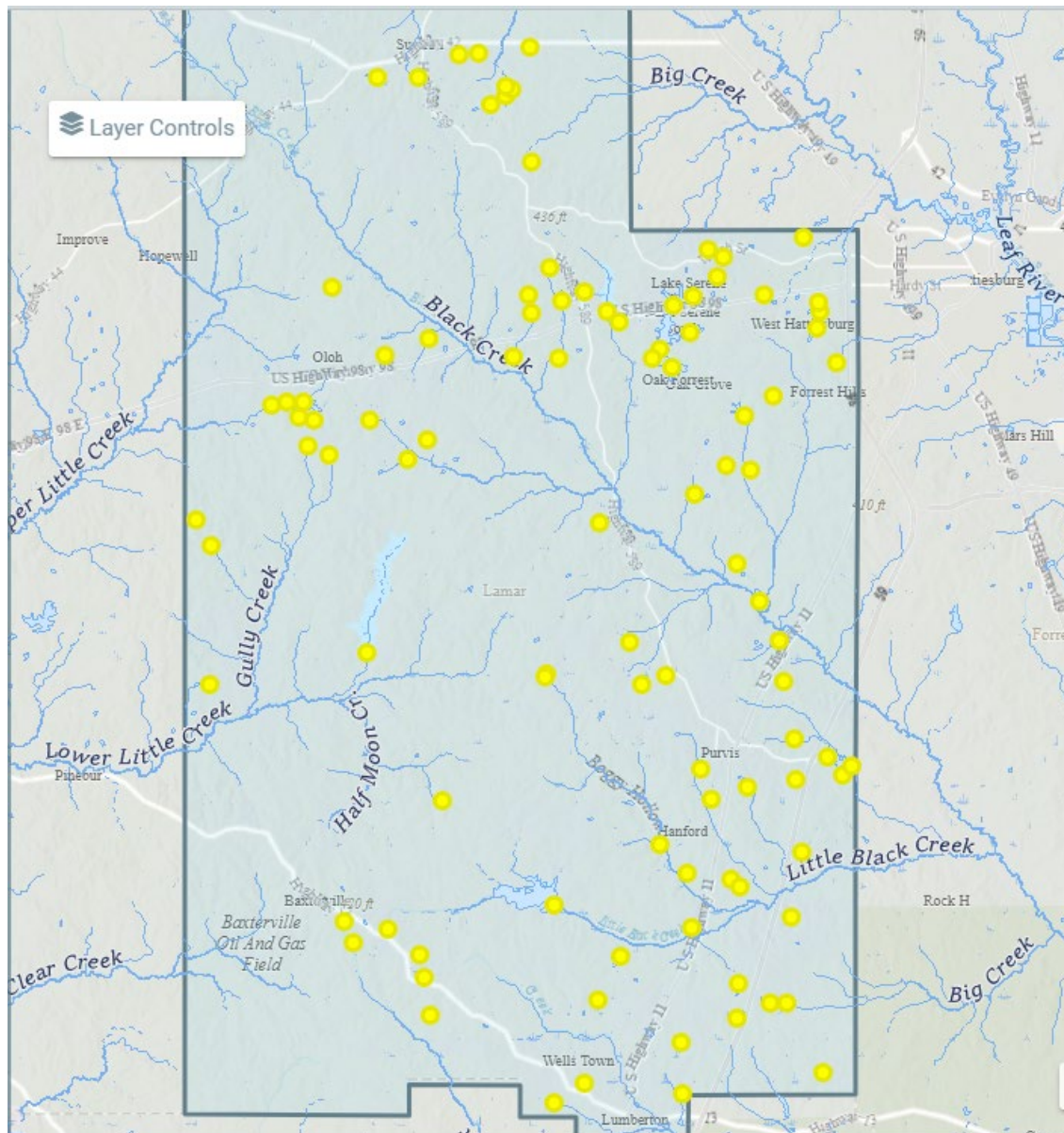
Dam failure is the unintended release of impounded waters. Dams can fail for one or a combination of the following reasons:

- Overtopping caused by floods that exceed the capacity of the dam
- Deliberate acts of sabotage
- Structural failure of materials used in dam construction
- Poor design and/or construction methods
- Movement and/or failure of the foundation supporting the dam
- Settlement and cracking of concrete or embankment dams
- Piping and internal erosion of soil in embankment dams.
- Inadequate maintenance and upkeep

Failures may be categorized into two types: component failure of a structure that does not result in a significant reservoir release, and uncontrolled breach failure that leads to a significant release. With an uncontrolled breach failure of a manmade dam there is a sudden release of the impounded water, sometimes with little warning. The ensuing flood wave and flooding have enormous destructive power.

Location

Map 6-13 Dam Locations in Lamar County, MS (National Inventory of Dams)



Extent

In total, there are 101 dams located throughout Lamar County, both in incorporated and unincorporated areas. Of these, nine dams are classified as High Hazard according to data provided by National Inventory of Dams. In the event of a dam breach, any area downstream could be severely affected by flooding, posing significant risks to life and property.

The Mississippi Department of Environmental Quality (MDEQ) classifies dams into three categories based on their potential for damage:

- High Hazard: Dam failure in this category can result in loss of life and significant damage to homes, commercial buildings, critical infrastructure (e.g., utilities, roads, railroads), and public facilities.

- Significant Hazard: Failure of these dams may cause significant damage to major roads, minor railroads, or lead to interruption of important public services and utilities.
- Low Hazard: These dams, when failing, may cause damage to agricultural buildings, minor roads, and farmland, but the risk to life and property is lower.

According to the Department of Environmental Quality's Dam Safety Division, Lamar County is home to nine High Hazard Dams. In response to the risks posed by these dams, the Lamar County Emergency Management Agency (EMA) is actively collaborating with dam owners to develop and update emergency action plans for each of the high-hazard dams. These plans focus on critical areas such as early warning systems, vulnerable structures, and future development in the flood inundation zones that could result from a dam failure.

As part of ongoing preparedness efforts, the EMA has established a regular schedule for visual inspections of these dams to identify early signs of potential failure and mitigate risks before they escalate. These proactive inspections are crucial in maintaining the safety and integrity of the dams in the county.

The ongoing collaboration between local emergency management officials and dam owners ensures that Lamar County remains vigilant in managing these risks. Lamar County is committed to taking steps to address the dangers posed by these high-hazard dams and prevent further damage. Continued planning, regular inspections, testing, early-warning systems, risk assessments, and retrofit measures are critical in safeguarding the community against potential dam failures.

Table 6-14 Dam List - Lamar County, MS (National Inventory of Dams)

Dam Name	NID ID	Dam Height (Ft)	Dam Length (Ft)	Last Inspection Date	Hazard Potential Classification	Condition Assessment
J D Broome Pond Number 2 Dam	MS00706	22			Undetermined	
Hudson Dam	MS03460	16	600		Undetermined	
Ms05240 Lake Dam	MS05240	19		7/15/2015	Undetermined	Satisfactory
Ms05039 Lake Dam	MS05039	15			Undetermined	
Ms05383 Lake Dam	MS05383	22			Undetermined	
Ms04211 Lake Dam	MS04211	17			Undetermined	
Ms05513 Lake Dam	MS05513	20			Undetermined	
C R Fortenberry Pond Dam	MS00692	16			Undetermined	
Dr Richard Clark Pond Dam	MS01461	15			Undetermined	
Bass Pecan Plant Pond Number 6 Dam	MS00720	20			Undetermined	
Bass Pecan Plant Pond Dam	MS00714	18			Undetermined	
Joe Winstead Lake Dam	MS01174	25			Undetermined	
Irby Alexander Pond Dam	MS01220	13			Undetermined	

Dam Name	NID ID	Dam Height (Ft)	Dam Length (Ft)	Last Inspection Date	Hazard Potential Classification	Condition Assessment
Little Black Creek Water Park Dam	MS00712	18		1/27/2023	High	Fair
West Lake Manor First Addition Dam	MS03597	15	440	3/16/2023	High	Fair
Lake Serene Southeast Dam	MS00704	24	2060	3/21/2023	High	Satisfactory
West Lake Dam	MS00700	24	1200	3/16/2023	High	Poor
Lake Serene North Dam	MS00698	21	1300	3/21/2023	High	Fair
Lakeshore Lake Dam	MS02732	27	600	3/26/2023	High	Fair
Bridgefield Estates Lake Dam	MS03357	25	2100	5/16/2023	High	Fair
Canebrake Lake Dam	MS00132	35	2050	3/22/2023	High	Fair
Ms05510 Lake Dam	MS05510	22			Undetermined	
Big Bay Lake Dam	MS03753	56	1890	4/1/2022	High	Satisfactory
Fox Lake Dam	MS00707	22	530	4/20/2018	Low	Satisfactory
Lake Serene East Dam	MS00696	25	1327		Low	
J M Burge Road Dam	MS03500	26	750		Low	
Henry Hudson Dam	MS03469	17	899	3/1/2012	Low	
Safari Lake #2 Dam	MS03784	31	850		Undetermined	
Canebrake Golf Course Hole Number 12 Dam	MS03501	14	185		Undetermined	
W J Morris Pond Dam	MS02731	15		5/16/2023	High	Fair
Bennett York Lake Number 2 Dam	MS00514	22		5/24/2017	Low	Fair
Bass Pecan Plant Pond Number 2 Dam	MS00716	15			Low	
Sportsman Club Lake Number 2 Dam	MS00695	13			Low	
Ms05059 Lake Dam	MS05059	16			Low	
Ms05265 Lake Dam	MS05265	10			Low	
Ms05264 Lake Dam	MS05264	24			Low	
Ms05405 Lake Dam	MS05405	21			Low	
Ms05404 Lake Dam	MS05404	18			Low	
Ms05403 Lake Dam	MS05403	20			Low	
Ms05401 Lake Dam	MS05401	14			Low	
Ms05400 Lake Dam	MS05400	14			Low	
Ms05385 Lake Dam	MS05385	27		7/10/2015	Low	Fair
Ms05037 Lake Dam	MS05037	18			Low	
Ms05045 Lake Dam	MS05045	30			Low	
Ms05044 Lake Dam	MS05044	15			Low	
Ms05043 Lake Dam	MS05043	13			Low	
Ms05038 Lake Dam	MS05038	16			Low	
Ms05381 Lake Dam	MS05381	16			Low	

Dam Name	NID ID	Dam Height (Ft)	Dam Length (Ft)	Last Inspection Date	Hazard Potential Classification	Condition Assessment
Ms04225 Lake Dam	MS04225	19			Low	
Ms04224 Lake Dam	MS04224	21			Low	
Ms04212 Lake Dam	MS04212	14			Low	
Sumrall Sportsmen Dam	MS03055	19			Low	
Ms04216 Lake Dam	MS04216	16			Low	
Ms04215 Lake Dam	MS04215	14			Low	
Ms04214 Lake Dam	MS04214	17			Low	
Ms05511 Lake Dam	MS05511	19			Low	
Ronnie Kent Dam	MS03105	15			Low	
Ms05399 Lake Dam	MS05399	17			Low	
Ms05398 Lake Dam	MS05398	17			Low	
Ms05255 Lake Dam	MS05255	10			Low	
Ms05254 Lake Dam	MS05254	11			Low	
Ms05253 Lake Dam	MS05253	17			Low	
Ms05252 Lake Dam	MS05252	19			Low	
Ms05247 Lake Dam	MS05247	19			Low	
Ms05245 Lake Dam	MS05245	19			Low	
Ms05242 Lake Dam	MS05242	12			Low	
Ms05241 Lake Dam	MS05241	16			Low	
Ms05394 Lake Dam	MS05394	11			Low	
Ms05393 Lake Dam	MS05393	11			Low	
Komp Lake Dam	MS00711	12			Low	
Lake Serene Dam	MS00697	24			Low	
South Mississippi Electric Power Association Dam	MS00496	16	5000	1/4/2017	Low	Satisfactory
Lake Heritage Dam	MS03797	42	3000	4/12/2018	Low	Satisfactory
Buster Crider Pond Dam	MS00715	10			Low	
Charlie Johnson Pond Dam	MS00713	12			Low	
Charles Roseberry Pond Dam	MS00708	12			Low	
Sportsman Club Lake Dam	MS00694	20			Low	
J D Broome Pond Dam	MS00705	18			Low	
John W Atwood Lake Dam	MS01321	13			Low	
Beaver Lake Dam	MS00709	24	1150	4/20/2021	Low	Unsatisfactory
Hoyle D Byrd Lake Dam	MS00497	17			Low	
A G McInturff Lake Dam	MS00523	24			Low	

Dam Name	NID ID	Dam Height (Ft)	Dam Length (Ft)	Last Inspection Date	Hazard Potential Classification	Condition Assessment
Sportsman Club Lake Number 3 Dam	MS02339	35			Low	
Wright Dam	MS03177	17	399		Low	
Murdy Pond Dam	MS03152	22	591		Low	
Woodville Trace Lake Dam	MS05382	23		12/11/2020	Low	Unsatisfactory
Refuge Lake Dam	MS03799	23	380	6/14/2016	Low	Poor
Sullivan Pond Dam	MS03785	21	465		Low	
Bass Pecan Plant Pond Number 4 Dam	MS00718	16			Low	
Bass Pecan Plant Pond Number 3 Dam	MS00717	12			Low	
Brett Favre Lake Dam	MS03518	13	604		Low	
David Cox Lake Dam	MS03736	32	458		Low	
Hudson Farm Lake Dam	MS00693	15			Low	
Hudson Lake Dam	MS03035	23	1000		Low	
Ms05042 Lake Dam	MS05042	10			Low	
Ms05040 Lake Dam	MS05040	25			Low	
Ms04220 Lake Dam	MS04220	17			Low	
Ms04218 Lake Dam	MS04218	13			Low	
Lake Serene South Dam	MS00703	31	1980	4/12/2013	Low	Poor
Mrs Florine Ulmer Pond Dam	MS00710	14			Low	

Historical Frequency & Probability of Future Occurrence

Dam Failures in Lamar County

Lamar County has experienced two significant dam failures in recent history. The first occurred in March 2004, when the Big Bay Lake Dam failed, causing the evacuation of 150 structures in both Lamar and Marion counties. This failure resulted in the destruction or severe damage of 130 homes, with the affected area submerged under approximately 15 feet of water. The release of 7.5 billion gallons of water damaged several roads and bridges. Despite the scale of the disaster, no fatalities or injuries were reported.

The second dam failure occurred in October 2004, when the Timber Lake Dam, a 90-acre lake, failed. While the event caused road closures for several hours, it did not result in any property damage or injuries. This serves as a reminder that dam failures, though infrequent, can have varying levels of impact depending on the circumstances.

Impacts & Loss Estimates

The severity of a dam failure depends on the area surrounding the dam or levee, the volume and velocity of water that breaches the structure, and the structures and population in the area. A dam failure will result in flooding of normally protected areas, resulting in impacts similar to those seen that are within the normal floodplain.

There are many vulnerable populations in Lamar County, including those in the table below. People particularly susceptible to the threat of flooding are the elderly, small children, persons with chronic illnesses, and those in unstable structures.

Table 6-15 Vulnerable Populations in Lamar County

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
Source: US Census Bureau, 2020 & JobsEQ, 2025	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies.

Flooding may lead to power outages depending on its cause and amount of damage. The following table lists types of critical facilities that could be negatively affected by power outages, including places like hospitals and dialysis centers that rely on power to operate lifesaving equipment. Any damage to any of these locations due to lightning could delay critical resources to those in need.

Table 6-16 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar

Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

Repetitive Loss and Mitigation Efforts

Repetitive loss properties are a significant concern in Lamar County. According to the NFIP, a Repetitive Loss Property is one for which two or more flood insurance claims exceeding \$1,000 have been paid within a 10-year period. Nationwide, these properties account for approximately 40% of all NFIP claims. Within Lamar County, most repetitive losses are concentrated in the northeast, particularly near Mixon and Turtle Creeks. Most of these properties are pre-FIRM (constructed before the community's initial NFIP maps were adopted), making them more vulnerable due to outdated construction practices and elevation standards.

Lamar County and its municipalities require strict enforcement of floodplain management ordinances. New residential construction or substantial improvements within SFHAs must be elevated to at least two feet

above the base flood elevation (BFE) as identified on the FIRMs. Non-residential structures must be either elevated or dry floodproofed, with certification by a licensed professional engineer if dry floodproofing is used.

In addition, all subdivision proposals must:

- Minimize flood damage through design;
- Include provisions for flood-resistant public utilities and infrastructure;
- Incorporate stormwater drainage designs that reduce exposure to flood hazards;
- Provide BFE data for developments greater than five lots or five acres.

Mobile homes in SFHAs must be installed using methods that resist flotation, collapse, and lateral movement during flood events.

Flooding can also threaten life, safety, and health and often results in substantial damage to infrastructure, homes, and other property. The extent of damage caused by a flood depends on the topography, soils, and vegetation in an area, and the depth and duration of flooding, velocity of flow, rate of rise, and the amount and type of development in the floodplain.

Human death and injury sometimes occur as a result of flooding but are not common. Human hazards during flooding include drowning, electrocution due to downed power lines, leaking gas lines, fires and explosions, hazardous chemicals, and displaced wildlife. Economic loss and disruption of social systems are often enormous. Floods may destroy or damage structures, furnishings, business assets including records, crops, livestock, roads, and highways. They often deprive large areas of electric service, potable water supplies, wastewater treatment, communications, and many other community services, including medical care, and may do so for long periods of time.

Enforcement Challenges and Recommendations

Enforcement of NFIP's 50% rule—which mandates that cumulative damages exceeding 50% of a structure's value require retrofitting—is often difficult in post-disaster scenarios. Building permits may be waived to expedite recovery, and if damage is non-structural or utilities are unaffected, property owners may proceed with repairs without contacting local permitting officials. Nonetheless, strict enforcement of the 50% rule remains a critical tool in reducing future flood risk. It is recommended that all jurisdictions require post-event permits and tracking for potentially substantial damage, even when emergency repairs are underway.

Funding and Mitigation Opportunities

Local governments may access funding through the Hazard Mitigation Grant Program (HMGP) to acquire, retrofit, or elevate repetitively flooded properties. Additionally, Community Development Block Grant (CDBG) and HOME Investment Partnerships programs offer competitive grant opportunities that can be used to address flood-prone structures, especially in low-lying or economically disadvantaged areas.

Historically, most flood-related losses in Lamar County have resulted from stormwater flooding rather than riverine flooding. Continued investment in stormwater infrastructure, drainage maintenance, and elevation of vulnerable structures will be essential to reducing flood risk countywide.

CHAPTER 7 SEVERE SUMMER WEATHER

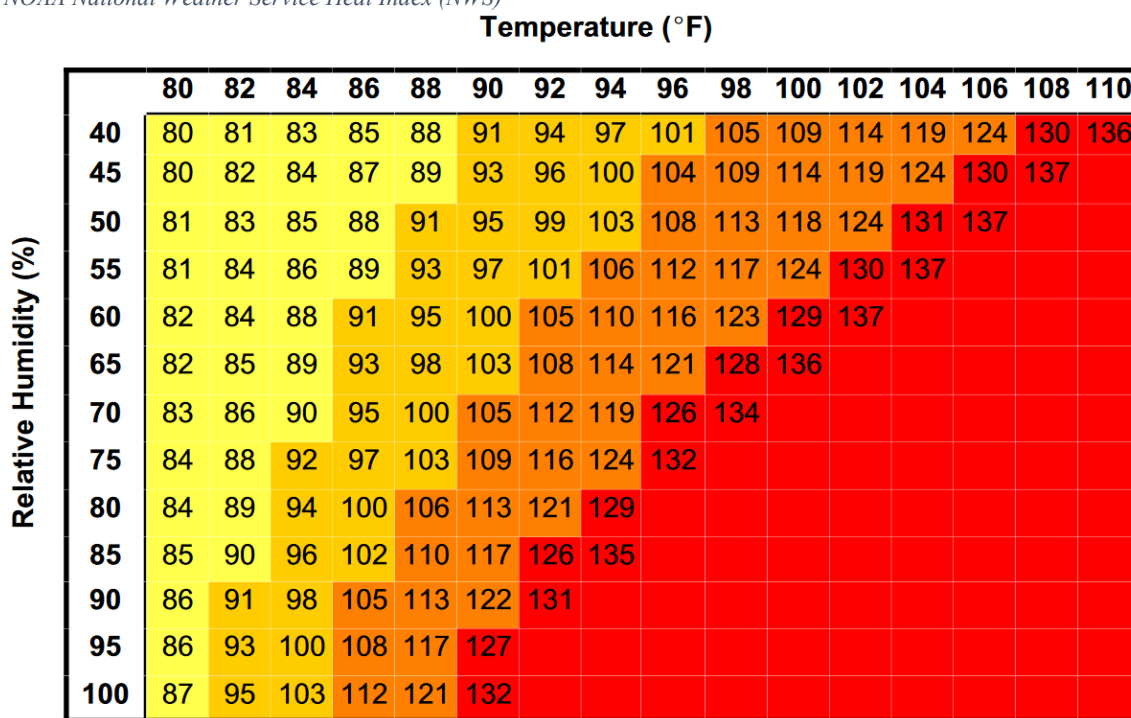
7.1 HAZARD DESCRIPTION

Severe summer weather includes hazards that are found during spring, summer and early fall seasons of the year in Lamar County. Severe summer weather can and does affect the entire county, and all critical facilities are susceptible to severe summer weather. Included in this category are hurricane, lightning, hail, tornado, straight-line wind and extreme heat. Each hazard is examined independently; however, it is recognized that these hazards may occur together.

7.2 RELATED HAZARDS

7.2.1 Extreme Heat

Figure 7-1 NOAA National Weather Service Heat Index (NWS)



Likelihood of Heat Disorders with Prolonged Exposure and/or Strenuous Activity

Caution
 Extreme Caution
 Danger
 Extreme Danger

Hazard Description

Table 7-2 Hazard Description – Extreme Heat, Lamar County, MS

Potential Probability	low
	medium
	high

Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Year Round, especially Spring & Summer
Duration	Events may last hours or days
Analysis Source	NOAA, NWS

The term “extreme heat,” sometimes called “heat wave,” is to some extent a relative one describing a period when weather conditions include temperatures and humidity significantly higher than those usual for a particular geographic area.

Location

Due to the subtropical climate with high humidity of Lamar County in the Pine Belt area of South Mississippi, the entire county may be affected by extreme heat, including the jurisdictions of Lumberton, Purvis and Sumrall.

Extent

The National Weather Service (NWS) issues alerts to the public based on its Heat Index (HI), which takes both temperature and humidity into account. The NWS will initiate alert procedures when the HI is expected to exceed 105°–110°F (depending on local climate) for at least two consecutive days (NWS, 2022).

Historical Frequency & Probability of Future Occurrence

In Lamar County, Mississippi, July and August are typically the hottest months, with average high temperatures reaching into the 90s, according to U.S. Climate Data. Specifically, July is often cited as the hottest month. In Purvis, the average high temperature in July is 92 degrees Fahrenheit.

Since the National Weather Service began record-keeping on January 1, 1893, Lamar County, MS has experienced several instances of extreme heat, reaching 106°F on multiple occasions. The highest temperature ever recorded in the county was 107°F on August 26, 2023. Below is a table listing the top ten highest temperature days on record for Lamar County.

Table 7-3. Record Highest Temperatures in Lamar County, MS

Date	Temperature (Fahrenheit)	Rank
8/26/2023	107	1
8/27/2023	106	2
6/14/1963	106	3
8/30/1951	106	4
6/20/1936	106	5
10/26/1919	106	6
6/26/1914	106	7
8/24/2023	105	8
8/23/2023	105	9
8/19/2023	105	10

FEMA NRI Score Table

Table 7-4. Heat Wave: Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	66.81	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	66	Relatively Moderate
28073020304	Unincorporated Lamar County	65.81	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	64.54	Relatively Moderate
28073020205	Unincorporated Lamar County	60.78	Relatively Moderate
28073020600	Unincorporated Lamar County	60.41	Relatively Moderate
28073020501	Unincorporated Lamar County	58.82	Relatively Moderate
28073020204	Unincorporated Lamar County	58.66	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	57.97	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	55.97	Relatively Moderate
28073020303	Unincorporated Lamar County	55.17	Relatively Moderate
28073020306	Unincorporated Lamar County	53.74	Relatively Moderate
28073020502	Unincorporated Lamar County	53.14	Relatively Moderate
28073020308	Unincorporated Lamar County	52.56	Relatively Moderate
28073020203	Unincorporated Lamar County	51.7	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	51.31	Relatively Moderate
28073020307	Unincorporated Lamar County	41.78	Relatively Low
Source: National Risk Index, 2023			

Impacts and Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis, and Sumrall may be impacted by extreme heat, affecting crops, vegetation, and livestock, increase the risk of wildfires, cause utility and economic losses (decreased tourism, increased energy costs, crop losses, etc.). The primary impact of extreme heat is on human health, with disorders such as sunstroke, heat exhaustion, heat cramps, and even death. There are also undoubtedly indirect and chronic health effects from extreme heat, the magnitude of which are difficult or impossible to estimate. Environmental effects can include loss of wildlife and vegetation and increased probability of wildfires.

There are many vulnerable populations in Lamar County, including those in the table below. People particularly susceptible to extreme heat are the elderly, small children, and persons with chronic illnesses.

Table 7-5 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%

Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

7.2.2 Thunderstorms and Lightning

Hazard Description

Table 7-6 Hazard Description – Thunderstorms & Lightning, Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Year Round, especially Spring & Summer
Duration	Storms that produce lightning may last hours or days
Analysis Source	NOAA, NWS, Vaisala, NFPA, NIFC

Lightning is defined by the NWS as “a visible electrical discharge produced by a thunderstorm. The discharge may occur within or between clouds, between the cloud and air, between a cloud and the ground, or between the ground and a cloud.” A lightning discharge may be over five miles in length, generate temperatures upwards of 50,000°F, and carry 50,000 volts of electrical potential. Lightning is most often associated with thunderstorm clouds, but lightning can strike as far as five to 10 miles from a storm. Thunder is caused by the rapid expansion of air heated by a lightning strike. Cloud-to-ground lightning strikes occur with significant frequency in the southeastern US than in other parts of the country.

Location

This hazard can affect the entire county and the state of Mississippi, so the risk to the county is high. The individual jurisdictions of Lumberton, Purvis and Sumrall experience lightning, as well. Potential impacts of lightning include burns, nerve damage, cardiac effects, hearing loss, trauma, mental disorders, death, wildfires, property damage, loss of utilities.

Extent

A lightning flash is created by a transfer of significant charge between two charged objects. Lightning discharges can occur inter-cloud, cloud-to-cloud, cloud-to-air, and cloud-to-ground. Cloud-to-ground (CG) lightning has the greatest risk to society. A CG stroke can kill, destroy equipment, start fires, and disturb power delivery systems. The lightning activity level (LAL) provides a scale for measuring lightning levels.

Figure 7-7 Lightning Activity Level - NWS

Lightning Activity Level (LAL)	
Is a scale which describes lightning activity. Values are labeled 1-6:	
LAL 1	No thunderstorms
LAL 2	Isolated thunderstorms. Light rain will occasionally reach the ground. Lightning is very infrequent, 1 to 5 cloud to ground strikes in a five minute period.
LAL 3	Widely scattered thunderstorms. Light to moderate rain will reach the ground. Lightning is infrequent, 6 to 10 cloud to ground strikes in a 5 minute period.
LAL 4	Scattered thunderstorms. Moderate rain is commonly produced Lightning is frequent, 11 to 15 cloud to ground strikes in a 5 minute period.
LAL 5	Numerous thunderstorms. Rainfall is moderate to heavy. Lightning is frequent and intense, greater than 15 cloud to ground strikes in a 5 minute period.
LAL 6	Dry lightning (same as LAL 3 but without rain). This type of lightning has the potential for extreme fire activity and is normally highlighted in fire weather forecasts with a Red Flag Warning.

Source: graphical.weather.gov

Historical Frequency and Probability of Future Occurrence

Mississippi typically experiences a moderate number of lightning strikes compared to other states in the US. While not a lightning "hotspot" like Florida or Texas, Mississippi still sees a considerable amount of thunderstorm activity each year, placing it within the top five states for total lightning strikes. Mississippi averages 875,720 lightning strikes per year, with an average density of 18.4 strikes per square mile. This makes Mississippi one of the most lightning-prone states in the US, experiencing frequent thunderstorms, particularly during the summer months. The warm, humid air and solar heating contribute to these frequent thunderstorms, especially in the afternoon.

Lightning events typically coincide with thunderstorms, which bring precipitation. Just like many areas in United States, Mississippi has experienced an upward trend in the frequency of extreme precipitation events, so an increase in thunderstorms—and therefore lightning events—is likely (NOAA, 2022). Future lightning trends are predicted to remain consistent in the next 20 years in Lamar County.

Impacts and Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis, and Sumrall may be impacted by lightning. Lightning is the second most deadly weather phenomenon in the U.S., being second only to floods. In Mississippi, the average number of deaths per year from lightning strikes is less than one. While the state has a high rate of lightning strikes per capita, the actual number of fatalities is relatively low. Between 1959

and 2017, 109 people died from lightning strikes in Mississippi. More recently, four people have died from lightning strikes since 2016, according to the National Weather Service (NWS).

Mississippi ranks 15th in the US for lightning deaths, despite being the 35th most populated state according to the NWS. The last recorded lightning death in Mississippi was in 2016, with three fatalities. From 1959 to 2017, 109 people died from lightning strikes in Mississippi. Lightning kills about 20 people each year in the U.S.

Despite the enormous energy carried by lightning, only about 10% of strikes are fatal (NWS, 2022b). Injuries include central nervous system damage, burns, cardiac effects, hearing loss, and trauma. The effects of central nervous system injuries tend to be long-lasting and severe, leading to such disorders as depression, alcoholism, chronic fatigue, and in some cases suicide. Lightning also strikes structures, causing fires and damaging electrical equipment. Wildland fires are often initiated by lightning strikes as are petroleum storage tank fires. About one third of all power outages are lightning-related.

There are many vulnerable populations in Lamar County, including those in the table below. Any community, whether vulnerable or not, may experience lightning. However, those with inadequate living conditions or shelter may be more vulnerable to a strike.

Table 7-8 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

Additionally, over 2.9 million Medicare beneficiaries in the U.S. rely on electricity-dependent durable medical and assistive equipment (DME) and devices to live independently in their homes, and some of those individuals also have health care service dependencies.

Lightning strikes may lead to power outages depending on the location of the strike and amount of damage inflicted. The following table lists types of critical facilities that could be negatively affected by power outages, including places like hospitals and dialysis centers that rely on power to operate lifesaving equipment. Any damage to any of these locations due to lightning could delay critical resources to those in need.

Table 7-9 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 7-10 Lightning: Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	98.56	Very High
28073020304	Unincorporated Lamar County	98.25	Very High
28073020402	City of Purvis & Unincorporated Lamar County	97.82	Very High
28073020102	Town of Sumrall & Unincorporated Lamar County	97.02	Very High
28073020205	Unincorporated Lamar County	96.58	Very High
28073020600	Unincorporated Lamar County	96.31	Very High
28073020204	Unincorporated Lamar County	95.29	Very High
28073020501	Unincorporated Lamar County	94.64	Very High
28073020206	Town of Lumberton & Unincorporated Lamar County	94.41	Very High
28073020303	Unincorporated Lamar County	93.82	Very High
28073020101	Town of Sumrall & Unincorporated Lamar County	93.61	Relatively High
28073020306	Unincorporated Lamar County	92.96	Relatively High
28073020308	Unincorporated Lamar County	91.94	Relatively High
28073020203	Unincorporated Lamar County	91.29	Relatively High
28073020502	Unincorporated Lamar County	91.28	Relatively High
28073020401	City of Purvis & Unincorporated Lamar County	89.65	Relatively High
28073020307	Unincorporated Lamar County	79.03	Relatively High
Source: National Risk Index, 2023			

THUNDERSTORMS

Due to its location in the Gulf Coast region, Lamar County and its municipalities experience frequent thunderstorms throughout the year. These storms often bring damaging winds, heavy rainfall, and intense lightning, all of which pose risks to infrastructure, property, and public safety. In addition to these primary hazards, thunderstorms in the region can also produce secondary severe weather events such as tornadoes and hailstorms, increasing the potential for widespread damage. Local records indicate that numerous severe thunderstorms and windstorm events have impacted both unincorporated areas and incorporated jurisdictions within the county since the establishment of the Lamar County Emergency Management Agency in 1997.

A common consequence of these storms is the downing of trees onto overhead power lines. All jurisdictions within Lamar County rely on aerial electrical distribution systems, making widespread power outages a frequent occurrence during severe weather events. These outages typically last between 4 to 6 hours. While generally not life-threatening, they can pose significant inconveniences to residents and may affect those with medical needs or limited mobility more severely.

Structural damage also occurs during these events, primarily involving roof damage and incidents where falling trees impact homes. This type of damage is often attributed to squall lines associated with fast-moving frontal systems. The effects of these storms tend to be distributed countywide, with all jurisdictions experiencing similar levels of vulnerability.

Recognizing these risks, Lamar County will continue to prioritize vegetation management, public communication, and coordination with utility providers to reduce service disruption and structural losses during future storm events.

The following table shows the number of Thunderstorms for all of the jurisdictions from 2019 to June 2024.

Table 7-11 Thunderstorm Related Events in Lamar County, MS

THUNDERSTORM RELATED EVENTS				
LOCATION	DATE	TIME	TYPE	MAGNITUDE
TALOWAH	1/19/2019	1035	Thunderstorm Wind	50
TATUMS CAMPS	4/18/2019	1523	Thunderstorm Wind	50
TATUMS CAMPS	4/18/2019	1532	Thunderstorm Wind	54
OAK GROVE	5/9/2019	1205	Thunderstorm Wind	50
SUMRALL	6/25/2019	1715	Thunderstorm Wind	43
OKAHOLA	6/25/2019	1720	Thunderstorm Wind	43
OAK GROVE	6/25/2019	1720	Thunderstorm Wind	43
HICKORY GROVE	7/13/2019	2125	Thunderstorm Wind	50
NORTH LUMBERTON	7/14/2019	330	Thunderstorm Wind	50
LUMBERTN BASS MEM AR	7/14/2019	1009	Thunderstorm Wind	50
WARDWELL STATION	7/14/2019	1034	Thunderstorm Wind	50
PURVIS	7/14/2019	1042	Thunderstorm Wind	50
WARDWELL STATION	7/14/2019	1042	Thunderstorm Wind	50
BAXTERVILLE	7/15/2019	1415	Thunderstorm Wind	50
SUMRALL	10/26/2019	440	Thunderstorm Wind	50
PURVIS	3/31/2020	742	Thunderstorm Wind	52
TATUMS CAMPS	4/19/2020	1833	Thunderstorm Wind	50
PURVIS	4/19/2020	1848	Thunderstorm Wind	50
PURVIS	4/19/2020	1853	Thunderstorm Wind	50
BAXTERVILLE	7/8/2020	1420	Thunderstorm Wind	50
LUMBERTON	7/15/2020	1625	Thunderstorm Wind	50
PURVIS	8/16/2020	1901	Thunderstorm Wind	50
BAXTERVILLE	3/17/2021	1712	Thunderstorm Wind	65
TATUMS CAMPS	3/17/2021	1718	Thunderstorm Wind	55
OKAHOLA	3/17/2021	1724	Thunderstorm Wind	50
WARDWELL STATION	3/17/2021	1731	Thunderstorm Wind	50
OLOH	4/9/2021	2359	Thunderstorm Wind	52
OLOH	4/10/2021	3	Thunderstorm Wind	54
WARDWELL STATION	4/10/2021	15	Thunderstorm Wind	52
PURVIS	4/23/2021	2345	Thunderstorm Wind	50
PURVIS	6/13/2021	1639	Thunderstorm Wind	50
LUMBERTON	6/13/2021	1700	Thunderstorm Wind	52
SUMRALL	4/15/2022	1658	Thunderstorm Wind	50
SUMRALL	6/10/2022	1246	Thunderstorm Wind	52
OAK GROVE	6/10/2022	1301	Thunderstorm Wind	52
OAK GROVE	6/17/2022	1833	Thunderstorm Wind	39
OAK GROVE	4/15/2023	1155	Thunderstorm Wind	52
HIGGINS	5/5/2023	1353	Thunderstorm Wind	52
SUMRALL	5/5/2023	1358	Thunderstorm Wind	70
WARDWELL STATION	5/5/2023	1415	Thunderstorm Wind	52
OAK GROVE	5/5/2023	1417	Thunderstorm Wind	52

THUNDERSTORM RELATED EVENTS				
LOCATION	DATE	TIME	TYPE	MAGNITUDE
EPLEY	5/5/2023	1423	Thunderstorm Wind	52
WARDWELL STATION	5/5/2023	1436	Thunderstorm Wind	52
PURVIS	5/5/2023	1441	Thunderstorm Wind	52
TATUMS CAMPS	6/10/2023	1615	Thunderstorm Wind	55
EPLEY	6/10/2023	1625	Thunderstorm Wind	40
OLOH	6/12/2023	1543	Thunderstorm Wind	47
TATUMS CAMPS	6/12/2023	1610	Thunderstorm Wind	45
PURVIS	6/12/2023	1620	Thunderstorm Wind	45
HICKORY GROVE	6/14/2023	1747	Thunderstorm Wind	75
HICKORY GROVE	6/16/2023	508	Thunderstorm Wind	55
PURVIS	1/9/2024	15	Thunderstorm Wind	45
TALOWAH	1/25/2024	1041	Thunderstorm Wind	50
HICKORY GROVE	4/10/2024	913	Thunderstorm Wind	50
NORTH LUMBERTON	4/10/2024	930	Thunderstorm Wind	50
HICKORY GROVE	5/13/2024	315	Thunderstorm Wind	50
EPLEY	5/13/2024	320	Thunderstorm Wind	60
WARDWELL STATION	5/13/2024	323	Thunderstorm Wind	50
BAXTERVILLE	6/4/2024	1745	Thunderstorm Wind	61
OAK GROVE	6/5/2024	1525	Thunderstorm Wind	52

7.2.3 Hail Storms

Hazard Description

Table 7-12 Hazard Description – Hail Storms

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Year round, especially late spring, summer & early fall
Duration	Hailstorms may last hours or days
Analysis Source	NOAA, NWS, Weather on the Web, EWG, TORRO

The NWS definition of hail is “showery precipitation in the form of irregular pellets or balls of ice more than 5 mm in diameter, falling from a cumulonimbus cloud. Its size can vary from the defined minimum, a little over a quarter of an inch, up to 4.5 inches or larger.” Severe hail is defined as being 0.75 inches or more in diameter. The largest hailstones are formed in supercell thunderstorms because of their sustained updrafts and long duration.

Location

Lamar County can experience hailstorms countywide, including the jurisdictions of Lumberton, Purvis and Sumrall.

Extent

The TORRO Hailstorm Intensity Scale was developed by Jonathan Webb to measure and categorize hailstorms (TORRO, 2023). It extends from H0 (hard hail, no damage) to H10 (super hailstorm, extensive structural damage, risk of severe/fatal injuries) with its increments of intensity or damage potential related to hail size (distribution and maximum), texture, numbers, fall speed, speed of storm translation, and strength of the accompanying wind. The scale could be modified depending on factors such as building materials and types (e.g., whether roofing tiles are predominantly slate, shingle, or concrete). Hail is considered severe when reaching a size of 0.75 inches in diameter or greater.

Historical Frequency & Probability of Future Occurrence

Hailstorms are a relatively common occurrence in Mississippi, with the spring months being the most active period for severe weather, including hail. While hail can happen year-round, March, April, and May tend to have the highest number of severe weather reports, with a secondary peak in November and December. The state has experienced numerous hailstorms in the past, including some with large hail. Mississippi has experienced 288 documented hailstorms between 2012 and 2021, according to RestoreMasters. Hailstones can range in size, with some reaching significant diameters. The largest hailstone recorded in Mississippi history was 5 inches in diameter, according to the National Weather Service. Recent hail events include a storm in June 2025 that produced hail in McComb, Jackson, and Hattiesburg, with hail sizes reaching 1.25" and 1.50", according to HailPoint.com. Hail is likely to occur again in the future in any part of the county, including Lumberton, Purvis, and Sumrall.

Table 7-12 Hail Storm Data Events and Locations in Lamar County, MS

Hail Storm Data Events and Locations				
LOCATION	DATE	TIME	TYPE	MAGNITUDE
HICKORY GROVE	12/16/2019	1705	Hail	1.75
OAK GROVE	4/19/2020	1843	Hail	1.75
WARDWELL STATION	4/19/2020	1848	Hail	1.5
TATUMS CAMPS	4/15/2022	1604	Hail	2
TATUMS CAMPS	4/15/2022	1619	Hail	1
PURVIS	4/15/2022	1631	Hail	1
BAXTERVILLE	4/27/2023	259	Hail	1
EPLEY	4/27/2023	336	Hail	1
HIGGINS	5/5/2023	1354	Hail	1
SUMRALL	5/5/2023	1359	Hail	1
OAK GROVE	5/11/2023	1715	Hail	1
OAK GROVE	5/10/2024	38	Hail	0.88

Impacts & Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis and Sumrall. Deaths and injuries due to hail have occurred but are rare. Most impacts are economic, but hailstorms can also cause utility failure through damage to critical infrastructure. Hailstorms may also lead to car accidents and road closures. There are many vulnerable populations in Lamar County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to hailstorms.

Table 7-13 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
Source: US Census Bureau, 2020 & JobsEQ, 2025	

Economic loss can be extensive, especially to agriculturally based economies. Hail is very damaging to crops. Severe hail may also cause extensive property damage, including damage to vehicle paint and bodywork, glass, shingles and roofs, plastic surfaces, etc. Hail-related insured losses averaged between \$8 billion to \$14 billion each year in the years 2000–2019 in the U.S. (Insurance Information Institute, 2022).

Table 7-14 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall

Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 7-15 Hail Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County		Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County		Relatively Moderate
28073020205	Unincorporated Lamar County		Relatively Moderate
28073020304	Unincorporated Lamar County		Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County		Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County		Relatively Moderate
28073020600	Unincorporated Lamar County		Relatively Moderate
28073020306	Unincorporated Lamar County		Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County		Relatively Moderate
28073020303	Unincorporated Lamar County		Relatively Moderate
28073020204	Unincorporated Lamar County		Relatively Moderate
28073020308	Unincorporated Lamar County		Relatively Moderate
28073020501	Unincorporated Lamar County		Relatively Moderate
28073020502	Unincorporated Lamar County		Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County		Relatively Low
28073020203	Unincorporated Lamar County		Relatively Low
28073020307	Unincorporated Lamar County		Relatively Low

Source: National Risk Index, 2023

7.2.4 Straight-Line Wind

Hazard Description

Table 7-16 Hazard Description – Straight-Line Wind

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	County wide
Seasonal Pattern or Conditions	Year Round
Duration	Events may last hours to days
Analysis Source	NOAA, NWS, EWG

The term “straight-line wind” is used to describe any wind not associated with rotation, particularly tornadoes. Of concern is high wind, defined by the NWS as “sustained wind speeds of 40 mph or greater, lasting for one hour or longer, or winds of 58 mph or greater for any duration.” Like tornadoes, strong, straight-line winds are generated by thunderstorms, and they can cause similar damage. Straight-line wind speeds can approach 150 mph, equivalent to those in an EF3 tornado.

Location

Straight-line wind events affect the entire county, including the jurisdictions of Lumberton, Purvis, and Sumrall.

Extent

The Beaufort Wind Scale explains different wind speeds based on how they would affect land conditions and sea conditions (NOAA, 2022).

Table 7-17 Beaufort Wind Scale

Force	Wind (Knots)	WMO Classification	Appearance of Wind Effects on Land
0	Less than 1	Calm	Calm, smoke rises vertically
1	1-3	Light Air	Smoke drift indicates wind direction, still wind vanes
2	4-6	Light Breeze	Wind felt on face, leaves rustle, vanes begin to move
3	7-10	Gentle Breeze	Leaves and small twigs constantly moving, light flags extended
4	11-16	Moderate Breeze	Dust, leaves, and loose paper lifted, small tree branches move
5	17-21	Fresh Breeze	Small trees in leaf begin to sway
6	22-27	Strong Breeze	Larger tree branches moving, whistling in wires
7	28-33	Near Gale	Whole trees moving, resistance felt walking against wind
8	34-40	Gale	Twigs breaking off trees, generally impedes progress
9	41-47	Strong Gale	Slight structural damage occurs, slate blows off roofs

10	48-55	Storm	Seldom experienced on land, trees broken or uprooted, "considerable structural damage"
11	56-63	Violent Storm	
12	64+	Hurricane	
<i>Source: NOAA, 2022</i>			

Historical Frequency & Probability of Future Occurrence

Straight-line wind storms are a common weather hazard in Mississippi, capable of causing significant damage similar to or even exceeding that of tornadoes, though the winds are not rotating. These storms, also known as damaging winds, can occur any time of year but are more frequent during the spring and summer months. They are characterized by strong, straight-line winds that can knock down trees, damage structures, and even cause injuries or fatalities. Straight-line winds are a frequent weather event in South Mississippi, not just during severe weather outbreaks. These winds can cause extensive damage to trees, buildings, and infrastructure, sometimes even more damage than a tornado. Unlike tornadoes, which often cause damage in a circular or swirling pattern, straight-line winds typically leave debris and downed trees in a more uniform, parallel direction. Straight-line winds are often the result of downdrafts, which are columns of sinking air that fan out when they hit the ground.

Table 7-18 High Wind Events in Lamar County, MS

SIGNIFICANT STRONG WIND EVENTS				
LOCATION	DATE	TIME	EVENT	MAGNITUDE
Lamar County	3/1/2010	1958	Strong Wind	43
Lamar County	10/26/2019	530	Strong Wind	45

Impacts & Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis and Sumrall may be impacted by straight-line wind. The impacts of straight-line winds are virtually the same as those from tornadoes with similar wind speeds. The damage is distinguishable from that of a tornado only in that the debris is generally deposited in nearly parallel rows. Downbursts are particularly hazardous to aircraft in flight. This hazard may cause injury from flying objects, death, automobile accidents, property damage, aircraft accidents, crop/vegetation/livestock losses, road closures, fallen trees, loss of utilities.

There are many vulnerable populations in Lamar County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to straight-line winds.

Table 7-19 Vulnerable Populations in Lamar County, MS

Vulnerability Category		Data Point
Persons Over 65 Years of Age		15.9%
Persons with Disabilities Under 65		14.1%

Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

Straight-line wind may cause significant damage to critical facilities in the county and could even bring down power lines, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from straight-line wind or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 7-20 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 7-21 Strong Wind: Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	73.61	Relatively Moderate
28073020205	Unincorporated Lamar County	68.42	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	67.06	Relatively Moderate
28073020304	Unincorporated Lamar County	63.97	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	63.26	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	61.03	Relatively Moderate
28073020600	Unincorporated Lamar County	57.91	Relatively Moderate
28073020306	Unincorporated Lamar County	55.19	Relatively Low
28073020303	Unincorporated Lamar County	52.8	Relatively Low
28073020308	Unincorporated Lamar County	51.9	Relatively Low
28073020101	Town of Sumrall & Unincorporated Lamar County	51.88	Relatively Low
28073020501	Unincorporated Lamar County	51.49	Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County	51.38	Relatively Low
28073020204	Unincorporated Lamar County	50.58	Relatively Low
28073020502	Unincorporated Lamar County	49.48	Relatively Low
28073020203	Unincorporated Lamar County	45.76	Relatively Low
28073020307	Unincorporated Lamar County	31.61	Relatively Low

Source: National Risk Index, 2023

7.2.5 Summary Assessment of Severe Summer Weather Vulnerability & Potential Losses

Aside from the impacts and vulnerable populations already identified in each hazard, it is very difficult to estimate specific potential losses by jurisdiction for severe summer weather. Several factors limit the planning team's ability to determine potential vulnerability and losses including:

- Lack of location research
- Most hazards are tied to weather and cannot be predicted by location
- Limited GIS data is available for severe summer weather in Mississippi

Lamar County, Lumberton, Purvis, and Sumrall's vulnerability to severe summer weather, to some extent, includes all structures, people, and businesses. Of note, those most vulnerable and the visitors in the county are at greatest risk to severe summer weather.

The 22 challenge variables that may affect Lamar County are presented below.

Table 7-22 Community Resilience Challenges Index Challenge Variables

22 Challenge Variables			
Population, Household, Housing Characteristics	Economic	Healthcare	Connection to Community
Population without a High School Diploma Population 65 and Older Population with a Disability Households without a Vehicle Households with Limited English Single-parent Households Households without a Smartphone Mobile Homes as Percentage of Housing Owner-Occupied Housing	Population below Poverty Level Median Household Income Unemployed Labor Force Unemployed Women Labor Force Income Inequality Workforce in Predominant Sector	Number of Hospitals Medical Professional Capacity Populations without Health Insurance	Presence of Civic and Social Organizations Populations without Religious Affiliation Percent of Inactive Voters Population Change
Source: FEMA Resilience Analysis and Planning Tool (RAPT) 2023			
Individual Maps for each of the categories in Attachments			

CHAPTER 8 TORNADO

8.1 HAZARD DESCRIPTION

Table 8-1 Hazard Description – Tornado, Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Year round
Duration	A few minutes to hours
Analysis Source	NOAA, NWS

The National Weather Service describes a tornado as “a violently rotating column of air, usually pendant to a cumulonimbus, with circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by

a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena” (NWS, 2022). Like hail, most tornadoes are spawned by supercell thunderstorms. They usually last only a few minutes, although some have lasted more than an hour and traveled several miles.

8.2 LOCATION

A tornado event is possible anywhere in Lamar county, including the jurisdictions of Lumberton, Purvis, and Sumrall. FEMA designates Unincorporated Lamar County and its municipalities as falling within a Category IV Wind Zone, identifying this region as being at high risk for extreme wind events with potential gusts up to 200 miles per hour. This classification requires that building codes, especially for critical infrastructure, enforce enhanced wind-resistant standards.

According to the NOAA Storm Prediction Center, the county consistently experiences an average of 11 to 15 tornadoes per 1,000 square miles, based on data spanning from 1993 to 2020 in National Climatic Data Center records.

8.3 EXTENT

Tornadoes impacting the county may range from weak to violent and can result from seasonal storms, hurricanes, or tropical weather systems. The updated Enhanced Fujita Scale (EF0–EF5) is used to estimate tornado intensity based on observed damage, with expected damage levels.

Table 8-2. Enhanced Fujita (EF) Scale for Estimation of Tornado Wind Speeds

EF Scale	Class	Windspeed (mph)	Windspeed (km/h)	Description	Typical Damage
EF0	Weak	65–85	105–137	Gale	Light damage; broken branches, minor roof damage
EF1	Weak	86–110	138–177	Weak	Moderate damage; significant roof damage, mobile homes overturned
EF2	Strong	111–135	178–217	Strong	Considerable damage; roofs torn off, large trees snapped or uprooted
EF3	Strong	136–165	218–266	Severe	Severe damage; entire stories of well-built homes destroyed, trains overturned
EF4	Violent	166–200	267–322	Devastating	Devastating damage; well-built houses leveled, vehicles thrown.
EF5	Violent	> 200	> 322	Incredible	Incredible damage; structures swept away, reinforced buildings severely damaged
Source: NOAA Storm Prediction Center, 2022					

EF0 – Light - Chimneys are damaged, tree branches are broken, shallow rooted trees are toppled.

EF1 – Moderate - Roof surfaces are peeled off, windows are broken, some tree trunks are snapped, unanchored mobile homes are overturned, and attached garages may be destroyed.

EF2 – Considerable - Roof structures are damaged, mobile homes are destroyed, debris becomes airborne, missiles are generated, and large trees are snapped or uprooted.

EF3 – Severe - Roofs and some walls are torn from structures, small buildings are destroyed, and most trees are uprooted.

EF4 – Devastating - Well-constructed houses are destroyed; some structures are lifted from foundations and blown some distance. Cars are blown some distance, large debris become airborne.

EF5 – Incredible - Strong frame houses are lifted from foundations, reinforced concrete structures are damaged, automobile sized missiles become airborne, and trees are completely debarked.

8.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

On April 24, 1908, the Town of Purvis was virtually destroyed by a devastating cyclone—one of the Top Ten Deadliest Tornadoes in U.S. History. In Lamar County alone, an estimated 55 to 60 people lost their lives, over 400 were injured, and only 7 of approximately 150 homes remained standing. Property losses were estimated in excess of \$500,000, a considerable sum at the time. Tornado path records and historical storm assessments indicate multiple tornado tracks through Lamar County. These path maps reveal clusters of tornado activity near Purvis, Lumberton, and areas east of Hattiesburg, suggesting recurrent exposure, particularly during spring and late summer months when tropical systems enter the region. Lamar County is highly vulnerable to tornado events and other severe storms, both historically and based on current risk

classifications. This highlights the importance of preparedness, planning, and mitigation across all jurisdictions.

A key concern is the number of residents living in structures that are not built to withstand high winds, which are frequently damaged during such events. Tornado occurrence in Lamar County is extremely high. The Storm Events Database records many tornado occurrences in the county.

Future tornadoes are very likely, and significant damage is probable. According to Neighborhoods at Risk, Lamar County is expected to experience an increase in average annual temperature, which could even increase the formation of additional tornadoes with the increased warm air (2023).

Table 8-3 Tornado Related Events in Lamar County, MS

TORNADO RELATED EVENTS			
LOCATION	DATE	TIME	TYPE
Unincorporated Lamar County	2/20/1954	35	Tornado
Unincorporated Lamar County	2/26/1958	1800	Tornado
Unincorporated Lamar County	2/21/1961	1720	Tornado
Unincorporated Lamar County	8/19/1965	1345	Tornado
Unincorporated Lamar County	11/13/1972	1130	Tornado
Unincorporated Lamar County	9/9/1974	1500	Tornado
Unincorporated Lamar County	2/16/1975	2030	Tornado
Unincorporated Lamar County	11/22/1989	1530	Tornado
Unincorporated Lamar County	8/27/1992	1815	Tornado
Unincorporated Lamar County	3/9/1994	1020	Tornado
Unincorporated Lamar County	4/11/1995	515	Tornado
Unincorporated Lamar County	1/15/1997	1649	Tornado
Unincorporated Lamar County	11/9/2000	150	Tornado
Unincorporated Lamar County	2/16/2001	1539	Tornado
Unincorporated Lamar County	3/12/2001	940	Tornado
Unincorporated Lamar County	10/13/2001	1230	Tornado
Unincorporated Lamar County	1/7/2005	2135	Tornado
Unincorporated Lamar County	3/20/2006	1610	Tornado
Unincorporated Lamar County	10/17/2006	239	Tornado
Unincorporated Lamar County	10/27/2006	645	Tornado
Unincorporated Lamar County	11/15/2006	230	Tornado
Unincorporated Lamar County	11/15/2006	350	Tornado
Unincorporated Lamar County	5/15/2008	905	Tornado
Unincorporated Lamar County	9/1/2008	1234	Tornado
Unincorporated Lamar County	9/1/2008	1245	Tornado
Unincorporated Lamar County	12/10/2008	113	Tornado
Unincorporated Lamar County	9/4/2011	705	Tornado
Unincorporated Lamar County	3/2/2012	1823	Tornado
Unincorporated Lamar County	12/9/2012	1615	Tornado
Unincorporated Lamar County	2/10/2013	1649	Tornado
Unincorporated Lamar County	2/10/2013	1703	Tornado
Unincorporated Lamar County	12/23/2014	1445	Tornado

TORNADO RELATED EVENTS			
LOCATION	DATE	TIME	TYPE
Unincorporated Lamar County	12/23/2014	1446	Tornado
Unincorporated Lamar County	10/31/2015	1524	Tornado
Unincorporated Lamar County	1/21/2016	1849	Tornado
Unincorporated Lamar County	2/23/2016	1607	Tornado
Unincorporated Lamar County	2/23/2016	1615	Tornado
Unincorporated Lamar County	2/23/2016	1629	Tornado
Unincorporated Lamar County	3/31/2016	653	Tornado
Unincorporated Lamar County	1/2/2017	1452	Tornado
Unincorporated Lamar County	1/21/2017	335	Tornado
Unincorporated Lamar County	3/30/2017	432	Tornado
Unincorporated Lamar County	8/30/2017	904	Tornado
Unincorporated Lamar County	4/14/2018	907	Tornado
SUMRALL	12/16/2019	1717	Tornado
BAXTERVILLE	4/19/2020	1834	Tornado
BAXTERVILLE	3/17/2021	1716	Tornado
OAK GROVE	3/30/2022	1844	Tornado
PURVIS	3/30/2022	1844	Tornado
WARDWELL STATION	8/24/2022	1204	Tornado

FEMA Disaster Declarations

Lamar County has been included in several FEMA disaster declarations due to tornadoes and severe storms. Notable instances include:

May 2019 Severe Storms and Tornadoes – DR-4446-MS: Followed multiple EF1–EF2 tornadoes in southern Mississippi.

March 2014 Severe Storms and Tornadoes – DR-4153-MS: Included tornado events causing property damage across several counties.

April 2011 Tornado Outbreak – DR-4026-MS: One of the deadliest outbreaks on record, affecting multiple southern states, including damaging tornadoes in Lamar County.

These declarations unlocked Public Assistance and Individual Assistance programs, enabling community recovery and mitigation investments such as shelter retrofitting and infrastructure resilience upgrades.

Table 8-4 EOC Activations for Tornado Related Events in Lamar County, MS

EOC Activations for Tornado Related Events since 1998	
Type Issued	Number Issued
Tornado Watches	175
Tornado Warnings	85
Tornado Reported (EF1 or Greater)	28

8.5 IMPACTS & LOSS ESTIMATES

Lamar County and the jurisdictions of Lumberton, Purvis, and Sumrall will be impacted by tornadoes in a foreseeable future with an unpredictable path most of the time. Tornadoes may cause injury, death, property damage, loss of utilities,

crop/vegetation/livestock losses, car accidents, road closures, fallen trees, risk to emergency services. Loss of utilities may occur due to fallen trees and wind damage and is common following tornadoes, and, depending on circumstances, communities might be deprived of almost any kind of goods and services including food, water, and medical care. Agriculturally, crop and livestock loss are also possible.

Windborne Debris and Impact on Structures

One of the most destructive aspects of tornadoes is the debris and other objects picked up by the high winds. These debris become missiles that can travel at extreme velocities, damaging buildings and infrastructure. Objects such as small stones, branches, and even pieces of buildings can be picked up by the wind, and they can penetrate windows, doors, walls, and other parts of structures. The greater the wind speed, the larger and heavier the missiles it can carry, leading to a higher likelihood of severe damage.

Even light debris, such as small branches or stones, can cause significant destruction. For example, these lighter missiles can easily shatter windows and damage doors, which increases the repair costs and the time required for recovery. In tornado events with higher wind speeds, larger debris can cause catastrophic damage, especially to residential and commercial buildings not designed to withstand these extreme conditions.

Tornadoes pose a threat to all areas within Lamar County, including both incorporated municipalities and unincorporated regions. Due to the unpredictability of tornado tracks, it is likely that every jurisdiction in Lamar County will experience some level of damage during a tornado event. Tornadoes can cause damage to any part of any jurisdiction, depending on the storm's intensity, path, and duration.

In particular, areas in high-wind zones such as Category IV Wind Zones will face increased vulnerability, and all buildings in these zones must adhere to stringent building codes designed to mitigate wind damage. Given the presence of windborne debris, it is critical that both residential and commercial buildings implement design measures to prevent missile penetration and reduce structural damage.

There are many vulnerable populations in Lamar County, including those in the table below. People with inadequate living conditions or shelter or those who cannot move to shelter quickly enough may be more vulnerable to tornadoes.

Table 8-5 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
Source: US Census Bureau, 2020 & JobsEQ, 2025	

A tornado may cause significant damage to critical facilities in the county and could bring down power lines, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from a tornado or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 8-6 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

8.6 FEMA NRI SCORE

Table 8-7 Tornado Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	81.64	Relatively High
28073020102	Town of Sumrall & Unincorporated Lamar County	76.67	Relatively High
28073020402	City of Purvis & Unincorporated Lamar County	76.49	Relatively High
28073020304	Unincorporated Lamar County	75.95	Relatively High
28073020205	Unincorporated Lamar County	75.04	Relatively Moderate
28073020600	Unincorporated Lamar County	70.28	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	68.19	Relatively Moderate
28073020501	Unincorporated Lamar County	66.17	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	65.35	Relatively Moderate
28073020204	Unincorporated Lamar County	65.19	Relatively Moderate
28073020306	Unincorporated Lamar County	64.11	Relatively Moderate
28073020303	Unincorporated Lamar County	63.93	Relatively Moderate
28073020308	Unincorporated Lamar County	61.96	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	61.89	Relatively Moderate
28073020502	Unincorporated Lamar County	61.41	Relatively Moderate
28073020203	Unincorporated Lamar County	59.02	Relatively Moderate
28073020307	Unincorporated Lamar County	46.23	Relatively Low

Source: National Risk Index, 2023

Recommended Mitigation Strategies

Since tornadoes are hard to predict, the mitigation efforts have focused on programs to educate the public on early warning, proper sheltering techniques, and both individual and community storm shelters. In the educational programs, the importance of NOAA weather radios and other early warning devices are one of the main topics. Due to the terrain, timber, and separation of residences in Unincorporated Lamar County, the uses of sirens as early warning devices are cost prohibitive. Other means of early warning, such as reverse 911, are being investigated to determine the effectiveness and the feasibility. To reduce tornado-related risk, Lamar County will prioritize the following actions:

Community Safe Rooms

Promote construction and public access to FEMA-compliant safe rooms at schools, daycares, healthcare facilities, and emergency shelters. Consider a countywide safe room incentive program.

Enhanced Building Codes

Adopt or enforce International Building Code provisions for high-wind design, including reinforced roofing connections and garage door protections.

Early Warning Systems

Expand siren coverage and integrate storm alert systems (e.g., outdoor speakers, SMS alerts, NOAA weather radios). Conduct quarterly tests and community drills.

Public Awareness Campaigns

Launch “Tornado Awareness Week” annually to distribute safety literature, staging tornado drills in schools and workplaces, and updating evacuation routes.

Post-Disaster Inspection and Tracking

Enforce NFIP's 50% rule through post-event inspections, ensuring damaged structures over 50% of their value are retrofitted or elevated. Maintain permit tracking post-event, even during emergency recovery.

Grant Funding Opportunities

Pursue Hazard Mitigation Grant Program (HMGP) and Pre-Disaster Mitigation (PDM) funding for safe room construction, shelter retrofitting, and building hardening. Support communities with FEMA grants post disaster declarations.

CHAPTER 9 WILDFIRE

9.1 HAZARD DESCRIPTION

Table 9-1 Hazard Description Wildfire

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	Summer months. Wildfire-prone areas are areas affected by drought and/or heavily overgrown and dry brush and debris. Lightning and human triggers cause wildfires.
Duration	Wildfires typically last days but can last months, depending on climate and fuel load as well as resources (financial, manpower) to extinguish the fire
Analysis Source	U.S. Forest Service, National Climate Center, FEMA, AGRC, NWCG, Mississippi Forestry Commission; Mississippi Insurance Commission

Wildfires—uncontrolled fires spreading through both naturally occurring and non-native vegetative fuel sources—are a significant hazard, often beginning unnoticed and spreading quickly while threatening any structures in its path. Wildfires can cover a large geographic area, can be ignited by natural or human sources, and are hard to predict. They help to maintain a healthy ecosystem and have been a natural and fundamental part of the world’s forests and grasslands for millions of years. Fires cleanse and regenerate forests, giving new life to the soil and encouraging biodiversity. They are responsible for the evolution of many of the grasses, brushes, and tree species found in Mississippi.

Wildfires are classified as Wildland and Wildland-Urban Interface (WUI). Wildland fires occur in areas where development is essentially nonexistent except for roads, railroads, or power lines. WUI fires materialize in a geographical area where structures and other human development adjoins wildlands. A fireshed is an area that will adversely affect a community or high-value resource and/or asset if ignited.

9.2 LOCATION

While Lamar County usually experiences high annual precipitation, making it less prone to property-damaging wildfires, certain conditions, such as drought-like weather patterns, can increase the potential for wildfire occurrences. During these periods, fire service officials may issue frequent burn bans to reduce the risk of fires spreading. Additionally, urban development encroaching into forested areas further elevates the potential for property damage from wildfires. On average, years with more spring rainfall and dryer summers typically have higher wildfire incidents in the summer and fall after vegetation dries out and becomes combustible material. Hot temperatures, higher winds, and dry conditions may contribute to prime fire conditions.

Although wildfires in Lamar County have generally been contained, some fires have caused damage, primarily to outbuildings and timber. Structures, particularly those in the unincorporated areas of Lamar County, are more likely to be affected by wildfires due to the rural nature of these areas and the prevalence of timberland. The cities within Lamar County, including Purvis, Lumberton, and Sumrall, are less vulnerable to property-damaging wildfires compared to the unincorporated areas. This is due to the way properties are landscaped and managed, with the incorporation of fire-resistant landscaping materials and defensible space around structures.

9.3 EXTENT

The National Wildfire Coordinating Group (NWCG) classifies fire sizes using the following standards (NWCG, 2023). These standard data values are included in the data table below.

Table 9-2 Size Class of Fire

Size Class of Fire

- As to size of wildfire:
 - Class A - one-fourth acre or less;
 - Class B - more than one-fourth acre, but less than 10 acres;
 - Class C - 10 acres or more, but less than 100 acres;
 - Class D - 100 acres or more, but less than 300 acres;
 - Class E - 300 acres or more, but less than 1,000 acres;
 - Class F - 1,000 acres or more, but less than 5,000 acres;
 - Class G - 5,000 acres or more.

9.4 HISTORICAL FREQUENCY & PROBABILITY OF FUTURE OCCURRENCE

Historically, Lamar County has not experienced any major wildfires that resulted in significant property damage or loss of life. The majority of wildfire incidents in the county have involved grass or timber burns, which typically did not extend to structures. In cases where structures were affected, the damages were primarily limited to abandoned buildings, old barns, or run-down outbuildings, which did not hold significant value.

According to records from the Mississippi Forestry Commission, there have been several wildfire incidents in the past years, but none have caused substantial damage to valuable property. The occurrence of wildfires remains a concern, especially during dry seasons, as conditions can change rapidly. Fire risks are closely monitored, and mitigation strategies are in place to prevent major incidents.

Table 9-3 Wildfires in Lamar County, MS

Wildfires in Lamar County			Structures		
Year	Number of Fires	Acreage	Destroyed	Damaged	Threatened
2004	106				
2005	167				
2006	195				
2007	85	2,168			
2008	75	2,363			
2009	85	1,539			
2010	50	1,099	0	0	14
2011	143	1,791	5	0	103
2012	40	263	2	0	28
2013	37	1,853		2	102
2014	124	2,798	1		45
2015	179	146			30
2016	99	497	3	2	15
2017	83	79			3
2018	35	301	2		12
2019	39	814		1	14
2004-2012	1542	9,223	13	5	366

Throughout the past years, due to the weather conditions in Lamar County, there have not been any major wildfires. The structures that were involved in the fires listed above had minimal value because they were either abandoned houses, old barns, or run down out buildings. All of the reported fires have been either grass or timber burns that did not result in loss of life or property. Although the numbers have been minor in Lamar County, this is always a subject to change with the conditions of the weather.

Wildfires are likely to occur again in the future in Lamar County. According to Neighborhoods at Risk, Lamar County is expected to experience 15 more days that reach above 95°F by 2048 (2023). As annual temperatures continue to increase, longer and more serious wildfire seasons are likely. In fact, Lamar County is expected to experience an increase in average annual temperature of 2°F by 2048 (NOAA, 2022). Along with increased temperatures, variable dry conditions have led to more frequent and lengthy periods of drought, which could also contribute to more severe wildfire seasons.

9.5 IMPACTS & LOSS ESTIMATES

Lamar County and the jurisdictions of Lumberton, Purvis and Sumrall may be impacted by wildfire. Potential impacts of wildfire include injury, burns, smoke inhalation, death, property damage, crop/vegetation/livestock losses, road closures, firefighting expenses, loss of utilities, fallen trees, downed power lines, mass evacuations, risk to emergency services, economic losses.

While wildfire risk in Lamar County is generally low, due to the area's precipitation patterns and forest management practices, the potential for wildfire damage should not be overlooked. Rural areas, especially in Unincorporated Lamar County, face the highest risk due to the prevalence of timberland. Continued efforts to monitor drought conditions, enforce burn bans during high-risk periods, and educate property owners on fire prevention techniques will be key in minimizing wildfire impacts.

Potentially vulnerable populations may experience difficulty preparing for and responding to wildfire. The table below lists the vulnerable populations in Lamar County that may be at greater risk during a wildfire.

Table 9-4. Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
Source: US Census Bureau, 2020 & JobsEO, 2025	

A wildfire may cause significant damage to critical facilities in the county and could create hazardous conditions, causing power outages, low visibility and impassable roadways. The following table lists types of critical facilities that could be negatively affected by damage from a wildfire or power outages, including places like hospitals and dialysis centers that rely on power to operate life-saving equipment.

Table 9-5 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

9.6 FEMA NRI SCORE

Table 9-6. Wildfire Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020501	Unincorporated Lamar County	94.04	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	93.09	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	92.97	Relatively Moderate
28073020600	Unincorporated Lamar County	92.43	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	91.8	Relatively Moderate
28073020204	Unincorporated Lamar County	89.63	Relatively Moderate
28073020502	Unincorporated Lamar County	88.14	Relatively Moderate
28073020303	Unincorporated Lamar County	87.44	Relatively Moderate
28073020205	Unincorporated Lamar County	86.07	Relatively Moderate
28073020305	Unincorporated Lamar County	85.95	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	83.25	Relatively Low
28073020203	Unincorporated Lamar County	80.12	Relatively Low
28073020304	Unincorporated Lamar County	79.83	Relatively Low
28073020101	Town of Sumrall & Unincorporated Lamar County	79.76	Relatively Low
28073020308	Unincorporated Lamar County	78.45	Relatively Low
28073020306	Unincorporated Lamar County	78.21	Relatively Low
28073020307	Unincorporated Lamar County	0	No Rating

Source: National Risk Index, 2023

Changes in Development and Impact of Future Development

There is low impact based on current development trends, meaning future development will minimally increase the impacts of wildfire. As housing continues to encroach on WUI areas, more structures may become vulnerable to wildfire. Places prone to drought are expected to become even drier, creating perfect dry conditions for wildfires, according to University Corporation for Atmospheric Research (UCAR, 2023). Higher temperatures, increasing variation in precipitation patterns, and changes in water levels are likely to

increase the vulnerability of certain areas to extreme events (including flooding, drought, heat waves, wildfires, and other intense events), compounding already existing stressors.

CHAPTER 10 SEVERE WINTER WEATHER

10.1 HAZARD DESCRIPTION

Severe winter weather includes extreme cold, winter storm, and avalanche. Severe winter weather can affect the entire county, and all critical facilities are susceptible to severe weather. It should be noted that straight-line wind is also associated with severe winter storms.

10.2 RELATED HAZARDS

10.2.1 Extreme Cold

Hazard Description

Table 10-1 Hazard Description Extreme Cold

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	County wide
Seasonal Pattern or Conditions	Winter months
Duration	Events may last hours to days
Analysis Source	NOAA, NWS, EWG

“Extreme cold” is another of the terms describing hazards that must be defined relative to what is considered normal in a given locale. What might be considered extreme cold varies considerably in the state of Mississippi where normal winter temperatures in the south are appreciably more moderate than those in the north. Very cold temperatures become a particular hazard when accompanied by winds of 10 mph or greater. As with extreme heat, extreme cold is of greatest concern when the condition persists for an extended period of time.

Location

Extreme cold temperatures affect the entire county, including the jurisdictions of Lumberton, Purvis, and Sumrall.

Extent

The NWS has developed a formula for calculating wind chill based on temperature and wind speed and issues wind chill advisories in this region when the wind chill temperature is predicted to be -10°F or less with winds of 10 mph or higher for one hour or more. Wind chill warnings are issued when wind chill

temperature will be -20°F or less with winds of 10 mph or higher for one hour or more (see the figure below).

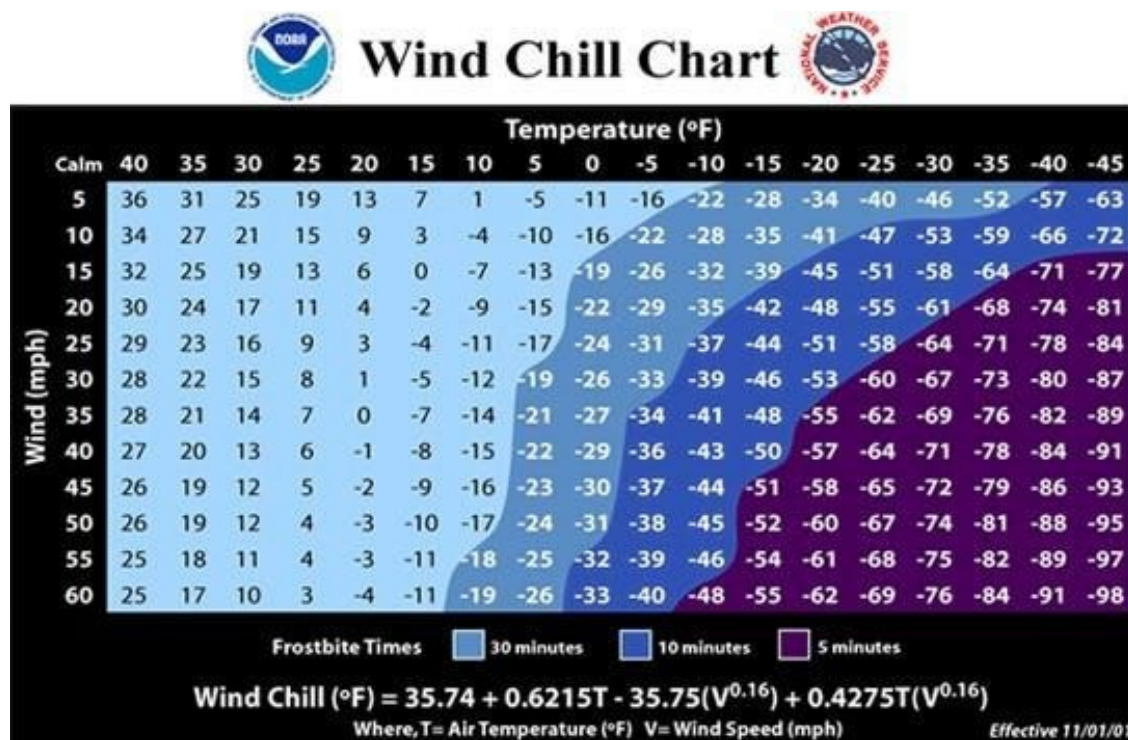


Figure 10-2. National Weather Service Wind Chill Chart

Historical Frequency & Probability of Future Occurrence

Since the National Weather Service began record-keeping on January 1, 1893, Lamar County, MS has experienced several instances of extreme cold, reaching 7°F on multiple occasions. The lowest temperature ever recorded in the county was -1°F on February 13, 1899. Below is a table listing the top ten lowest temperature days on record for Lamar County.

In Lamar County, Mississippi, January is typically the coldest month, with average low temperatures reaching into the low 40s, according to U.S. Climate Data. In Sumrall, the average low temperature in January is 44 degrees Fahrenheit.

Table 10-3 Coldest Temperatures in Lamar County, MS

Date	Temperature (Fahrenheit)	Rank
2/13/1899	-1	1
2/8/1895	2	2
12/23/1989	4	3
1/21/1985	4	4
1/22/1985	5	5
1/11/1982	5	6
12/25/1989	7	7
12/24/1989	7	8
1/24/1963	7	9
12/13/1962	7	10

Impacts and Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis, and Sumrall may occasionally be impacted by extreme cold but usually not for an extended period of time.

Health effects of exposure to extreme cold include hypothermia and frostbite, both of which can be life threatening. Infants and the elderly are most susceptible. In the United States, approximately 1,300 deaths are attributed to hypothermia or cold exposure annually (Lane, 2018). Extreme cold may cause loss of wildlife and vegetation and kill livestock and other domestic animals. Economic loss may result from flooding due to burst pipes, large demands on energy resources, and diminished business activity.

Extreme cold affects the individuals, families in towns and the county. Damage typically occurs to individual properties; however, water systems may be vulnerable to extreme cold. Repairs to water line freeze-ups and breaks typically require repairs and additional maintenance during the warmer months. Extreme cold can cause death and injury especially to those working or stranded outside for prolonged periods. Economic loss is related to private individuals, businesses, and government agencies in heating of homes and facilities. Additional losses can be expected to the livestock industry. During extreme cold periods the schools are closed to protect children traveling to and from school.

There are certain vulnerable populations in Lamar County, including those in the table below. People with inadequate living conditions or shelter from the cold may be more vulnerable to extreme cold conditions. Additionally, those who cannot afford to sufficiently heat their homes may be at risk.

Table 10-4 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

Extreme cold may cause significant damage to critical facilities in the county due to frozen or burst water lines. The following table lists types of critical facilities that could be negatively affected by damage from freeze-ups, which could delay emergency response.

Table 10-5 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar

Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 10-6 Cold Wave Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020101	Town of Sumrall & Unincorporated Lamar County	0	No Rating
28073020102	Town of Sumrall & Unincorporated Lamar County	0	No Rating
28073020203	Unincorporated Lamar County	0	No Rating
28073020204	Unincorporated Lamar County	0	No Rating
28073020205	Unincorporated Lamar County	0	No Rating
28073020206	Town of Lumberton & Unincorporated Lamar County	0	No Rating
28073020303	Unincorporated Lamar County	0	No Rating
28073020304	Unincorporated Lamar County	0	No Rating
28073020305	Unincorporated Lamar County	0	No Rating
28073020306	Unincorporated Lamar County	0	No Rating
28073020307	Unincorporated Lamar County	0	No Rating
28073020308	Unincorporated Lamar County	0	No Rating
28073020401	City of Purvis & Unincorporated Lamar County	0	No Rating
28073020402	City of Purvis & Unincorporated Lamar County	0	No Rating
28073020501	Unincorporated Lamar County	0	No Rating
28073020502	Unincorporated Lamar County	0	No Rating
28073020600	Unincorporated Lamar County	0	No Rating

Source: National Risk Index, 2023

10.2.2 Winter Storm

Hazard Description

Table 10-7 Hazard Description Winter Storm

Potential Probability	low
	medium
	high
Potential Consequence	low

	medium
	high
Location	County wide
Seasonal Pattern or Conditions	Winter months
Duration	Events may last hours to days
Analysis Source	NOAA, NWS, EWG

The NWS describes winter storm as weather conditions that produce heavy snow or significant ice accumulations. For the purposes of this analysis, a severe winter storm is defined as any winter condition where the potential exists for heavy snowfall (six inches or more snowfall in 24 hours), ice storm, and/or strong winds.

Location

Severe winter storms are a risk countywide and occur frequently, including in the jurisdictions of Lumberton, Purvis and Sumrall.

Extent

The magnitude or severity of a severe winter storm depends on several factors, including a region's climatological susceptibility to snowstorms, snowfall amounts, snowfall rates, wind speeds, temperatures, visibility, storm duration, topography, time of occurrence during the day and week (e.g., weekday versus weekend), and time of season. The Regional Snowfall Index and Sperry-Piltz Ice Accumulation Index provide indices for considering extent values of snowfall and ice accumulations throughout the planning area.

Table 10-8 Severity of Winter Storms

Category	RSI Value	Description
1	1-3	Notable
2	3-6	Significant
3	6-10	Major
4	10-18	Crippling
5	18.0+	Extreme

Source: [Regional Snowfall Index \(RSI\)](#) | [National Centers for Environmental Information \(NCEI\)](#) ([noaa.gov](#))

Figure 10-9 The Sperry-Piltz Ice Accumulation Index Chart

The Sperry-Piltz Ice Accumulation Index, or “SPIA Index” – Copyright, February, 2009

ICE DAMAGE INDEX	DAMAGE AND IMPACT DESCRIPTIONS
0	Minimal risk of damage to exposed utility systems; no alerts or advisories needed for crews, few outages.
1	Some isolated or localized utility interruptions are possible, typically lasting only a few hours. Roads and bridges may become slick and hazardous.
2	Scattered utility interruptions expected, typically lasting 12 to 24 hours. Roads and travel conditions may be extremely hazardous due to ice accumulation.
3	Numerous utility interruptions with some damage to main feeder lines and equipment expected. Tree limb damage is excessive. Outages lasting 1 – 5 days.
4	Prolonged & widespread utility interruptions with extensive damage to main distribution feeder lines & some high voltage transmission lines/structures. Outages lasting 5 – 10 days.
5	Catastrophic damage to entire exposed utility systems, including both distribution and transmission networks. Outages could last several weeks in some areas. Shelters needed.

(Categories of damage are based upon combinations of precipitation totals, temperatures and wind speeds/directions.)

Source: *SPIA Index* (spia-index.com)

Historical Frequency & Probability of Future Occurrence

Winter weather is possible in all parts of Mississippi, including Lamar County. While not as frequent as other types of severe weather, winter storms can occur. Lamar County has experienced winter storm warnings in the past. A Winter Storm Warning was issued on January 20, 2025, with expectations of accumulating snow, possibly up to 4 inches. According to the National Weather Service (NWS) Roads were expected to become hazardous due to cold temperatures and potential snow cover. Travel impacts were anticipated even after the snow ended. The predictions of the severity, timing and duration were very accurate and proved that current weather modeling technology has advanced to provide extra time for people to prepare for this winter weather event.

Table 10-10 Recent Winter Storms in Lamar County, MS

RECENT WINTER STORMS			
LOCATION	DATE	TIME	TYPE
UNINCORPORATED LAMAR CO.	2/15/2021	445	Ice Storm
UNINCORPORATED LAMAR CO.	1/21/2025	624	Heavy Snow

Impacts and Loss Estimates

Lamar County and the jurisdictions of Lumberton, Purvis and Sumrall may be impacted by winter storms. Potential impacts of winter storm may include Hypothermia, frostbite, death, low visibility, stranded vehicles/people, loss of crops/vegetation/livestock, burst pipes, flooding, utility losses, carbon monoxide poisoning, frozen water, structure collapse, structure fire, increased maintenance to infrastructure, school/business closures, economic losses (decreased tourism, increased energy costs, crop losses, etc.), risk to emergency services.

The impacts of the very cold temperatures that may accompany a severe winter storm are discussed in the previous section. Other life-threatening impacts are numerous. Motorists may be stranded by road closures or may become trapped in their automobiles in snow or bad road conditions that may cause automobiles to go out of control. People can be trapped in homes or buildings for long periods of time without food, heat, and utilities. Those who are ill may be deprived of medical care by being stranded or through loss of utilities and lack of personnel at care facilities. Use of heaters in automobiles and buildings by those who are stranded may result in fires or carbon monoxide poisoning. Fires during winter storm conditions are a particular hazard because fire service response is hindered or prevented by road conditions and because water supplies may be frozen. Downed power lines not only deprive the community of electricity for heat and light but pose an electrocution hazard. Death and injury may also occur if heavy ice accumulation causes tree limbs to fall.

There are many vulnerable populations in San Juan County, including those in the table below. People with inadequate living conditions or shelter from the cold and winter storms may be more vulnerable to winter conditions. Additionally, those who cannot afford to sufficiently heat their homes or transport themselves to a safe location may be at risk.

Table 10-11 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

Winter storms may cause significant damage to critical facilities in the county due to frozen or burst water lines. High wind during winter storms may knock down power lines, as well, causing power outages. The following table lists types of critical facilities that could be negatively affected by damage from freeze-ups or power outages, which could delay emergency response and access to life-saving medical equipment.

Table 10-12 Multi-Jurisdictional Critical Government Facilities in Lamar County, MS

Multi-Jurisdictional Critical Government Facilities		
Name	Location	Jurisdictional Location
Lamar County Circuit Courthouse	Main St, Purvis	Purvis
Lamar County Chancery Courthouse	Main St, Purvis	Purvis
Lamar County Sheriff's Department	Main St, Purvis	Purvis
Lamar County Correctional Facility	Main St, Purvis	Purvis
Lamar County Emergency Management	Purvis Oloh Rd	Unincorporated Lamar
Lamar County Road Department South	Purvis to Baxterville Rd	Unincorporated Lamar
Lamar County Road Department North	Grantham Rd	Unincorporated Lamar
Purvis City Hall / Police Department	Shelby Speights Dr	Purvis
Purvis Fire Department	Main St	Purvis
Purvis Public Works	Purvis to Baxterville Rd	Purvis
Sumrall City Hall / Police Department	Hwy 589	Sumrall
Sumrall Fire Department	Water Ave	Sumrall
Sumrall VFD County Station	Epley Rd	Unincorporated Lamar
Sumrall Public Works	Water Ave	Sumrall
Lumberton City Hall / Police Department	E Main St	Lumberton
Lumberton Fire Department	9th Ave	Lumberton
Lumberton Public Works	N Front St	Lumberton
Central Lamar VFD Station #1	Keystone Dr	Unincorporated Lamar
Central Lamar VFD Station #2	WPA Rd	Unincorporated Lamar
Central Lamar VFD Station #3	Hwy 589	Unincorporated Lamar
Hickory Grove VFD Station #1	Newman Camp Rd	Unincorporated Lamar
Hickory Grove VFD Station #2	Rocky Branch Rd	Unincorporated Lamar
Northeast Lamar VFD Station #1	W 4th St	Unincorporated Lamar
Northeast Lamar VFD Station #2	Weathersby Rd	Unincorporated Lamar
Oak Grove VFD Station #1	Old Hwy 24	Unincorporated Lamar
Oak Grove VFD Station #2	Old Okahola School Rd	Unincorporated Lamar
Oloh VFD	Purvis Oloh Rd	Unincorporated Lamar
Oloh VFD Station #1	Old Hwy 24	Unincorporated Lamar
Pine Ridge VFD Station #1	Hwy 589	Unincorporated Lamar
Pine Ridge VFD Station #2	Purvis Oloh Rd	Unincorporated Lamar
Southeast Lamar VFD Station #1	U.S. Hwy 11	Unincorporated Lamar
Southeast Lamar VFD Station #2	Little Black Creek Rd	Unincorporated Lamar
Southeast Lamar VFD Station #3	4 Mile Rd	Unincorporated Lamar
Southwest Lamar VFD Station #1	Hwy 13	Unincorporated Lamar
Southwest Lamar Station #2	Bay Creek Rd	Unincorporated Lamar
Southwest Lamar VFD Station #3	Purvis to Columbia Rd	Unincorporated Lamar
Rock Hill VFD Station #1	Old Hwy 11	Unincorporated Lamar
Lamar County Community Shelter	Central Industrial Row	Purvis

FEMA NRI Score

Table 10-13 Winter Weather Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	82.96	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	82.33	Relatively Moderate

28073020304	Unincorporated Lamar County	82.18	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	81.23	Relatively Moderate
28073020205	Unincorporated Lamar County	78.14	Relatively Moderate
28073020600	Unincorporated Lamar County	77.79	Relatively Moderate
28073020501	Unincorporated Lamar County	76.41	Relatively Moderate
28073020204	Unincorporated Lamar County	76.25	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	75.66	Relatively Moderate
28073020206	Town of Lumberton & Unincorporated Lamar County	73.79	Relatively Moderate
28073020303	Unincorporated Lamar County	73.08	Relatively Moderate
28073020306	Unincorporated Lamar County	71.75	Relatively Moderate
28073020502	Unincorporated Lamar County	71.12	Relatively Moderate
28073020308	Unincorporated Lamar County	70.53	Relatively Moderate
28073020203	Unincorporated Lamar County	69.60	Relatively Moderate
28073020401	City of Purvis & Unincorporated Lamar County	69.23	Relatively Moderate
28073020307	Unincorporated Lamar County	57.62	Relatively Low
<i>Source: National Risk Index, 2023</i>			

10.2.3 Summary Assessment of Severe Winter Weather Vulnerability & Potential Losses

Aside from the impacts and vulnerable populations already identified in each hazard, it is very difficult to estimate specific potential losses by jurisdiction for severe winter weather. Several factors limit the planning team's ability to determine potential vulnerability and losses including:

Lack of location research

Most hazards are tied to weather and cannot be predicted by location

Limited GIS data is available for severe winter weather in Mississippi

Lamar County, Lumberton, Purvis, and Sumrall's vulnerability to severe winter weather, to some extent, includes all structures, people, and businesses. Of note, those most vulnerable and the visitors in the county are at greatest risk to severe winter weather.

The 22 challenge variables that may affect Lamar County are presented below.

Table 10-14 Community Resilience Challenges Index Challenge Variables

22 Challenge Variables			
Population, Household, Housing Characteristics	Economic	Healthcare	Connection to Community
Population without a High School Diploma Population 65 and Older Population with a Disability Households without a Vehicle Households with Limited English Single-parent Households Households without a Smartphone Mobile Homes as Percentage of Housing Owner-Occupied Housing	Population below Poverty Level Median Household Income Unemployed Labor Force Unemployed Women Labor Force Income Inequality Workforce in Predominant Sector	Number of Hospitals Medical Professional Capacity Populations without Health Insurance	Presence of Civic and Social Organizations Populations without Religious Affiliation Percent of Inactive Voters Population Change
Source: FEMA Resilience Analysis and Planning Tool (RAPT) 2023			
Individual Maps for each of the categories in Attachments			

CHAPTER 11 OTHER HAZARDS

11.1 EARTHQUAKE

11.1.1 Hazard Description

Table 11-1 Earthquake Hazard Probability for Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide
Seasonal Pattern or Conditions	May occur at any time
Duration	Event duration is short, but the recovery may be long term
Analysis Source	USGS reports, DEM Hazus analysis, GIS data

The U.S. Geological Survey (USGS) defines earthquake as “ground shaking caused by the sudden release of accumulated strain by an abrupt shift of rock along a fracture in the Earth or by volcanic or magmatic activity, or other sudden stress changes in the Earth.” The hazards associated with earthquake are essentially secondary to ground shaking (also called seismic waves), which may cause buildings to collapse; displacement or cracking of the earth’s surface; flooding as a result of damage to dams; and fires from ruptured gas lines, downed power lines, and other sources. Earthquakes cause both vertical and horizontal ground shaking, which varies both in amplitude (the amount of displacement of the seismic waves) and frequency (the number of seismic waves per unit time), usually lasting less than thirty seconds.

11.1.2 Location

Lamar County is located within a region influenced by Quaternary faulting, meaning it lies near a fracture in the Earth’s crust that has experienced tectonic movement within the last 2.6 million years—the Quaternary period. More specifically, the county is situated between the Wiggins Uplift and the Gulf Margin Normal Fault Zone, both of which are recognized geological features in southern Mississippi.

11.1.3 Extent

Earthquakes are measured both in terms of their inherent “magnitude” and in terms of their local “intensity.” The magnitude of an earthquake is essentially a relative estimate of the total amount of seismic energy released and may be expressed using the familiar “Richter scale” or using the “moment magnitude scale” now favored by most technical authorities. On either scale, significant damage can be expected from earthquakes with a magnitude of about 5.0 or higher. What determines the amount of damage that might occur in any given location, however, is not the magnitude of the earthquake but the intensity at that

particular place. Earthquake intensity decreases with distance from the earthquake’s “epicenter” (its focal point) but also depends on local geological features, such as depth of sediment and bedrock layers. Intensity is most commonly expressed using the “Modified Mercalli Intensity Scale” (MMI). Mercalli intensity is assigned based on eyewitness accounts. More quantitatively, intensity may be measured in terms of “peak ground acceleration” (PGA) expressed relative to the acceleration of gravity (g) and determined by seismographic instruments. While Mercalli and PGA intensities are arrived at differently, they correlate reasonably well. While the locations most susceptible to earthquakes are known, there is little ability to predict an earthquake in the short term.

The following table correlates the MMI intensity with the Richter scale and effects of ground shaking:

Figure 11-2 Modified Mercalli Scale vs. Richter Scale

Category	Effects	Richter Scale (approximate)
I. Instrumental	Not felt	1-2
II. Just perceptible	Felt by only a few people, especially on upper floors of tall buildings	3
III. Slight	Felt by people lying down, seated on a hard surface, or in the upper stories of tall buildings	3.5
IV. Perceptible	Felt indoors by many, by few outside; dishes and windows rattle	4
V. Rather strong	Generally felt by everyone; sleeping people may be awakened	4.5
VI. Strong	Trees sway, chandeliers swing, bells ring, some damage from falling objects	5
VII. Very strong	General alarm; walls and plaster crack	5.5
VIII. Destructive	Felt in moving vehicles; chimneys collapse; poorly constructed buildings seriously damaged	6
IX. Ruinous	Some houses collapse; pipes break	6.5
X. Disastrous	Obvious ground cracks; railroad tracks bent; some landslides on steep hillsides	7
XI. Very disastrous	Few buildings survive; bridges damaged or destroyed; all services interrupted (electrical, water, sewage, railroad); severe landslides	7.5
XII. Catastrophic	Total destruction; objects thrown into the air; river courses and topography altered	8

The USGS keeps a record of earthquakes throughout the world in their Earthquake Catalog. There were no earthquakes felt in Lamar County since 1980 with a magnitude of 3.5 or higher.

11.1.4 Historical Frequency and Probability of Future Occurrence

Geological evidence in the area suggests the presence of faulting or deformation attributed to Quaternary activity. However, current assessments indicate that the fault structures in this region, particularly the normal faults—the most common type in this area—are not deeply rooted or active enough to pose a significant seismic hazard. These faults are not typically associated with large earthquake-generating potential in the current tectonic regime. As a result, Lamar County is considered to have a very low probability of experiencing a significant earthquake event within a human timescale.

Map 11-3 Earthquake related geological depiction map of Mississippi



11.1.5 Impacts & Loss Estimates

Earthquakes are capable of catastrophic consequences, especially in urban areas. Worldwide, earthquakes have been known to cost thousands of lives and enormous economic and social losses. In minor earthquakes, damage may be done only to household goods, merchandise, and other building contents, and people are occasionally injured or killed by falling objects. More violent earthquakes may cause the full or partial collapse of buildings, bridges and overpasses, and other structures. Fires due to broken gas lines, downed power lines, and other sources are common following an earthquake and often account for much of the damage. Economic losses arise from destruction of structures and infrastructure, interruption of business activity, and innumerable other sources. Utilities may be lost for long periods of time and all modes of transportation may be disrupted. Emergency Services, including medical, may be both disabled and overwhelmed. In addition to broken gas lines, other hazardous materials may be released.

There are many vulnerable populations in Lamar County, including those in the table below. People living in structures that are not up to current earthquake code, particularly older structures, are more likely to be damaged in an earthquake. Additionally, those who are unable to seek protection during an earthquake or transport themselves to a safe location after an earthquake may be at further risk.

Lamar County is considered to have a very low probability of experiencing a significant earthquake event within a human timescale. While this type of disaster is considered to have a low probability of occurrence, it should still remain on the radar of emergency management officials. Awareness and preparedness efforts should include low-probability events alongside more likely disasters, ensuring a comprehensive and resilient response strategy.

Table 11-4 Vulnerable Populations of Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

11.1.6 FEMA NRI Score

Table 11-5 Earthquake Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020305	Unincorporated Lamar County	69	Relatively Low
28073020402	City of Purvis & Unincorporated Lamar County	61.95	Relatively Low
28073020600	Unincorporated Lamar County	61.9	Relatively Low
28073020306	Unincorporated Lamar County	58.61	Relatively Low
28073020102	Town of Sumrall & Unincorporated Lamar County	57.12	Relatively Low
28073020308	Unincorporated Lamar County	57.09	Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County	54.52	Relatively Low
28073020101	Town of Sumrall & Unincorporated Lamar County	53.46	Very Low
28073020206	Town of Lumberton & Unincorporated Lamar County	52.73	Very Low
28073020205	Unincorporated Lamar County	52.52	Very Low
28073020502	Unincorporated Lamar County	46.51	Very Low
28073020501	Unincorporated Lamar County	46.16	Very Low
28073020303	Unincorporated Lamar County	44.38	Very Low
28073020304	Unincorporated Lamar County	39.83	Very Low
28073020204	Unincorporated Lamar County	33.48	Very Low
28073020203	Unincorporated Lamar County	31.35	Very Low
28073020307	Unincorporated Lamar County	30.55	Very Low
<i>Source: National Risk Index, 2023</i>			

11.2 LANDSLIDE

11.2.1 Hazard Description

Table 11-6 Landslide Hazard Probability for Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	
Seasonal Pattern or Conditions	Runoff or heavy rain
Duration	Events may last minutes to hours to months
Analysis Source	MDOT, NOAA

The term “landslide” encompasses several types of occurrences (including mudslides) in which slopeforming materials, such as rock and soil, move downward under the influence of gravity. Such downward movement may occur as the result of an increase in the weight of slope-forming materials, an increase in the gradient (angle) of the slope, a decrease in the forces resisting downward motion (friction or material strength), or a combination of these factors. Factors that may trigger a landslide include weather-related events, such as heavy rainfall (one of the most common contributors), and erosion; human causes, such as excavation and mining, deforestation, and vibration from explosions or other source; and geologic causes, such as earthquake and shearing or fissuring. The speed of descent ranges from sudden and rapid to an almost imperceptibly slow creep where effects are only observable over a period of months or years.

11.2.2 Location

Landslides have the highest probability of occurrence in the central part of the county between US Hwy 98 and Purvis-Oloh Road, and between MS Hwy 589 and Max White Road.

11.2.3 Extent

Factors that influence landslides are soil type and steepness of slope. Soil type is a key indicator for landslide potential and is used by geologists and geotechnical engineers to determine soil stability for construction standards. Past movements are also a good indicator of where movements might possibly exist.

11.2.4 Historical Frequency & Probability of Future Occurrence

Landslides are influenced by weather and climate events, such as drought, severe weather, wildfire, and flooding. Landslides have the potential of significantly harming transportation infrastructure risking life and property. Naturally, transportation infrastructure is at risk of failure from cascading effects of landslides. This cause and effect can be clearly seen in the case of highway pavements that fail from settlements and cracking due to the embankment side slope landslides.

11.2.5 Impacts & Loss Estimates

Mississippi's transportation infrastructure supported by expansive clay fill slopes are prone to slide failures, influenced by rainfall. Due to the cyclic shrink-swell behavior caused by seasonal moisture changes, the initially high shear strength of the soil strength gradually decreases to its fully softened shear strength. Additionally, during high intensity rainfall events, water infiltrates the slope through desiccation cracks and gets trapped creating perched water condition. This condition increases excess pore water pressure. The combination of fully softened shear strength and the presence of a perched water zone is the primary cause of shallow slope failure.

Some of the many direct and indirect impacts of landslides are:

- Human and animal deaths and injuries and resulting productivity losses
- Damage or destruction of structures
- Destruction or blockage of roadways and resulting transportation interruption
- Loss of or reduced land usage
- Loss of industrial, agricultural, and forest productivity
- Reduced property values in areas threatened by landslide
- Loss of tourist revenues and recreational opportunities
- Damaged or destroyed infrastructure and utilities
- Damming or alteration of the course of streams and resulting flooding
- Reduced water quality

There are many vulnerable populations in Lamar County, including those in the table below. People who are unable to seek immediate protection during a landslide or transport themselves to a safe location after a landslide may be at further risk.

Table 11-7 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEO, 2025</i>	

11.2.6 FEMA NRI Score

Table 11-8 Landslide Overall National Risk Index Score for Lamar County, MS

Census Tract	Communities in Census Tract	Risk Index Score	Risk Index Rating
28073020205	Unincorporated Lamar County	92.23	Relatively Moderate
28073020306	Unincorporated Lamar County	82.17	Relatively Moderate
28073020402	City of Purvis & Unincorporated Lamar County	81.92	Relatively Moderate
28073020308	Unincorporated Lamar County	80.89	Relatively Moderate
28073020501	Unincorporated Lamar County	79.27	Relatively Moderate
28073020101	Town of Sumrall & Unincorporated Lamar County	78.17	Relatively Moderate
28073020204	Unincorporated Lamar County	71.66	Relatively Moderate
28073020102	Town of Sumrall & Unincorporated Lamar County	67.45	Relatively Low
28073020206	Town of Lumberton & Unincorporated Lamar County	65.8	Relatively Low
28073020502	Unincorporated Lamar County	50.23	Relatively Low
28073020401	City of Purvis & Unincorporated Lamar County	47.99	Relatively Low
28073020303	Unincorporated Lamar County	44.06	Relatively Low
28073020600	Unincorporated Lamar County	43.62	Very Low
28073020203	Unincorporated Lamar County	0	No Rating
28073020304	Unincorporated Lamar County	0	No Rating
28073020305	Unincorporated Lamar County	0	No Rating
28073020307	Unincorporated Lamar County	0	No Rating
Source: National Risk Index, 2023			

11.3 Infestation

11.3.1 Hazard Description

Table 11-9 Infestation Hazard Probability for Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide agricultural lands, forested areas, areas of extreme drought
Seasonal Pattern or Conditions	Summer, drought or excess water related
Duration	Events may last months to years
Analysis Source	DEM, USDA, MS State University Extension Service; MS Forestry Commission

Lamar County continues to periodically experience an infestation problem of insects, disease, and noxious weeds. The unhealthy forests are conducive to insect and disease issues. Several factors contribute to the decline in forest health, including lack of active management, poor grazing patterns, fire exclusion, and invasive/noxious weeds. Adequate precipitation and growing space are necessary to maintain tree vigor, thereby increasing tree resistance to insects and disease.

11.3.2 Location

Infestation may occur throughout the county, including in the jurisdictions of Lumberton, Purvis, and Sumrall. The Mississippi Forestry Commission offices of the USDA Forest Service conduct aerial detection surveys (ADS) each year to record and analyze the impacts of insects, diseases, and other disturbances on various tree species in every county in Mississippi.

11.3.3 Extent

The USDA and Mississippi state agencies are concerned about several insect pests that can damage forests in Lamar County and other areas in Mississippi.

Southern Pine Beetle: This is considered the most destructive forest insect in the South, historically causing significant economic and ecological damage. It attacks stressed, damaged, or overly stocked trees and, in outbreak populations, even healthy pines. Weakening factors like drought, windstorms, and flooding can precede outbreaks. Southern pine beetles bore into pine trees, lay eggs, and their larvae create s-shaped tunnels under the bark, potentially introducing blue stain fungi that hinder water transport.

Ips Engraver Beetle: This pine bark beetle targets stressed, declining, or fallen trees, feeding on the inner bark and vascular tissues. Signs of infestation include fading tops or crowns of trees and boring dust in bark crevices and at the base of the tree. Elevated activity from Ips engraver beetles was reported statewide in Mississippi, including extensive activity and dead trees in areas like Madison County.

Redbay Ambrosia Beetle: This beetle carries a fungus that causes Laurel Wilt, a disease affecting various tree species, and is considered a destructive pest in the southeastern US.

Emerald Ash Borer: This metallic green beetle targets ash trees, boring into them and feeding on the tissues beneath the bark, eventually killing the trees.

Spongy Moth (formerly Gypsy Moth): Considered a significant forest pest, it feeds on the leaves and needles of both conifer and hardwood trees, leading to tree death and ecological damage.

In addition, the USDA and Mississippi State University Extension Service list various insects that can damage crops in Lamar County, Mississippi.

Aphids: These tiny, pear-shaped insects feed on plant sap, causing leaves to curl, wilt, and yellow, and can reproduce rapidly.

Thrips: Slender insects with fringed wings, they damage plants by feeding on sap and spreading viruses.

Spider Mites: These arachnids are tiny and suck the cell contents from plants, leading to severe damage if left unchecked.

Fire Ants: Common in Mississippi gardens, they can damage crops like okra and Irish potatoes and even eat newly planted seeds.

Stink Bugs: Heavy infestations can seriously damage tomatoes, beans, and peas, and they can also feed on corn seedlings.

Caterpillars: These can cause significant economic damage by feeding on leaves and young shoots, quickly destroying a plant.

Whiteflies: Small, flying insects that cluster on the undersides of leaves, sucking plant juices and causing wilting and yellowing.

Beetles: Various beetle species can harm crops by consuming leaves, fruits, and roots.

Leaf Miners: Their larvae mine the leaf tissue, causing damage and premature leaf-fall.

Mealybugs and scales: These feed on various parts of plants, including roots and aerial parts.

Flies: Can cause direct and indirect damage to crops depending on the species.

Plant Bugs: Damage plants by puncturing leaves and feeding on nutrients.

Emerald Ash Borer: Bores into ash trees, causing damage and ultimately killing them.

Asian Longhorned Beetle: Attacks hardwood trees.

Citrus Greening and Asian Citrus Psyllid: Attack citrus trees.

Giant African Snail: Attacks plants, fruits, and vegetables.

11.3.4 Historical Frequency & Probability of Future Occurrence

Lamar County is affected by bark beetles and defoliators, as well as other natural agents, that breakdown and damage the county's forestlands, including lands located in the municipalities of Lumberton, Purvis, and Sumrall. Insects and diseases play an important role in the function and nutrient cycling of forest ecosystems. In a healthy forest, endemic levels of insects and diseases remove weakened and stressed trees, thus thinning the forest and reducing competition for light, water, and nutrients. Dead trees provide habitat for a variety of wildlife species, such as perches for raptors and homes for cavity-nesting birds. The vigor of trees is an important factor in determining their susceptibility to attack by insects or diseases. Forests that are overmature or over-dense often become susceptible to insect and disease outbreaks, creating considerable fuel and increasing the susceptibility of stands to fire. An increase in wildfires throughout the county due to the deteriorating health of forests causes considerable damage to property and negatively affects the county's economy.

11.3.5 Impacts & Loss Estimates

The Mississippi Forestry Commission assists landowners in Lamar County with forest pest management, including surveys and evaluations. You can contact your Area Forester for assistance with concerns about southern pine beetles or other forest pests. The USDA has a service center in Purvis, MS, which serves Lamar County. Infestation will continue to be an issue in the future because of Lamar County's climate. The extremely humid conditions, with occasional droughts, invasive weeds, insects, and species diversity are all affected by climate and will continue to be a limited problem for Lamar County's forestlands and communities.

There are many vulnerable populations in Lamar County, including those in the table below. Farmers who rely on crop revenue are especially vulnerable.

Table 11-10 Vulnerable Populations in Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
<i>Source: US Census Bureau, 2020 & JobsEQ, 2025</i>	

11.4 Hazardous Materials Incident

11.4.1 Hazard Description

Table 11-11 Hazardous Materials Incident - Hazard Probability for Lamar County, MS

Potential Probability	low
	medium
	high
Potential Consequence	low
	medium
	high
Location	Countywide, especially along highways, including Lumberton, Purvis, and Sumrall
Seasonal Pattern or Conditions	Can occur at any time
Duration	Event duration is typically short, but may take several days to weeks to clean up releases
Analysis Source	National Response Center, EPA, U.S. DOT, NFPA

Substances that, because of their chemical or physical characteristics, are hazardous to humans and living organisms, property, and the environment are regulated by the US Environmental Protection Agency (EPA) and, when transported in commerce, by the US Department of Transportation (DOT). EPA regulations address “hazardous substances” and “extremely hazardous substances.” The EPA chooses to specifically list hazardous substances and extremely hazardous substances rather than providing objective definitions. Hazardous substances, as listed, are generally materials that, if released into the environment, tend to persist for long periods and pose long-term health hazards for living organisms. They are primarily chronic rather than acute health hazards. Regulations require that spills of these materials into the environment in amounts at or above their individual “reportable quantities” must be reported to the EPA. Extremely hazardous substances, on the other hand, while also generally toxic materials, are acute health hazards that, when released, are immediately dangerous to the life of humans and animals and can cause serious damage to the environment. There are currently 355 specifically listed extremely hazardous substances listed along with their individual threshold planning quantities (TPQ) (eCFR, 2022).

When facilities have these materials in quantities at or above the TPQ, they must submit “Tier II” information to appropriate state and/or local agencies to facilitate emergency planning. DOT regulations provide the following definition for the term “hazardous material”: A hazardous material is “a substance or material that the Secretary of Transportation has determined is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” and has been designated as hazardous under section 5103 of federal hazardous materials transportation law (49 U.S.C.

5103). The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, materials designated as hazardous in the Hazardous Materials Table (see 49 CFR 172.101), and materials that meet the defining criteria for hazard classes and divisions in part 173 of subchapter C of the same chapter (U.S. Compliance, 2020).

When a substance meets the DOT definition of a hazardous material, it must be transported under safety regulations providing for appropriate packaging, communication of hazards, and proper shipping controls. In addition to EPA and DOT regulations, the National Fire Protection Association (NFPA) develops codes and standards for the safe storage and use of hazardous materials. These codes and standards are generally adopted locally and include the use of the NFPA 704 standard for communication of chemical hazards in terms of health, fire, instability (previously called “reactivity”), and other special hazards (such as water reactivity and oxidizer characteristics).

While somewhat differently defined by the above organizations, the term “hazardous material” may be generally understood to encompass substances that have the capability to harm humans and other living organisms, property, and/or the environment. There is also no universally-accepted, objective definition of the term “hazardous material event.” A useful working definition, however, might be framed as “any actual or threatened uncontrolled release of a hazardous material, its hazardous reaction products, or the energy released by its reactions that poses a significant risk to human life and health, property, and/or the environment.”

11.4.2 Location

Hazardous materials are widely used, stored, and transported; a hazardous material release incident could take place almost anywhere in the county, including in the jurisdictions of Lumberton, Purvis, and Sumrall. Moreover, many hazardous materials are used, stored, and transported in very large quantities, so the impacts of a release incident may be widespread and powerful. Hazardous material incidents usually occur on major highways and railways.

11.4.3 Extent

Diamond-shaped NFPA 704 signs ranking the health, fire, and instability hazards on a numerical scale from zero (least) to four (greatest) along with any special hazards are usually required to be posted on chemical storage buildings, tanks, and other facilities. Similar NFPA 704 labels may also be required on individual containers stored and/or used inside facilities.

11.4.4 Historical Frequency and Probability of Future Occurrence

Lamar County faces the threat of hazardous material accidents involving transportation, pipelines; manufacture plants and storage tanks on the highways and in the county’s industrial areas. Based on EPA information, hazardous materials incidents were recorded in Lamar County, Mississippi.

Davis Timber Superfund Site was a former wood processing and preserving facility that operated from 1972 until the late 1980s. Operations included wood treatment using pentachlorophenol (PCP). Wastewater containing PCP and dioxin and furan compounds was discharged into an impoundment. Several fish kills in the nearby Country Club Estates Lake were attributed to documented releases of PCP from the impoundment. The EPA targeted this site for cleanup in 2000 and it was removed from the Superfund list in 2018 after remediation efforts.

Atkins Road Site comprised two locations along Atkins Road in rural Lamar County. It contained twenty-seven 55-gallon drums that leaked grease and other materials onto the ground. The EPA conducted a removal action under the authority of CERCLA (Superfund). The Atkins Road site removal was overseen by EPA Region 4 through Mississippi Department of Environmental Quality.

The Tatum Salt Dome, also known as the Salmon Site, is a region of woods in Lamar County, Mississippi used for nuclear weapons testing. In 1960, the Atomic Energy Commission Site Evaluation Committee selected the Tatum Salt Dome as the experimental site. Official site cleanup began in 1971. By April 1991, the Environmental Protection Agency (EPA) determined that there was an insignificant amount of tritium, a radioactive isotope of Hydrogen, in the surface ground, and that the federal and state guidelines for contamination were met. In July of 1993, the Remedial Action Corporation (RAC) stated that, after reviewing published data of research by Federal and State agencies, the full extent of contamination was still uncertain and required long term remediation due to the presence of hazardous substances. In the 1990s, the DOE invested \$1.9 million in a safer water system for locals of the area. The area remains off-limits for the foreseeable future. Warning notices are posted to advise the public to stay out of the area.

11.4.5 Impacts & Loss Estimates

Because hazardous materials are so widely used, stored, and transported, a hazardous material event could take place almost anywhere. Further, many hazardous materials are used, stored, and transported in very large quantities, so the impacts of an event may be widespread and powerful. Regulations and safety practices make such large-scale events unlikely, but smaller scale incidents may have severe impacts, including:

- Human deaths, injuries, and permanent disabilities
- Livestock/animal deaths
- Destruction of vegetation and crops
- Property damage and destruction
- Pollution of groundwater, drinking water supplies, and the environment
- Contamination of foodstuffs, property, land, and structures
- Temporary or long-term closure of transportation routes and/or facilities
- Loss of business and industrial productivity
- Utility outages
- Clean-up and restoration costs
- Losses and inconvenience due to evacuation
- Loss of valuable chemical product

Losses due to the release of hazardous materials is linked specifically to two areas: (1) response, including evacuation, and (2) cleanup. Lamar County has not had a significant hazardous materials incident; however, releases of hydrocarbon fuels are a constant threat. Cleanup of these releases is the responsibility of the spiller.

There are many vulnerable populations in Lamar County, including those in the table below. People who live near transportation corridors or hazardous materials facilities are most at risk. Those who are unable to immediately respond and transport themselves to a safe location after a hazardous material release may be at further risk.

Table 11-12 Vulnerable Populations Lamar County, MS

Vulnerability Category	Data Point
Persons Over 65 Years of Age	15.9%
Persons with Disabilities Under 65	14.1%
Persons in Poverty	16.1%
Households Receiving Food Stamps	10.1%
Persons Experiencing Difficulty with English	1.7%
Households with No Access to a Vehicle	4.4%
Households in Mobile Homes	11%
Households Without Internet	11.4%
Source: US Census Bureau, 2020 & JobsEQ, 2025	

11.5 Summary Assessment of Other Hazards

Aside from the impacts and vulnerable populations already identified in each hazard, it is very difficult to estimate specific potential losses by jurisdiction for other hazards. Several factors limit the planning team's ability to determine potential vulnerability and losses including:

Lack of location research

Most other hazards are unpredictable by location

Limited GIS data is available for these hazards in Mississippi

Lamar County, Lumberton, Purvis, and Sumrall's vulnerability to other hazards, to some extent, includes all structures, people, and businesses. Of note, those most vulnerable and the visitors in the county are at greatest risk.

The 22 challenge variables that may affect Lamar County are presented below.

Table 11-13 Community Resilience Challenges Index Challenge Variables

22 Challenge Variables			
Population, Household, Housing Characteristics	Economic	Healthcare	Connection to Community
Population without a High School Diploma Population 65 and Older Population with a Disability Households without a Vehicle Households with Limited English Single-parent Households Households without a Smartphone Mobile Homes as Percentage of Housing Owner-Occupied Housing	Population below Poverty Level Median Household Income Unemployed Labor Force Unemployed Women Labor Force Income Inequality Workforce in Predominant Sector	Number of Hospitals Medical Professional Capacity Populations without Health Insurance	Presence of Civic and Social Organizations Populations without Religious Affiliation Percent of Inactive Voters Population Change
Source: FEMA Resilience Analysis and Planning Tool (RAPT) 2023			
Individual Maps for each of the categories in Attachments			

CHAPTER 12 CAPABILITY ASSESSMENT

12.1 Jurisdictional Capability Assessment

12.1.1 Lamar County

Table 15-1 Lamar County Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
Lamar County Emergency Management	Emergency Operations Plan	X			EOP: “Hazard Analysis” EOP acknowledges Mitigation Plan “Hazard Assessment” FEM: emergency preparedness lists; includes info and action plans about many hazards from Mitigation Plan
Lamar County Planning and Zoning	Comprehensive Plan; Land Use, Development, and Management Ordinance; 2015 International Residential Code; 2018 International Building Code	X			Comprehensive Plan: No hazards section, but includes resource info about fires, floods, noxious weeds, and earthquakes
Lamar County Fire	Firefighting; Emergency Medical Services; Fire Department By-Laws and SOPs; Fire Policy for Approved Development/ Construction	X			
Lamar County Sheriff’s Department		X			
Lamar County Road Department	Transportation planning	X			
Lamar County Public Health	All Hazards Public Health Emergency Preparedness and Response Guide	X			Includes hazards from the Mitigation Plan

Opportunities for Plan Integration

The plan will be reviewed on an annual basis by the Emergency Manager and by the local hazard mitigation planning team, which is comprised of representatives from the Lamar County Local Emergency Planning Committee (LEPC), Lamar County department heads, the incorporated cities of Lumberton and Purvis, and the town of Sumrall. The Lamar County local hazard mitigation planning team will determine the effectiveness of programs and reflect changes that may affect mitigation priorities and identify opportunities for plan integration based on plans that are being developed or updated. The Planning Commission for Lamar County will be a mechanism to ensure mitigation strategies and priorities are included in land use decisions and plans.

Table 15-2 Lamar County Fiscal Capability

Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas, or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 15-3 Lamar County Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes

Table 15-4 Lamar County Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	Available?	Full Time/Part Time/Other	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Full Time	Planning and Zoning Department
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Full Time	Planning and Zoning Department
Personnel skilled or trained in GIS applications	Yes	Full Time	San Juan County GIS
Emergency manager	Yes	Full Time	San Juan County Emergency Management
Grant writers	Yes	Full Time	Grant Writer

Table 15-5 Lamar County National Flood Insurance Compliance

National Flood Insurance Compliance	
What department is responsible for floodplain management in your jurisdiction?	Planning Department
Who is your jurisdiction's floodplain administrator? (department/position)	Floodplain Administrator
Does your jurisdiction have any outstanding NFIP compliance violations that need to be addressed? If so, please state what they are.	No
Do your flood hazard maps adequately address the flood risk within your jurisdiction? (If no, please state why)	No, mapping has not been completed for the entire county and is not available digitally
Does your floodplain management staff need any assistance or training to support its floodplain management program? If so, what type of assistance/training is needed?	No
Does your jurisdiction participate in the Community Rating System (CRS)? If so, is your jurisdiction seeking to improve its CRS Classification? If not, is your jurisdiction interested in joining the CRS program?	No, but interested in joining

12.1.2 City of Lumberton

Table 15-6 City of Lumberton Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Lumberton	2018 International Building Code	X			The plan references a land use overlay zone that necessitates building stipulations in flood zones
City of Lumberton Law Enforcement	Law enforcement	X			
City of Lumberton Public Works	Public utilities; 2023 Water Quality Report	X			

Table 15-7 City of Lumberton Fiscal Capability

Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 15-8 City of Lumberton Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/Enforce?

Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on county plans

Table 15-9 City of Lumberton Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	Available?	Full Time/Part Time/Other	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Part Time	Planners and Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Part Time	Planners and Engineers
Personnel skilled or trained in GIS applications	Yes	Full Time	GIS
Emergency manager	Yes	Full Time	Lamar County Emergency Management
Grant writers	No	N/A	Each department is responsible for writing their own grants

12.1.3 City of Purvis

Table 15-10 City of Purvis Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
City of Purvis	2018 International Building Code	X			The plan references a land use overlay zone that necessitates building stipulations in flood zones
City of Purvis Law Enforcement	Law enforcement	X			
City of Purvis Public Works	Public utilities; 2021 Water Quality Report	X			

Table 15-11 City of Purvis Fiscal Capability

Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 15-12 City of Purvis Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on county plans

Table 15-13 City of Purvis Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	Available?	Full Time/Part Time/Other	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Part Time	Planners and Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Part Time	Planners and Engineers
Personnel skilled or trained in GIS applications	Yes	Part Time	GIS
Emergency manager	Yes	Full Time	Lamar County Emergency Management
Grant writers	No	N/A	Each department is responsible for writing their own grants

12.1.4 Town of Sumrall

Table 15-14 Town of Sumrall Capability Assessment

Agency Name (Mission/Function)	Programs, Plans, Policies, Regulations, Funding, or Practices	Effect of Loss Reduction			Comments
		Support	Facilitate	Hinder	
Town of Sumrall	2018 International Building Code	X			The plan references a land use overlay zone that necessitates building stipulations in flood zones
Town of Sumrall Law Enforcement	Law enforcement	X			
Town of Sumrall Public Works	Public utilities; 2023 Water Quality Report	X			

Table 15-15 Town of Sumrall Fiscal Capability

Fiscal Capability	
Financial Resources	Accessible or Eligible to Use?
Community Development Block Grants	Yes
Capital Improvements Project Funding	Yes
Authority to Levy Taxes for Specific Purposes	Yes
User Fees for Water, Sewer, Gas or Electric Service	Yes
Withhold Public Expenditures in Hazard-Prone Areas	Yes
State/Federal Sponsored Grant Programs	Yes
Development Impact Fees for Homebuyers or Developers	Yes

Table 15-16 Town of Sumrall Legal and Regulatory Capability

Legal and Regulatory Capability	
	Local Authority Exists to Develop and Implement/ Enforce?
Building Code Development and Enforcement	Yes
Zoning Ordinance(s)	Yes
Subdivision Ordinance(s)	Yes
Stormwater Management Program	Yes
Floodplain Ordinance(s)	Yes
Post Disaster Recovery Program	Yes
Growth Management	Yes
Site Plan Review Requirements	Yes
General or Comprehensive Plan	Yes
Capital Improvement Plan	Yes
Comprehensive Emergency Management Plan / Local Emergency Operations Plan	Yes, rely on county plans

Table 15-17 Town of Sumrall Administrative and Technical Capability

Administrative and Technical Capability			
Staff/Personnel Resources	Available?	Full Time/Part Time/Other	Department/Agency/Position
Planners or engineers with knowledge of land development and land management practices	Yes	Part Time	Planners and Engineers
Engineers or professionals trained in building or infrastructure construction practices	Yes	Full Time	Engineer
Planners or engineers with an understanding of natural hazards	Yes	Part Time	Planners and Engineers
Personnel skilled or trained in GIS applications	Yes	Part Time	GIS
Emergency manager	Yes	Full Time	Lamar County Emergency Management
Grant writers	Yes	N/A	Each department is responsible for writing their own grants

12.2 NFIP Continuity Strategy

Interlocal Floodplain Management Agreements

The Town of Sumrall, the City of Purvis, and the City of Lumberton have in place an interlocal agreement with the Lamar County Board of Supervisors. This agreement authorizes the Lamar County Floodplain Manager to administer and enforce the Flood Damage Prevention Ordinances on behalf of these municipalities, ensuring continued compliance with NFIP standards. As part of this process, residents of these jurisdictions apply for flood permits through the Lamar County office, where applications are reviewed for compliance before being returned to the appropriate municipality for final approval and signature by the Mayor or Clerk. Recorded copies of these interlocal agreements are available at the Lamar County Chancery Clerk's office.

Enforcement Challenges and Recommendations

Enforcement of NFIP's 50% rule—which mandates that cumulative damages exceeding 50% of a structure's value require retrofitting—is often difficult in post-disaster scenarios. Building permits may be waived to expedite recovery, and if damage is non-structural or utilities are unaffected, property owners may proceed with repairs without contacting local permitting officials. Nonetheless, strict enforcement of the 50% rule remains a critical tool in reducing future flood risk. It is recommended that all jurisdictions require post-event permits and tracking for potentially substantial damage, even when emergency repairs are underway.

Funding and Mitigation Opportunities

Local governments may access funding through the Hazard Mitigation Grant Program (HMGP) to acquire, retrofit, or elevate repetitively flooded properties. Additionally, Community Development Block Grant (CDBG) and HOME Investment Partnerships programs offer competitive grant opportunities that can be used to address flood-prone structures, especially in low-lying or economically disadvantaged areas. Historically, most flood-related losses in Lamar County have resulted from stormwater flooding rather than riverine flooding. Continued investment in stormwater infrastructure, drainage maintenance, and elevation of vulnerable structures will be essential to reducing flood risk countywide.

CHAPTER 13 COMMUNITY PREPAREDNESS & MITIGATION GOALS

Preparedness

Lamar County has implemented a range of strategies to prepare for natural hazards and transportation-related incidents, with severe weather—particularly damaging winds and flooding—being the most common threat. Key preparedness measures include:

- Upgrading and maintaining the county's drainage infrastructure to reduce flood risk
- Educating residents about local storm and flood hazards
- Enforcing land use regulations, including Floodplain Damage Prevention and Stormwater Management Ordinances
- Collaborating with municipalities across the county to coordinate mitigation efforts and improve community resilience

Emergency Management Activities

Lamar County and its municipalities have jointly developed a Comprehensive Emergency Management Plan (CEMP), commonly referred to as the "Disaster Plan"—to guide emergency operations before, during, and after disasters. The plan outlines mutual aid agreements and clearly defines responsibilities for all involved jurisdictions and agencies.

The CEMP integrates the four phases of emergency management:

- Mitigation: Actions taken to reduce or eliminate the likelihood or impact of disasters
- Preparedness: Planning, training, and resource development to enhance readiness and minimize risk
- Response: Immediate actions to protect life and property and provide emergency assistance
- Recovery: Short- and long-term efforts to restore normal operations and improve community resilience

The Lamar County Emergency Management Agency (EMA) is responsible for maintaining and implementing the CEMP, ensuring it aligns with the Mississippi State Emergency Operations Plan. The EMA coordinates emergency programs, disseminates timely public information, and establishes the organizational structure for incident response.

During an emergency, the Emergency Operations Center (EOC) is activated, with designated department heads reporting according to the CEMP. The Emergency Management Office is responsible for:

- Developing and maintaining an effective emergency warning system
- Issuing alerts and warnings during emergency events
- Educating the public on warning procedures and system usage
- Activating warning systems and, if necessary, deploying personnel for door-to-door notifications

The CEMP ensures a coordinated, all-hazards approach to emergency management across Lamar County and its jurisdictions.

Community Education

The Lamar County Emergency Management Agency (EMA) serves as the central source for public information during disasters. The agency is responsible for releasing official updates, instructions, and recommendations to help safeguard residents before, during, and after emergencies. Contact numbers for obtaining real-time disaster information are regularly published and promoted for public use.

The EMA maintains a strong focus on public education and outreach. The agency develops and distributes educational materials such as brochures and hurricane tracking maps and welcomes inquiries from residents seeking guidance. The EMA Director frequently gives presentations to local organizations and community groups upon request.

To enhance preparedness and coordination, the agency routinely participates in emergency drills and exercises, both locally and in collaboration with state and neighboring emergency management agencies.

Local media outlets play a vital role in disseminating critical information during emergencies. Included in the emergency communications chain of command, media partners help broadcast timely updates such as:

- Current situation reports
- Evacuation notices and route details
- Shelter locations and availability
- Personal and property protection guidelines
- Road closures and detours
- Emergency medical service locations
- Closures of schools, government offices, and businesses

Through proactive communication and ongoing public education, the Lamar County EMA helps build a safer and more informed community, better prepared to face all types of emergencies.

Social Media

The Lamar County Board of Supervisors and the Lamar County Emergency Management Agency (EMA) now maintain official Facebook pages to help keep residents and surrounding communities informed about major storm events and other hazards affecting our area. These platforms provide updates before, during, and after significant weather occurrences.

The Lamar County EMA Facebook page regularly posts active weather watches and warnings. However, due to the high demands placed on staff during emergency situations, continuous updates cannot be guaranteed throughout the duration of a storm. These pages are intended as supplementary tools for public awareness and should not be relied upon as the sole source for critical alerts.

We encourage all residents to also monitor reliable sources such as:

- The National Weather Service (NWS)
- National Hurricane Center (NHC)
- NOAA
- Mississippi Emergency Management Agency (MEMA)
- Local television stations and meteorologists

These agencies provide real-time updates, live coverage, and detailed forecasts during severe weather events.

For the most accurate and up-to-date information, we recommend using a NOAA weather radio, emergency notification apps, or tuning into trusted local news channels in addition to following official county pages.

Television and Radio Stations

Residents of Lamar County and South Mississippi receive comprehensive disaster information year-round—particularly during hurricane season—through a variety of local and regional media outlets. Key television affiliates serving the area include:

- WDAM (NBC – Hattiesburg/Laurel)
- WHLT (CBS – Hattiesburg/Laurel)
- WLOX (ABC – Biloxi/Gulfport)
- WHPM-LP (Hattiesburg)

These stations provide frequent updates, educational programming, and special reports on hurricane and flood preparedness. Most stations produce at least one annual prime-time documentary focused on hurricane awareness.

The State of Mississippi typically observes Hurricane Preparedness Week during the first week of June, during which stations intensify coverage with segments on storm hazards, safety measures, property protection, insurance tips, and evacuation guidance. These messages are integrated into regular newscasts several times daily.

All major local stations use advanced weather technology, including pinpoint Doppler radar systems, to forecast and track severe weather. These tools are essential for providing real-time alerts for tornadoes, flash floods, and severe thunderstorms, with coverage available around the clock whenever the National Weather Service issues warnings.

Media Accessibility

Most areas of Lamar County have access to cable television, and affordable satellite services further expand access to national channels like The Weather Channel, which becomes a critical source of continuous updates during severe weather events. Public service announcements produced by FEMA and the National Flood Insurance Program (NFIP) air on national networks, often during prime time, emphasizing the importance of flood insurance—even for properties outside high-risk zones.

Role of Radio

Local AM and FM radio stations are a vital part of Lamar County’s Emergency Information Network, especially during evacuations when many residents are on the road. These stations provide life-saving updates when electricity or cable services are disrupted. In emergencies, normal programming is suspended in favor of continuous public service announcements until the threat has passed. Additionally, NOAA Weather Radios have been installed in several Lamar County government buildings to ensure critical alerts are received even during widespread communication outages.

Print News Media

Several newspapers cover local news in Lamar County, with the Pine Belt News being part of the broader Hub City Spokes brand, an online publication dedicated to delivering local news and updates. The Hattiesburg American, another major newspaper serving the area, also provides comprehensive coverage of local events, including weather-related news and public information about flooding, hurricanes, tornadoes, and other severe weather events.

At the start of hurricane season on June 1 each year, these newspapers, along with local media outlets, devote significant coverage to hurricanes and severe weather preparedness. This includes providing vital

information on safety steps and measures to take before, during, and after a storm, as well as coverage on evacuation routes, shelter locations, and other important safety protocols to protect residents in Lamar County. The larger newspapers are key resources for residents, offering up-to-date weather alerts, advice on property protection, and expert insights on how to stay safe during extreme weather conditions.

Other Sources

Local telephone directories include emergency preparedness information in the community sections, providing essential contact numbers for local emergency management and civil defense offices. These directories encourage residents to reach out for additional information or to address specific concerns. The directory also lists emergency hotlines, including the Emergency Information Network (EIN), National Weather Service, and the Hurricane Hotline, to ensure that the public has access to up-to-date weather and disaster information. The National Weather Service website, www.srh.noaa.gov/jan/, is also included for online resources.

Fire Station Bulletin Boards

One lesson learned from Hurricane Katrina is the importance of alternative information channels when traditional sources like television, radio, and newspapers are unavailable due to storm damage. In the event of communication outages, daily press releases prepared by federal, state, or local authorities will be posted on bulletin boards at fire stations throughout the county. These updates provide critical information during emergencies when other communication methods are disrupted.

Local Libraries

Each local library in Lamar County provides a dedicated section with books and guides to help the public prepare for and recover from flood events. The libraries also offer FIRM (Flood Insurance Rate Map) copies for public viewing, along with contact information for County offices related to flood questions and assistance. Additionally, the libraries offer free internet access for all library cardholders, enabling residents to visit the county website for further information on hazards, disaster assistance, and preparedness. This online access serves as a valuable resource for up-to-date alerts and emergency details during a disaster event.

Drainage System Maintenance

Local public works departments are responsible for maintaining the storm drainage systems within the municipalities of Lamar County. The County Road Department and the public works departments of the individual municipalities are equipped with personnel and machinery to handle the ongoing maintenance of drainage infrastructure. Each jurisdiction has a comprehensive drainage system maintenance plan and responds proactively to drainage issues as they arise.

In addition to municipal efforts, the county also maintains roadside ditches and drainage channels within its jurisdiction. Under the leadership of the County Engineer and the Road Department Manager, work centers in each of the county's districts are tasked with ensuring the effective operation of the drainage system. During periods of heavy rainfall, county work crews are deployed to inspect known problem areas, clear debris from ditches, and ensure that culverts under roadways are unobstructed. Regular maintenance includes debris removal and mowing roadside ditches multiple times throughout the growing season to keep systems functioning efficiently.

For further details, refer to the Lamar County Storm Water Run-Off Ordinance, which outlines regulations and best practices for maintaining effective drainage and reducing runoff impact.

Community Goals

Many of the hazard-related challenges currently facing Lamar County—such as inadequate drainage, recurring residential flooding, erosion, sedimentation, and evacuation issues—are directly tied to the county's rapid growth. Other risks stem from the inherent vulnerabilities of living in a region prone to tornadoes and strong straight-line winds.

This planning initiative provides a valuable opportunity to reduce the community's exposure to such risks by implementing a strategic mitigation plan focused on building resilience and enhancing disaster preparedness across all jurisdictions.

Through this process, the participating jurisdictions have developed a set of mitigation goals informed by the county-wide risk assessment. These goals aim to reduce or eliminate vulnerabilities and strengthen the community's ability to withstand and recover from future hazard events.

Mitigation Plan Goals

- 1. Reduce Risk and Impact – Implement strategies to reduce fatalities, injuries, property and infrastructure damage, as well as response and recovery costs.**
- 2. Enhance Data and Mapping Capabilities – Develop a comprehensive and accessible data network, including a robust Geographic Information System (GIS), to support planning and response efforts.**
- 3. Promote Public Education and Outreach – Increase public awareness and understanding of preparedness measures and hazard mitigation strategies.**
- 4. Foster Countywide Collaboration – Encourage inter-jurisdictional cooperation through shared resources, streamlined services, and coordinated agreements.**
- 5. Improve Hazardous Materials Response – Establish a specialized Hazardous Materials Team and Standard Operating Procedures that meet NFPA and CFATS standards.**
- 6. Strengthen Interagency Partnerships – Promote collaboration between local, state, and federal agencies, as well as public-private partnerships, to improve hazard response and recovery capabilities.**
- 7. Harden Critical Infrastructure – Reinforce essential county facilities and infrastructure against blast impacts when economically feasible. Integrate counterterrorism design by incorporating protective design elements into new construction of essential facilities and county buildings.**
- 8. Construct Tornado Safe Rooms – Include safe rooms in all new county facilities and essential infrastructure. Retrofit existing facilities by upgrading current county buildings to include tornado safe rooms where possible or add standalone small shelter buildings in all community center parking lots.**
- 9. Adopt and Enforce Building and Fire Codes – Strengthen the resilience of structures through adoption and enforcement of up-to-date building and fire safety codes.**
- 10. Modernize Emergency Dispatch Systems – Upgrade the county's emergency dispatch system, including all supporting computer software and hardware, to ensure reliable, real-time response capabilities.**

Community Mitigation Actions

The Council has identified a range of mitigation actions designed to strengthen the capacity of each jurisdiction within the county to reduce hazard-related risks. These shared or “common” actions emphasize the enhancement of planning capabilities across all jurisdictions, the development and exchange of critical information, intergovernmental collaboration—including partnerships between local governments and state agencies—and increased public education and outreach. In addition to these broad initiatives, the Council also outlined targeted mitigation strategies that address specific vulnerabilities and problem areas within individual communities.

GOAL 1

Reduce Risk and Impact – Implement strategies to reduce fatalities, injuries, property and infrastructure damage, as well as response and recovery costs.

1.1 Renovate existing public buildings to meet modern standards.

The jurisdictions will work to make existing public buildings resistant to damage from manmade and natural disasters.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	James Smith
Title	EMA Director
Timeframe	Ongoing
Funding	FEMA Hazard Mitigation Grant Program
Priority	Medium

1.2 Provide for redundancy in public and infrastructure operations.

The jurisdictions will work to ensure that their public functions and infrastructure will have the capability to be operational in the event of manmade and natural disasters.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

1.3 Develop strategies and plans to provide for minimization of damage and disturbance.

The jurisdictions will develop strategies, plans, and or ordinances to guide development toward low risk areas.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	County Funded
Priority	High

1.4 Procure Equipment to Enhance Response and Recovery Efficiency

Jurisdictions will prioritize the acquisition of equipment that demonstrably reduces overall response and recovery costs while accelerating emergency operations. The focus will be on investing in tools and technology that deliver broad community benefits, enhance operational readiness, and improve the speed and effectiveness of response and recovery efforts.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

1.5 Establish Stockpiles of Critical Emergency Supplies

Jurisdictions will create and maintain stockpiles of essential items that are often in short supply during emergencies. These supplies may include fuel (both gasoline and diesel), N-95 masks, potassium iodide tablets, and other critical commodities necessary to support response operations and protect public health and safety during a disaster.

Hazard	All Hazards

Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

GOAL 2

Enhance Data and Mapping Capabilities – Develop a comprehensive and accessible data network, including a robust Geographic Information System (GIS), to support planning and response efforts.

A comprehensive and accessible county-wide data network will significantly enhance efforts to coordinate development within Lamar County and its cities. It will support informed decision-making regarding new developments, infrastructure expansion, and hazard mitigation. By facilitating the sharing of data, local governments, developers, banks, and insurance providers can better assess and manage risks related to natural disasters, ultimately promoting more sustainable development. Additionally, sharing the costs of data collection and maintenance will prove cost-effective for the county and municipalities.

Lamar County, in collaboration with local municipalities, aims to establish a comprehensive Geographic Information System (GIS) that incorporates land use information, allowing for efficient retrieval and analysis. This system will be made accessible to all county and city departments, as well as residents and businesses operating within Lamar County. Greater accessibility to this data will increase its use in decision-making processes.

The primary goal of providing robust, accessible data is to empower county and city staff, residents, developers, and business leaders with the information needed to make informed decisions about new development projects, expansions, and risk assessments for specific locations. This will ultimately promote more resilient, well-planned growth in the region.

Hazard	Flood
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Tara Coggins and Sean Sullivan
Title	Floodplain Administrator and Director of GIS
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High



2.1 Update information that is available from the flood insurance maps.

Lamar County is actively pursuing designation as a Cooperative Technical Partner (TCP) with the Federal Emergency Management Agency (FEMA) to update floodplain data, including base flood elevation mapping. This initiative is crucial for residents and property owners, as the updated information will provide accurate, up-to-date flood zone maps, detailing special flood zones, floodplains, and base flood elevations across the county. Enhanced accuracy in these maps will enable informed decision-making regarding construction and development, aid in protecting vulnerable floodplains, and offer insight into the impacts of new development within these areas. Additionally, these updated maps will play a vital role in accurately determining flood zones for insurance purposes, benefiting both individuals and the community at large.

Hazard	Flood
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Tara Coggins
Title	Floodplain Administrator
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

2.2 To provide easily accessible tax map information to the municipalities in the county, insurance, realtors, banking interests, and individuals.

Geographic information related to property descriptions, elevation, flood zone location, land use, and ownership should be made easily accessible through a local network platform or an online portal. This would enable local governments, as well as banking, real estate, and insurance professionals operating within the county, to access vital data. The availability of this information is essential for local governments to make informed decisions when granting permits and setting development conditions. However, much of this data is often not readily accessible, causing delays in decision-making.

By making this information accessible, local governments can optimize their permitting process, resulting in faster and more precise decision-making. Moreover, businesses and individuals would be empowered to assess property development risks, identify required permits, and evaluate proximity to critical infrastructure, fostering more strategic and informed development throughout the county.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Sean Sullivan
Title	Director of GIS
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

GOAL 3

Promote Public Education and Outreach – Increase public awareness and understanding of preparedness measures and hazard mitigation strategies.

Develop educational programs for local government officials and staff that focus on disaster prevention, damage mitigation, and recovery strategies. These programs will serve as valuable opportunities for networking while also introducing new methods, technologies, and programs aimed at reducing disaster impacts. The workshops should cover a range of critical topics, including:

- Disaster recovery and preparedness strategies
- Hazard mitigation best practices
- Planning and management of drainage systems
- Ecological and environmental systems
- Emerging construction techniques for disaster resilience
- Innovative drainage maintenance solutions
- The National Flood Insurance Program (NFIP) and the Community Rating System (CRS) Program
- Federal and State Hazard Mitigation programs
- Continuity planning for local government departments
- Interpreting and utilizing monitoring data for local streams and rivers
- Stormwater modeling, mapping, and related technologies

These programs will ensure that staff members are well-equipped with the knowledge and tools necessary to effectively plan for, mitigate, and respond to natural hazards, ultimately contributing to a more resilient and disaster-ready community.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	Tara Coggins and James Smith
Title	Floodplain Administrator and EMA Director

Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.1 Provide outreach to the community, including local officials about the Hazard Mitigation Grant Program and requirements for elevation and purchase programs.

One of the initial workshops recommended for the educational program should be a presentation by the Federal Emergency Management Agency (FEMA) and the Mississippi Emergency Management Agency (MEMA) on the Hazard Mitigation Grant Program (HMGP), specifically focused on addressing properties with repetitive losses. These funds are typically utilized to either purchase, remove, or elevate properties that experience repetitive damage, based on a cost-benefit analysis. The program is voluntary, allowing property owners to opt-in.

This workshop should be open to local government officials, their staff, and the general public. It will provide an opportunity for community members to ask targeted questions regarding the program's application to their specific situations. Additionally, the session will help local officials gauge community support for the program and assist in identifying potential funding sources for matching federal funds, further enhancing the program's impact.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	Tara Coggins and James Smith
Title	Floodplain Administrator and EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.2 Establish a Hazard Mitigation Library at the Lamar County Library

To reduce property damage resulting from natural disasters, a key objective of the Mitigation Plan is to establish a comprehensive hazard mitigation library within the Lamar County Library System. The library collection should include essential resources such as manuals on building in flood-prone areas and guidelines for construction in hurricane-prone regions. Many of these materials are available to the county at minimal or no cost from organizations like the Federal Emergency Management Agency (FEMA) and the American Red Cross. These resources can be cataloged and cross-referenced within the library's catalog system, making it a centralized and easily accessible location for residents.

During Severe Weather Week in February and just prior to Hurricane Season, the Office of Emergency Management should collaborate with the library to ensure these materials are prominently available for

public use. In addition to construction manuals, FEMA and the American Red Cross also provide educational materials for children and handbooks on business continuity planning, all of which should be included in the library's collection.

Suggested titles include *Coastal Construction Manual*, *Taking Shelter from the Storm*, *The Disaster Twins*, *Business Continuity Planning for Businesses and Industry*, and *IBHS Continuity Planning for Small Business*.

The County's Planning Department and the Emergency Management Agency should work closely with the library to regularly update and expand the collection to ensure it remains a vital resource for the community.

Hazard	Floods
Jurisdiction	Lamar County
Contact	Tara Coggins
Title	Floodplain Administrator
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.3 Develop a brochure “Hazards in Lamar County” that will detail natural hazards within the county.

The Hazard Preparedness Brochure will serve as a vital educational tool for all residents of Lamar County and its municipalities. It will outline the primary natural hazards affecting the region—most notably hurricanes, tornadoes, severe weather events, and both stream and stormwater-related flooding. The brochure will offer practical safety guidance and preparedness tips to help residents better protect their families, homes, and property.

In addition to providing general safety information, the brochure will promote proactive mitigation efforts that homeowners can implement to reduce their risk of damage from natural disasters. These may include home reinforcements, elevation considerations, and proper drainage management.

The brochure will serve three key purposes:

1. **Flood Awareness and Outreach:** Educate residents—particularly those in flood-prone areas—on their risk exposure and encourage actions such as purchasing flood insurance and safeguarding property.
2. **Hurricane Preparedness:** Provide detailed guidance on how to prepare for hurricane season, including evacuation planning, home fortification, and emergency supply checklists.
3. **Wind and Storm Mitigation:** Suggest practical mitigation strategies to secure homes against high winds and severe weather, reducing potential loss and accelerating recovery.

The brochure will be distributed to all new residents and mailed following the assignment of their E-911 serial number. By equipping residents with timely, relevant, and actionable information, this initiative will help foster a safer, more resilient community.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.4 Establish a Speakers Forum

Lamar County and its municipalities are home to numerous active social, civic, and faith-based organizations that serve as valuable platforms for community education and engagement. These organizations can play a critical role in increasing public awareness of disaster preparedness and mitigation strategies.

It is recommended that the Lamar County Emergency Management Agency (LCEMA) establish and maintain a Speakers Forum, a curated list of qualified individuals available to provide presentations on disaster preparedness, hazard mitigation, and emergency response topics. This list should be reviewed and updated annually and distributed to local civic groups, churches, and other community-based organizations. Suggested speakers may include:

- Lamar County Emergency Management Director
- Hurricane Forecaster, Mississippi Emergency Management Agency (MEMA)
- Hazard Mitigation Specialist, MEMA
- Transportation Planner, MEMA
- Chief Meteorologist, National Weather Service – Jackson Office
- Local weathercasters from regional radio and television stations in Biloxi, Hattiesburg, and New Orleans

Annual updates should reflect staffing changes and the inclusion of new personnel or subject matter experts. The updated Speakers Forum list should be shared with all relevant community organizations to encourage proactive education and engagement throughout Lamar County.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review

Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.5 Establish a Hazard Mitigation and Disaster Preparedness Booth at festivals

Each year, the cities within Lamar County host a variety of festivals that attract large crowds from across the region. These events present an excellent opportunity for public education and outreach on emergency preparedness and hazard mitigation.

It is recommended that the Lamar County Emergency Management Agency establish an informational booth at each major festival. The purpose of the booth would be to distribute educational materials and engage directly with attendees to answer questions related to disaster preparedness and response.

These high-traffic venues offer an ideal setting to raise awareness about local hazards—including hurricanes, tornadoes, windstorms, and severe thunderstorms—and to encourage proactive steps for personal and property protection. The booth should be staffed with knowledgeable personnel and stocked with brochures, guides, and other resources to help residents understand potential risks and available mitigation strategies.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.6 Encourage the Chambers and Emergency Management to develop a program on Business Continuity Planning for Businesses

The U.S. Small Business Administration (SBA) reports that 43% of small businesses that are forced to close due to a disaster never reopen. Furthermore, the SBA estimates that an additional 29% of small businesses close within two years of experiencing a disaster. In Lamar County, approximately 77% of businesses employ fewer than 10 people, making them particularly vulnerable to the impacts of disasters. These small businesses often lack the resources necessary to recover from prolonged closures and may not have the expertise to develop effective continuity plans.

To address this challenge, it is recommended that the Area Development Partnership (ADP) and Lamar County Emergency Management Agency collaborate to establish a program that educates local businesses on business continuity planning.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

3.7 Host a workshop for school administrators to showcase educational materials that are available to teachers

It is recommended that the Lamar County Emergency Management Agency host an annual workshop to introduce new educational materials focused on natural hazards to school administrators and county librarians. The Federal Emergency Management Agency (FEMA) and the American Red Cross have developed a range of highly effective materials designed to complement and enhance existing school curricula. Programs like the American Red Cross’ “Masters of Disaster” and Allstate Insurance’s disaster preparedness lessons provide valuable resources that integrate lessons in language arts, math, and science, while teaching children how to prepare for emergencies.

The event should feature copies of these materials, with a representative from the American Red Cross, FEMA, or MEMA present to offer guidance on how to incorporate these resources into classroom activities. This event would serve as an opportunity for educators to learn how to engage students in disaster preparedness, ensuring that these critical lessons are effectively integrated into everyday learning.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

GOAL 4

Foster Countywide Collaboration – Encourage inter-jurisdictional cooperation through shared resources, streamlined services, and coordinated agreements.

4.1 Establish quarterly meetings between the Board of Supervisors and the three (3) City Governments.

The Lamar County Board of Supervisors, along with the Mayor and City Aldermen of Lumberton, Purvis, and Sumrall, should continue to hold quarterly meetings to foster countywide collaboration, promote shared resources, and minimize service duplication. Each meeting should follow a structured agenda, focusing on addressing key issues impacting the county.

Once a year, the agenda should include a comprehensive review of the standard operating procedures (SOPs) for hurricane response and other emergency situations within the county. This review should take place prior to the start of hurricane season to ensure preparedness. Additionally, the meeting should feature an update on FEMA’s Hazard Mitigation program, with a focus on evaluating progress in addressing and reducing repetitive losses within Lamar County.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

GOAL 5

Improve Hazardous Materials Response – Establish a specialized Hazardous Materials Team and Standard Operating Procedures that meet NFPA and CFATS standards.

Lamar County’s transportation infrastructure is a vital component of the national system that connects major cities across the Southeast. Rail lines in the county originate in New Orleans, providing access to key southern cities such as Birmingham, Alabama, and Atlanta, Georgia. U.S. Interstate 59 runs through Lamar County, linking the New Orleans region to Atlanta. Both rail and highway networks facilitate the movement of hazardous materials through the county. Lamar County is home to approximately 19 facilities registered as hazardous material handlers with the US Environmental Protection Agency.

Hazard	All Hazards

Jurisdiction	Lamar County
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

5.1 The Emergency Management Director, the Volunteer Fire Departments, Lamar County Fire Services, and the Municipal Fire Departments will maintain the Hazardous Materials Response Team through agreements

As Lamar County experiences increasing population growth and economic development, along with higher rail and truck traffic, the risk of accidents involving hazardous materials is also rising. To address this, the county has established a Hazardous Materials Team to respond to such incidents.

Given the high costs associated with training, equipping, and maintaining a Hazardous Materials Team, it is recommended that this effort be organized as a cooperative program among the County Board of Supervisors and the Cities of Lumberton, Purvis, and Sumrall. This collaborative approach will allow for shared staffing, equipment, and training, ensuring more efficient and cost-effective operations.

Currently, most of the team's equipment has been purchased through grants from the Department of Homeland Security. Additionally, the team has developed a procedure to bill the responsible party for the equipment used during an incident. In cases where no responsible party is identified, the Department of Environmental Quality (DEQ) may reimburse the team, provided the proper procedures are followed.

The formation of the Hazardous Materials Team should be preceded by the drafting and adoption of an Inter-local Agreement between the three local governments. This agreement should outline the staffing contributions from each entity, the ownership of equipment, and the designation of a fiscal agent to manage finances. It should also define how revenues from grants and reimbursements will be accounted for and spent, as well as the ownership of any property purchased by the team. To ensure compliance with industry standards, the team must adhere to NFPA guidelines, including NFPA 1582, which covers physicals and vaccinations for personnel.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

5.2 A written plan and standard operating procedures have been developed and incorporated into the County's CEMP (Comprehensive Emergency Management Plan)

Before finalizing the inter-local agreement, the county and municipalities should collaboratively develop standard operating procedures (SOPs) for responding to hazardous materials incidents, including the transportation of hazardous materials by air, rail, and roadways through Lamar County. The team should also establish detailed response protocols for hazardous material leaks originating from local businesses, including airborne, waterborne, and landborne spills.

These response and recovery procedures must be documented and integrated into the County's Comprehensive Emergency Management Plan (CEMP), and formally adopted by the Board of Supervisors as well as the municipalities of Lumberton, Purvis, and Sumrall.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

5.3 The Hazardous Materials Team will receive regular training to maintain certification

The Hazardous Materials Team is fully certified in the handling of hazardous materials and completes annual continuing education to maintain these certifications. Currently, grants are used to fund both the certification process and ongoing training for team members. The minimum certification and training requirements will be clearly outlined in the Hazardous Materials Emergency Response Team Membership Policy. This ensures that all members meet the necessary standards to effectively and safely respond to hazardous material incidents.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	James Smith
Title	EMA Director
Timeframe	Annual Review

Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

GOAL 6

Strengthen Interagency Partnerships – Promote collaboration between local, state, and federal agencies, as well as public-private partnerships, to improve hazard response and recovery capabilities.

6.1 Establish a formal policy to invite county/city staff to attend site plan review for projects that are immediately adjacent to the jurisdiction or will impact the jurisdiction.

It is recommended that a Memorandum of Understanding (MOU) be established and a formal policy be defined to implement an extra-territorial review process for proposed development projects. This review should be incorporated into the site plan review process for both the cities and the county, specifically for developments located adjacent to jurisdictional boundaries or within shared drainage sub-basins. Such a policy would ensure a comprehensive evaluation of potential flood impacts, fostering coordinated decision-making to prevent flooding within the watershed.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Brian Neuman
Title	Senior Planner
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

6.2 Cooperate with Mississippi Department of Transportation to establish pre-disaster policies on maintenance of the right of way

The Hazard Mitigation Council has identified Interstate 59, U.S. Highway 98, and U.S. Highway 11 as critical thoroughfares in Lamar County. These roadways are not only vital for evacuation purposes but are also essential for response and recovery efforts following natural disasters. During windstorms, tornadoes, severe thunderstorms, and tropical weather events such as hurricanes, these roads are susceptible to blockages from fallen tree limbs and trees. Road closures can pose significant safety risks, delay emergency response, and impede recovery efforts.

It is recommended that the Lamar County Board of Supervisors formally request that the Mississippi Department of Transportation adopt a more proactive approach to mitigation. This should include the development of a maintenance protocol aimed at identifying and removing dead or dying trees and limbs

along these key roadways. Additionally, the procedure should include routine trimming of trees and limbs to reduce the risk of falling debris during natural hazard events.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	James Smith
Title	EMA Director
Timeframe	Ongoing
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

GOAL 7

Harden Critical Infrastructure – Reinforce essential county facilities and infrastructure against blast impacts when economically feasible.

One of the most effective strategies a community can employ to minimize the damage caused by natural disasters is the adoption of minimum building standards. It is recommended that the Lamar County Board of Supervisors consider adopting comprehensive building codes and allocating resources for training and staffing to ensure successful implementation. This should include the employment of code enforcement officers, thorough education for contractors, and a robust framework for enforcing these building codes.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	Brian Neuman
Title	Senior Planner
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

7.1 Adopt building codes and minimum standards applied to the construction or reconstruction of buildings to insure public health, welfare, and safety. A community can adopt minimum standards that determine how a building should be constructed.

"Model" building codes have been developed to guide communities in establishing consistent standards for construction. These codes help ensure buildings are safer, reducing the risks associated with natural

disasters. In 1999, the International Code Congress took steps to unify building standards across the country by adopting the International Building Code (IBC), which was finalized and ready for implementation in 2000. The International Code Council (ICC) is also responsible for publishing the One- and Two-Family Dwelling Code, which is included as an appendix in the ICC.

The Cities of Purvis, Lumberton, and Sumrall have already adopted a Standard Building Code developed by the ICC, with dedicated staff for code enforcement within city limits. In contrast, the Lamar County Board of Supervisors has not yet adopted a full building code but has implemented a flood permit process to regulate construction in flood-prone areas. This permit ensures the county can maintain a record of new buildings and enforce its floodplain ordinance.

Adopting building codes serves a critical role in ensuring the safety of residents and protecting property by setting minimum standards for construction. These codes help ensure that structures are strong enough to withstand natural disasters, thereby reducing fatalities and property damage. Furthermore, the implementation of these codes reduces the reliance on public and private disaster aid following a disaster, preserving both the built environment and property values.

In addition to considering the adoption of the ICC Building Code, the Lamar County Board of Supervisors should also evaluate adopting the SSPD-1099, which is part of the ICC Code. These standards provide performance criteria for residential structures based on wind pressure, with specific requirements based on wind zones.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	Brian Neuman
Title	Senior Planner
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

7.2 Adopt similar enforcement procedures between the county and cities and consider shared staff to reduce costs and insure consistent enforcement.

Consistent implementation and enforcement of building codes are essential to ensure that contractors in Lamar County comply with established standards. To support this, it is recommended that all four local governments adopt similar model codes and collaborate in their enforcement. A shared enforcement approach will promote uniformity across jurisdictions, improve service delivery to residents and contractors, and achieve cost efficiencies through economies of scale.

Additionally, Lamar County should continue leveraging Insurance Rebate Code Funding to support firefighter attendance at the Mississippi Fire Academy for certification as NFPA 1031 Fire Inspectors. This ongoing investment will strengthen local inspection capabilities and enhance public safety across the county.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	Brian Neuman and Kyle Hill
Title	Senior Planner and Fire Coordinator
Timeframe	Annual Review
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

7.3 Adopt and implement a regulation requiring building owners to retrofit their structures for flood damage if the structure’s insured loss exceeds 50% or more of the structure’s value.

The National Flood Insurance Program (NFIP) requires that properties be retrofitted to reduce future flood damage when repair costs exceed 50% of the structure's fair market value. If a building sustains flood damage and the cost to repair it is more than half of its current market value, it must be brought into full compliance with the county’s Flood Damage Prevention Ordinance. This requirement serves as a critical tool in minimizing future flood losses and is enforced as part of Lamar County’s broader floodplain management efforts.

Hazard	Flood
Jurisdiction	Lamar County
Contact	Tara Coggins
Title	Floodplain Manager
Timeframe	Completed
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

GOAL 8

Construct Tornado Safe Rooms – Include safe rooms in all new county facilities and essential infrastructure. Retrofit existing facilities by upgrading current county buildings to include tornado safe rooms where possible or add standalone small shelter buildings in all community center parking lots.

To enhance community safety and resilience, Lamar County will prioritize the construction of tornado safe rooms in all newly built county facilities and essential infrastructure. In addition, existing county buildings will be evaluated and, where feasible, retrofitted to include safe rooms that meet FEMA and ICC 500 standards. For facilities where retrofitting is not viable, the county will explore the installation of standalone

tornado shelters—particularly in high-use public spaces such as community center parking lots. This effort aims to protect both county personnel and the general public during severe weather events, reduce the risk of injury or loss of life, and support faster post-disaster recovery.

Hazard	Severe Weather Events
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Brian Neuman
Title	Senior Planner
Timeframe	Ongoing
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

GOAL 9

Adopt and Enforce Building and Fire Codes – Strengthen the resilience of structures through adoption and enforcement of up-to-date building and fire safety codes.

Lamar County and the cities of Purvis, Lumberton, and Sumrall are committed to strengthening the resilience of the built environment through the adoption and enforcement of up-to-date building and fire safety codes. By implementing modern standards based on national model codes, the jurisdictions can ensure that new construction and substantial renovations are better able to withstand natural hazards such as hurricanes, tornadoes, and fires. This goal promotes a unified, countywide approach to code enforcement, encouraging consistency across all jurisdictions while reducing confusion for builders, contractors, and property owners. Coordinated training and staffing among the county and cities will support effective implementation and enforcement, improve public safety, and help reduce future damages and disaster recovery costs. Through the adoption of modern codes and the capacity to enforce them, Lamar County and its municipalities will not only protect lives and property but also enhance long-term community resilience and eligibility for insurance incentives and federal mitigation programs.

Hazard	All Hazards
Jurisdiction	Lamar County, City of Lumberton, City of Purvis, Town of Sumrall
Contact	Brian Neuman and Kyle Hill
Title	Senior Planner and Fire Coordinator
Timeframe	Ongoing

Funding	FEMA Hazard Mitigation Grant Program/County
Priority	Medium

GOAL 10

Modernize Emergency Dispatch Systems – Upgrade the county’s emergency dispatch system, including all supporting computer software and hardware, to ensure reliable, real-time response capabilities.

Lamar County, along with the cities of Purvis, Lumberton, and Sumrall, recognizes the critical importance of efficient communication during emergencies. As part of the effort to enhance disaster response and recovery, the goal is to upgrade and modernize the county’s emergency dispatch systems, including both supporting software and hardware. This modernization will ensure that emergency responders can access real-time, accurate data, improve coordination among multiple agencies, and streamline decision-making processes during natural disasters and other emergencies.

By implementing a more reliable, state-of-the-art dispatch system, the county and municipalities can improve response times, reduce errors, and enhance the overall effectiveness of emergency services. The system will allow for faster mobilization of first responders, better management of resources, and more efficient communication between agencies, ultimately saving lives and minimizing property damage.

Modernizing these systems also improves the ability to gather, store, and analyze data during and after an event, leading to more informed decision-making and better preparedness for future disasters. With this goal, Lamar County and its cities are ensuring that they remain ready to provide swift, reliable, and coordinated emergency services in the face of evolving challenges.

Hazard	All Hazards
Jurisdiction	Lamar County
Contact	James Smith
Title	EMA Director
Timeframe	Ongoing
Funding	FEMA Hazard Mitigation Grant Program/County
Priority	High

Mitigation Project Prioritization and Planning for a Resilient Future

The Lamar County Hazard Mitigation Council developed a standardized ranking system to evaluate and prioritize each mitigation project. All proposed projects were assessed using uniform criteria to generate a priority score for inclusion in the Mitigation Project List. This system incorporates a five-year cost-benefit analysis, along with social, technical, administrative, political, legal, and environmental considerations. Projects received a score of +1 for each favorable factor and 0 for unfavorable or neutral factors. A sample cost-benefit analysis is included in Appendix 2.

Based on this evaluation process, the Council identified and prioritized a series of mitigation projects believed to have the greatest potential to reduce disaster impacts across all jurisdictions within Lamar County.

A key focus of the Council was long-term planning aimed at building a more resilient and disaster-ready community. Given the county's geographic and jurisdictional diversity, the Council emphasized the value of a coordinated, multi-jurisdictional approach that leverages local expertise and shared resources. Collaborative planning not only improves the effectiveness of mitigation actions but also fosters community-wide resilience.

The overarching goal is to ensure that new development does not increase risk to existing homes, businesses, or infrastructure. Proactive mitigation planning will help create a safer and more sustainable environment, reduce the need for costly infrastructure retrofits, and minimize future public assistance expenditures related to natural disaster damages. The Council defined several strategic goals and actions to support these efforts. These initiatives are designed to guide responsible growth, reduce vulnerabilities, and strengthen community resilience.

CHAPTER 14 MITIGATION ACTIONS AND PROJECTS WORKSHEET

Action or Project Name	
Project Description	Lamar County has a need for heavy duty generators in order to continue to operate essential emergency services and critical facilities. This would include staffed fire stations.
Hazard Mitigated	All Hazards
Jurisdiction	Lamar County
Project Contact	James Smith
Title	EMA Director
Agency	Lamar County
Address	PO Box 1240, Purvis, MS 39475
Phone Number	601-794-8504
Email	jsmith@lamarcountymiss.gov
Timeline	Ongoing
Location of Project	Throughout Lamar County
Total Estimated Cost, if known	Varies
Sources of Funding	State or Federal Funding
Status	This is an ongoing project, since various critical facilities have a need for a generator

Action or Project Name	Repetitive Loss Property Buy Out Program
Project Description	Lamar County has a significant repetitive flood loss properties in the area of Westover Subdivision. The neighborhood was developed Pre-FIRM and has multiple flood losses. The county would like to alleviate these flood losses through a buy out program.
Hazard Mitigated	Flood
Jurisdiction	Lamar County
Project Contact	Tara Coggins, CFM
Title	Floodplain Manager
Agency	Lamar County
Address	PO Box 1240, Purvis, MS 39475
Phone Number	601-794-1024
Email	tlcoggins@lamarcountymiss.gov
Timeline	Ongoing
Location of Project	Westover Subdivision
Total Estimated Cost, if known	\$500,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project, several properties were just approved for funding

Action or Project Name	Obtaining Access to Message Boards Subscriptions
Project Description	Lamar County does not have any method of providing centralized dissemination of information to the public before, during, and after a disaster. Such service is imperative to keeping the public safe and informed.
Hazard Mitigated	All Hazards
Jurisdiction	Lamar County
Project Contact	James Smith
Title	EMA Director
Agency	Lamar County
Address	PO Box 1240, Purvis, MS 39475
Phone Number	601-794-8504
Email	jsmith@lamarcountymiss.gov
Timeline	Ongoing
Location of Project	Throughout Lamar County
Total Estimated Cost, if known	Varies
Sources of Funding	No specific funding sources identified
Status	This is an ongoing project, since various critical facilities have a need for a generator

Action or Project Name	Bridge Upgrade and Repair (Center Ave, Sumrall)
Project Description	Bridge on Center Ave in Sumrall has been declared unsafe for traffic and is in need of repairs and upgrades. It is a major inconvenience, but, more importantly, it is a major problem for emergency response.
Hazard Mitigated	All Hazards
Jurisdiction	Town of Sumrall
Project Contact	Mayor William Lofton
Title	Mayor
Agency	Town of Sumrall
Address	4880 Hwy 589, Sumrall, MS 39482
Phone Number	601-758-3591
Email	townofsumrall@gmail.com
Timeline	Ongoing
Location of Project	Center Ave, Sumrall
Total Estimated Cost, if known	\$500,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

Action or Project Name	Larger Box Culverts needed along Hwy 42 & Hwy 589
Project Description	Infrastructure protection measures are needed along Hwy 42 and Hwy 589 near the Sumrall City Hall. Currently there are culverts under these roadways that are causing a bottleneck effect which is causing water to back up over the roadway and into residential and commercial buildings. There have been numerous occasions where the City Hall and five nearby businesses have been flooded with approximately four to six inches of water. The Town of Sumrall would like to replace these with 25 5 x 8 concrete box culverts.
Hazard Mitigated	Flood
Jurisdiction	Town of Sumrall
Project Contact	Mayor William Lofton
Title	Mayor
Agency	Town of Sumrall
Address	4880 Hwy 589, Sumrall, MS 39482
Phone Number	601-758-3591
Email	townofsumrall@gmail.com
Timeline	Ongoing
Location of Project	Near Sumrall City Hall
Total Estimated Cost, if known	\$500,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

Action or Project Name	Generators are needed to run Critical Facilities
Project Description	Purvis has a need for six heavy duty generators. These are needed in order to continue to operate City Hall/Police Department, Fire Department, Public Works Building, sewer lagoon, water supply station, and several lift stations in the event of prolonged power outage as found with the many Hurricanes and Storm systems that damage power supply to the area. A generator has been purchased for the sewer lagoon and the water supply station for the School St. location.
Hazard Mitigated	All Hazards
Jurisdiction	City of Purvis
Project Contact	Katherine Kemp
Title	City Clerk
Agency	City of Purvis
Address	P.O. Box 308 Purvis, MS 39475
Phone Number	601-794-2472
Email	purviscityclerk@yahoo.com
Timeline	Ongoing
Location of Project	Throughout the City of Purvis
Total Estimated Cost, if known	\$250,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

Action or Project Name	A truck with a Knuckle Boom is needed
Project Description	The City of Purvis has a need for a truck with an attached knuckle boom. After hurricanes and windstorms, heavy debris across roadways is very problematic for first responders. The purchase of a truck with an attached knuckle boom will allow the city to expedite the process for opening the roads back up for first responders and general transportation of goods and supplies.
Hazard Mitigated	All Hazards
Jurisdiction	City of Purvis
Project Contact	Katherine Kemp
Title	City Clerk
Agency	City of Purvis
Address	P.O. Box 308 Purvis, MS 39475
Phone Number	601-794-2472
Email	purviscityclerk@yahoo.com
Timeline	Ongoing
Location of Project	Throughout the City of Purvis
Total Estimated Cost, if known	\$120,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

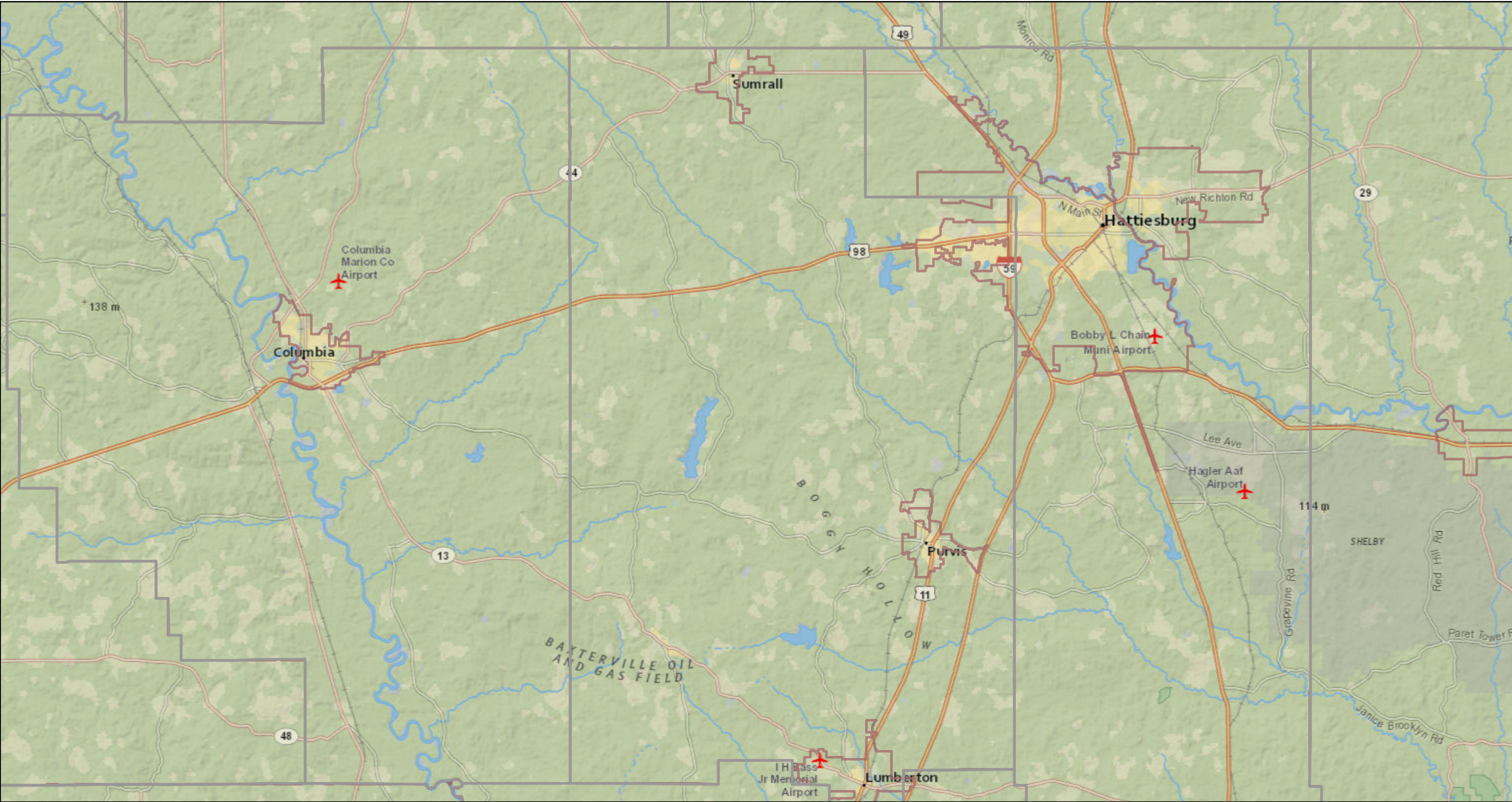
Action or Project Name	Generators are needed to run Critical Facilities
Project Description	The city currently has one existing generator that is old and in need of replacement. It is used to keep the police department running during emergency events. The city needs 8 new heavy-duty generators to keep the city's critical functions operating during a disaster event. The generators will be used for operation of public buildings, fire station, police station, city hall, city barn, water system, lagoon, and lift stations.
Hazard Mitigated	All Hazards
Jurisdiction	City of Lumberton
Project Contact	James Sandifer, Jr.
Title	Mayor
Agency	City of Lumberton
Address	P.O. Box 211, Lumberton, MS 39455
Phone Number	601-796-7003
Email	lumbertoncityclerk@hotmail.com
Timeline	Ongoing
Location of Project	Throughout the City of Purvis
Total Estimated Cost, if known	\$300,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

Action or Project Name	Two dump trucks are needed
Project Description	The city currently has one existing dump truck that is old and in need of replacement. Due to the excessive amounts of debris related to storms of all nature, the city is in need of two dump trucks.
Hazard Mitigated	All Hazards
Jurisdiction	City of Lumberton
Project Contact	James Sandifer, Jr.
Title	Mayor
Agency	City of Lumberton
Address	P.O. Box 211, Lumberton, MS 39455
Phone Number	601-796-7003
Email	lumbertoncityclerk@hotmail.com
Timeline	Ongoing
Location of Project	Throughout the City of Purvis
Total Estimated Cost, if known	\$150,000
Sources of Funding	State or Federal Funding
Status	This is an ongoing project

STAPLE + E PRIORITIZATION WORKSHEET

STAPLE +E CRITERIA	S		T			A			P			L			E					E	TOTAL
	Social		Technical			Administrative			Political			Legal			Environmental					Economic	
Considerations →	Community Acceptance	Effect -Segment Population	Technical Feasibility	Long-Term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance - Operations	Political Support	Local Champion	Public Support	State Authority	Existing local Authority	Potential Legal Challenge	Effect on Land/Water	Effect Endangered	Effect on HAZMAT/	Consistent Community	Consistent with Federal Laws	From Benefit Cost Review	Add ALL
Actions & Projects ↓																					
LAMAR COUNTY																					
Generators	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	3	20
Repetitive Loss Buy Out Program	1	1	1	1	1	1	1	1	1	0	1	0	0	1	1	1	1	1	1	3	19
Communication Towers	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	3	18
Dispatch Upgrades	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	2	17
Notification System	1	1	1	1	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	2	17
Weather Shelters	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	19
CITY of LUMBERTON																					
Generators	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	19
Drainage Improvements	1	1	0	1	1	0	0	1	1	0	1	1	0	1	1	1	1	1	1	2	16
Dump Trucks	1	1	1	0	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	18
Weather Shelters	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	19
CITY of PURVIS																					
Generators	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	3	20
Truck with Knuckle Boom	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	19
TOWN of SUMRALL																					
Generators	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	0	1	1	2	18
Drainage Improvements	1	1	0	1	1	0	0	1	1	0	1	0	0	1	1	1	1	1	1	2	15
Weather Shelters	1	1	1	1	1	1	0	1	1	0	1	1	1	1	1	1	1	1	1	2	19
Fire Truck	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	0	1	1	2	19

Lamar Co, MS - Geographic Map

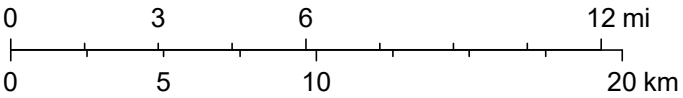


6/17/2025, 5:28:31 PM

1:288,895

-  County Boundaries
-  Municipal Boundaries

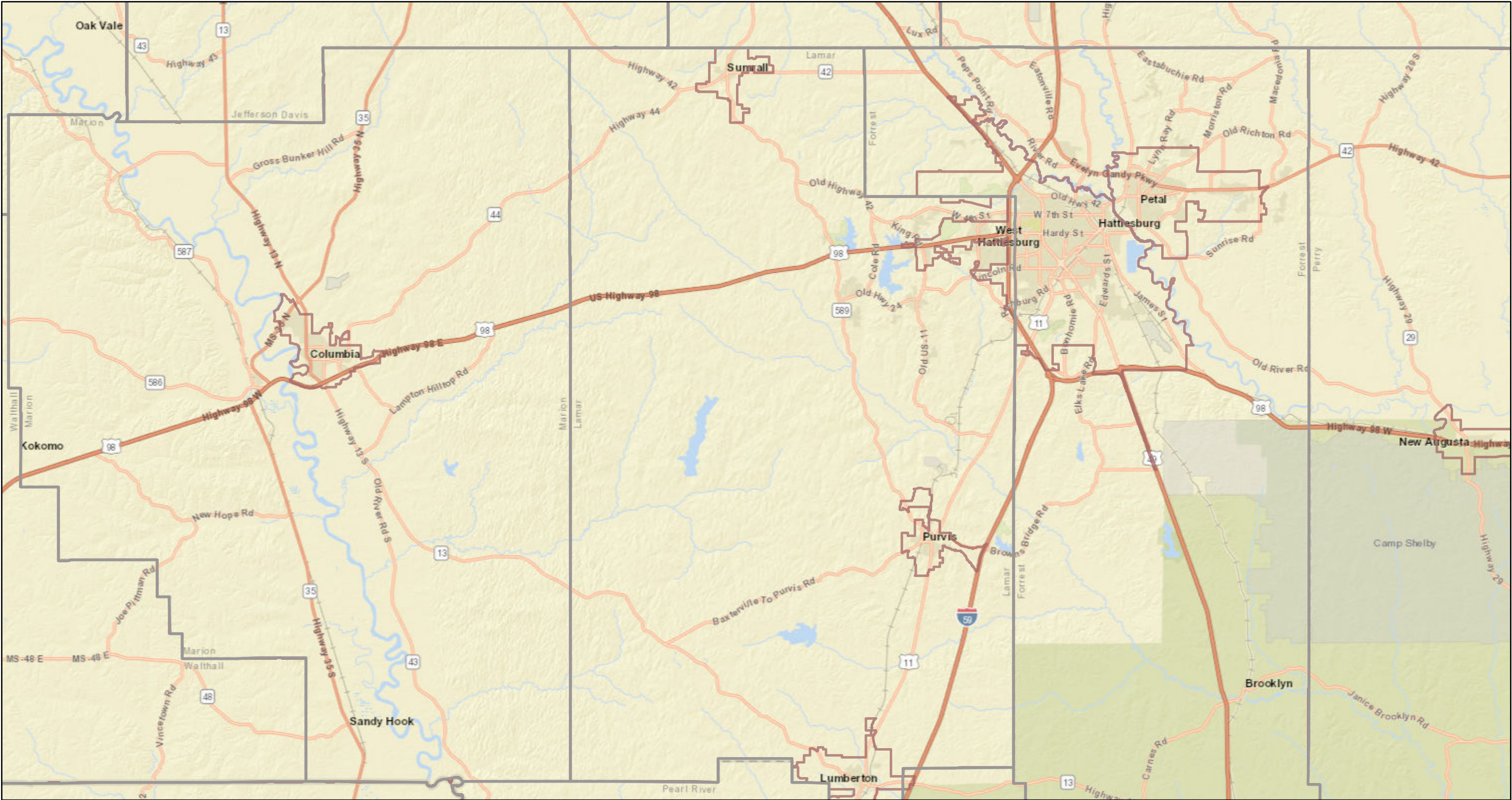
NatGeo_World_Map





National Geographic, Esri, Garmin, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, NRCAN, GEBCO, NOAA, increment P Corp.

Lamar Co, MS - Better Street Map

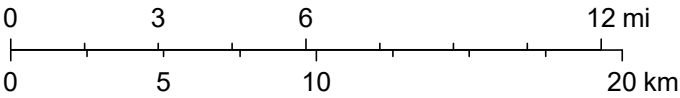


6/17/2025, 5:30:26 PM

1:288,895

-  County Boundaries
-  Municipal Boundaries

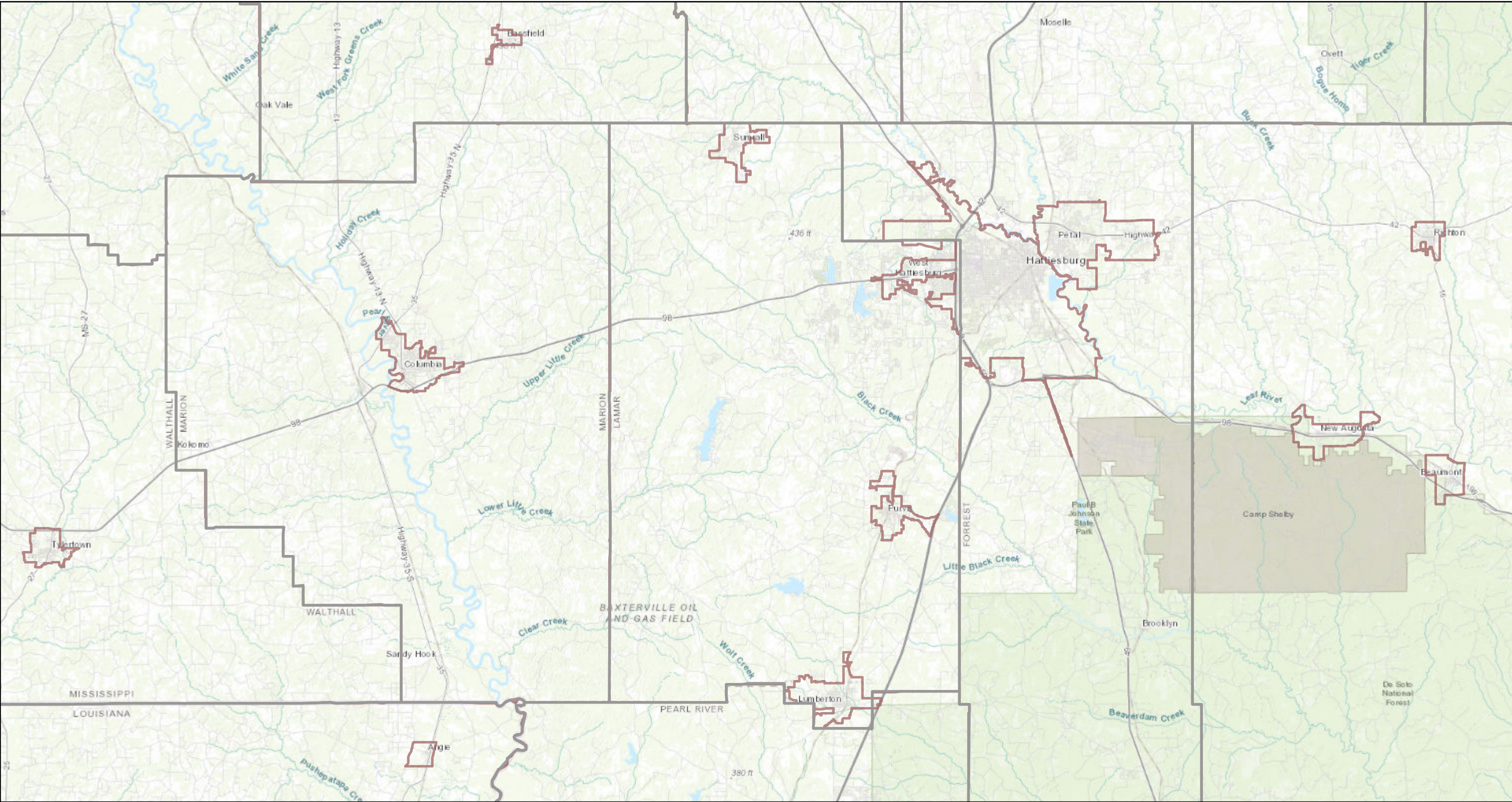
World_Street_Map





City of Hattiesburg, Esri, HERE, Garmin, NGA, USGS, NPS

Lamar Co, MS - County & Municipal Boundaries

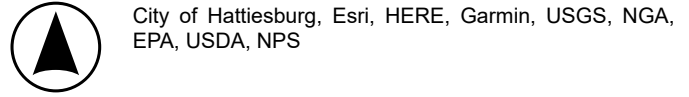
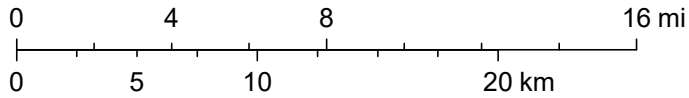


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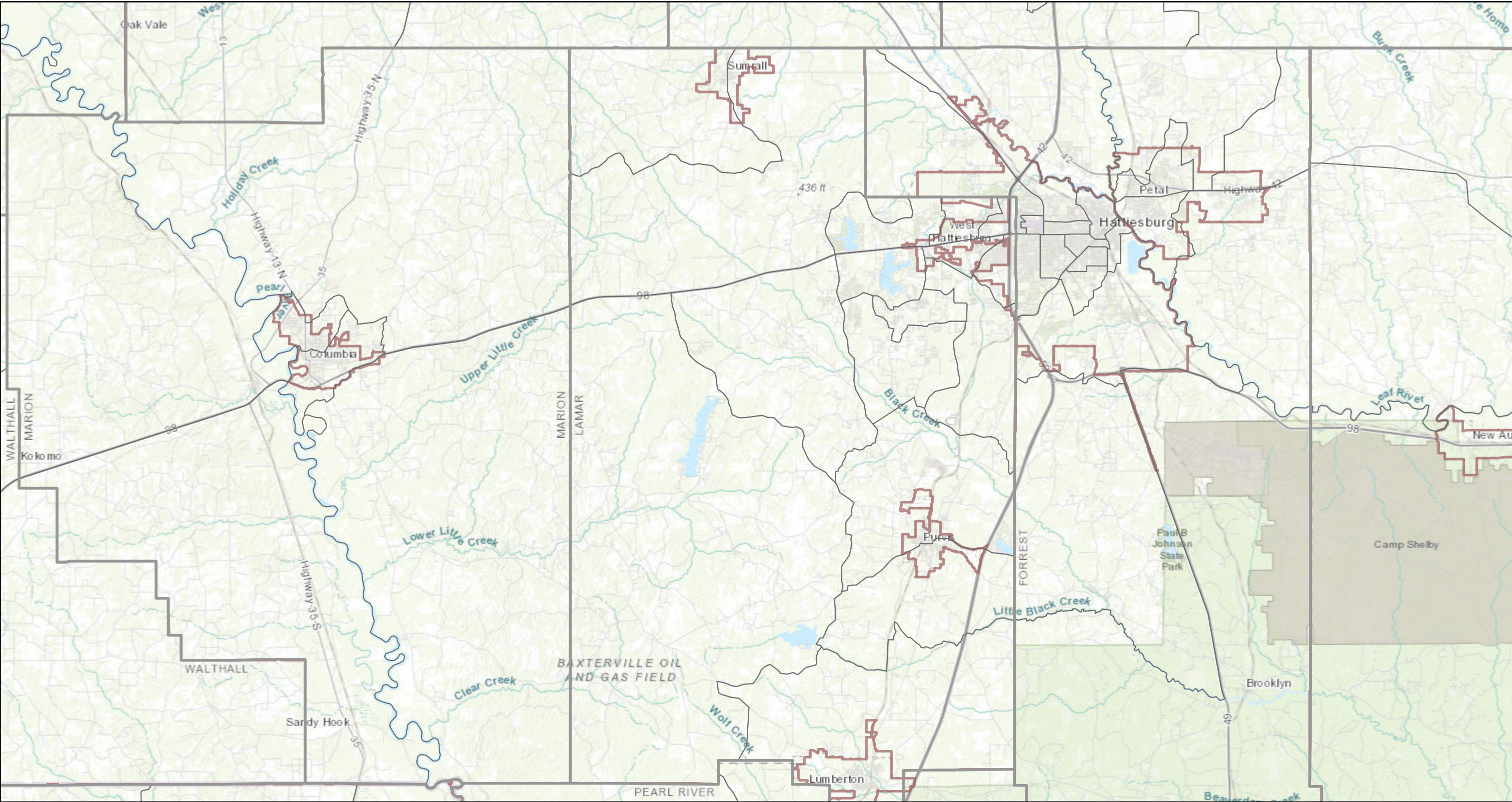
1:366,900

- County Boundaries
- Municipal Boundaries

Citations



Lamar Co, MS - County, Municipal, and Census Tract Boundaries

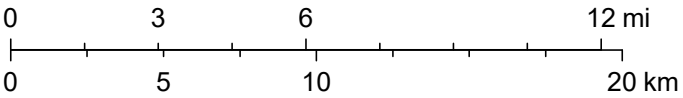


6/16/2025, 5:26:48 PM

1:288,895

-  County Boundaries
-  Census Tract Boundaries
-  Municipal Boundaries

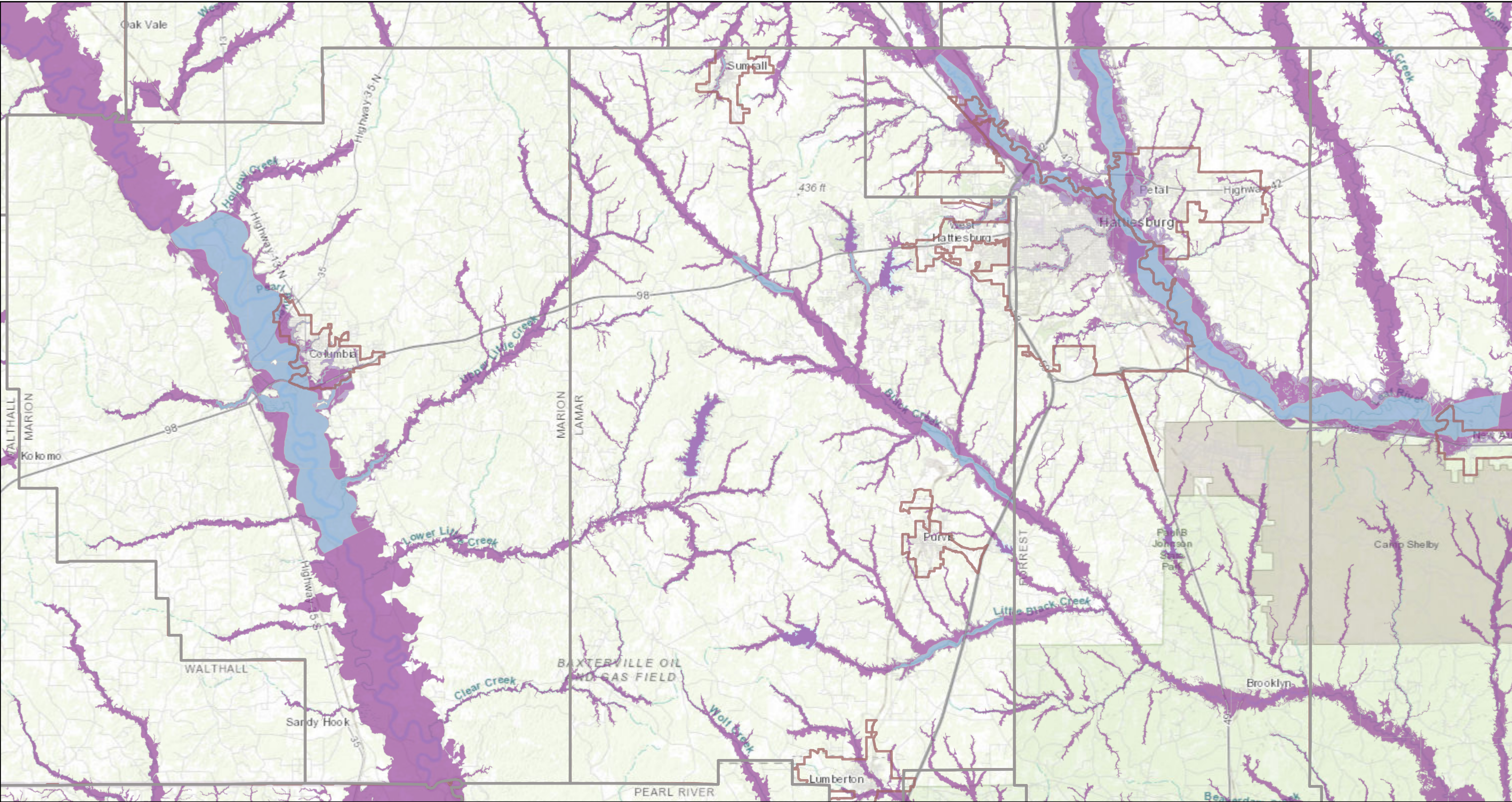
Citations





City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - FEMA Flood Hazard

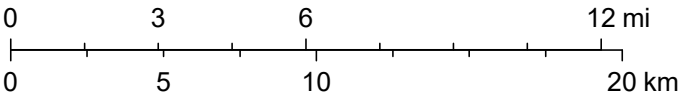


6/16/2025, 5:58:22 PM

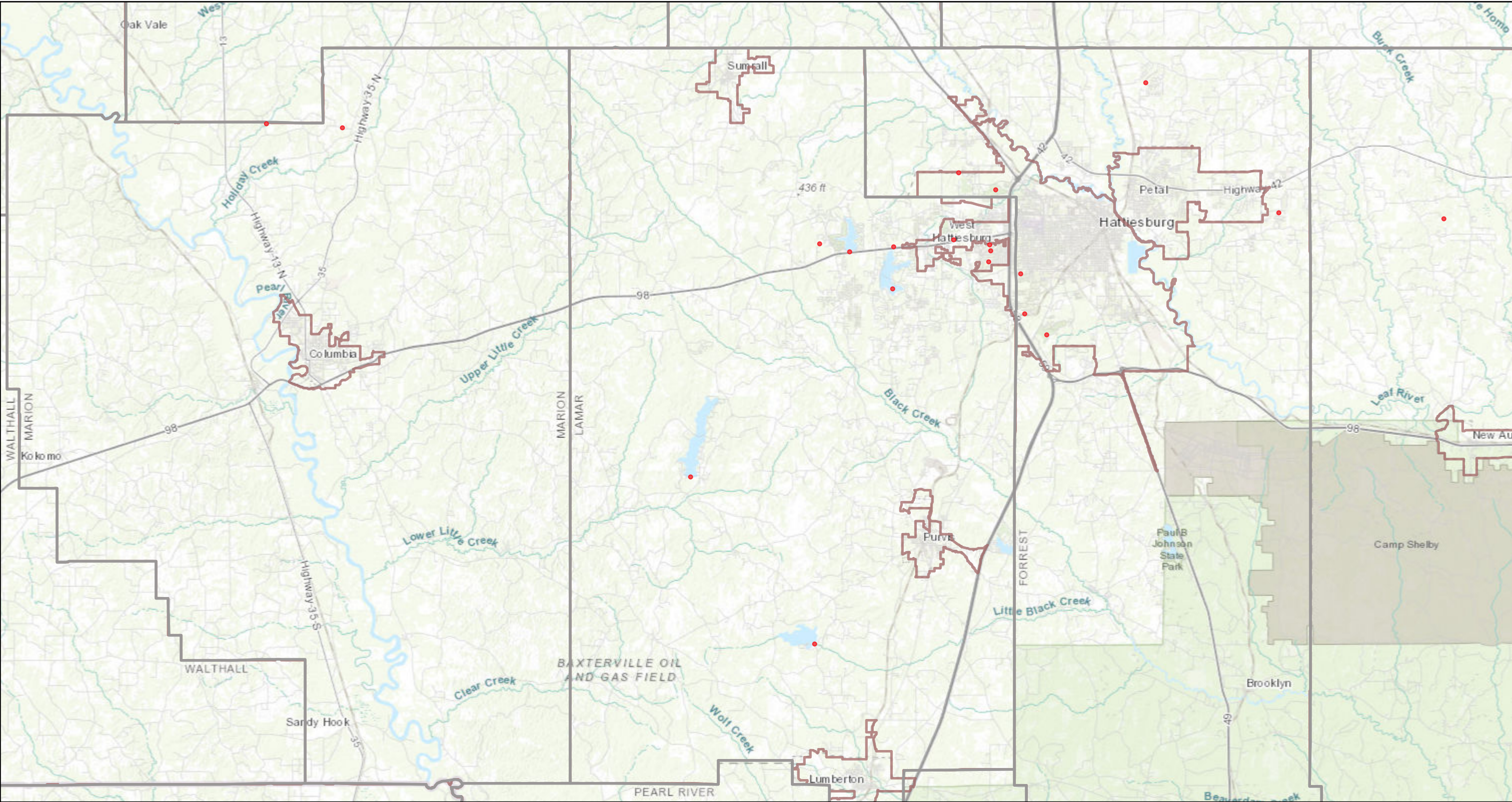
1:288,895

- County Boundaries
- Municipal Boundaries
- 0.2% Annual Chance Flood Hazard
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Citations

FEMA - Flood Hazard (zoom to activate)



Lamar Co, MS - High Hazard Potential Dam Lines



6/16/2025, 5:48:16 PM

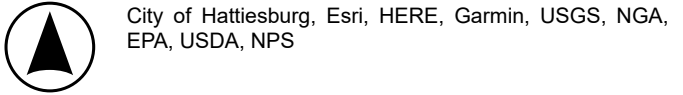
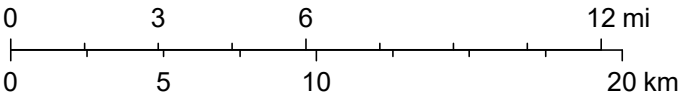
1:288,895

NID - High Hazard Potential Dam Lines

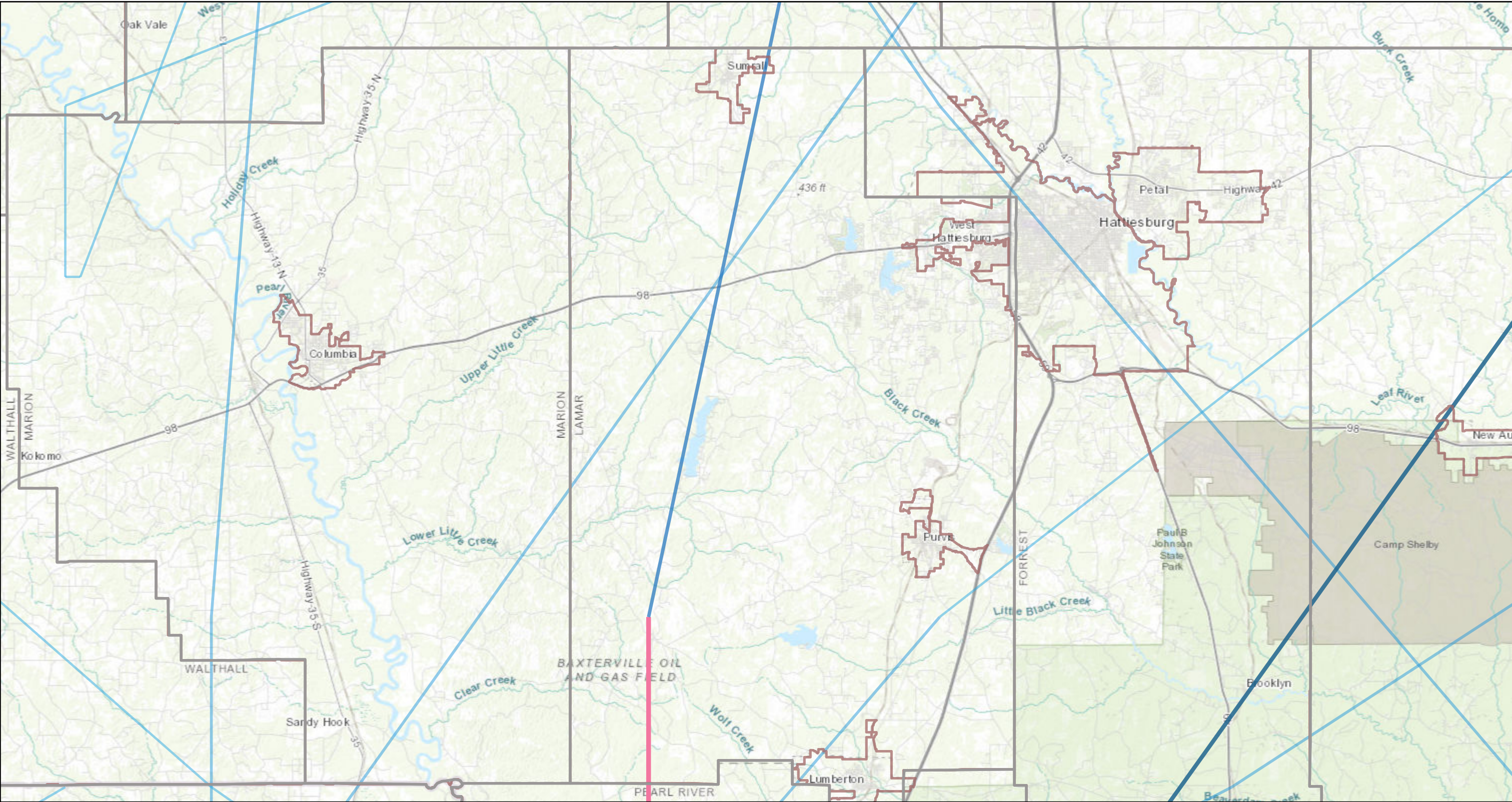
- High
- 0
- 92,513,300

- 185,027,000
- 277,540,000

- County Boundaries
- Municipal Boundaries
- Citations



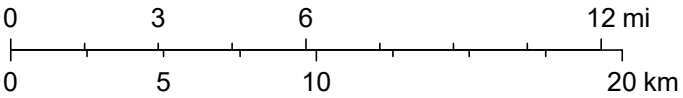
Lamar Co, MS - NOAA Hurricane Tracks (1990+)



6/16/2025, 6:05:53 PM

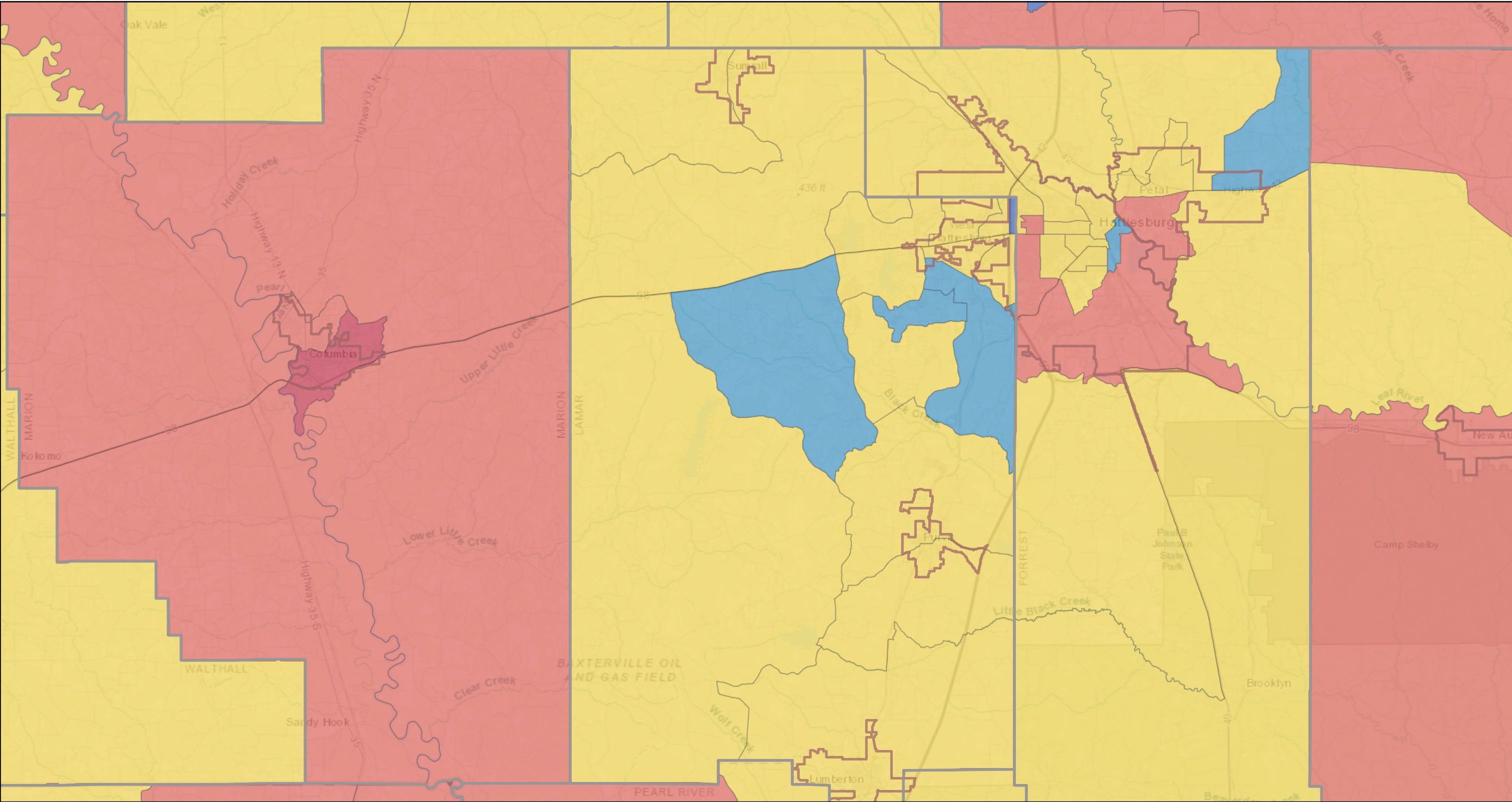
1:288,895

- County Boundaries
- Municipal Boundaries
- NOAA - Hurricane Tracks (1990+)
- Category 3
- Category 2
- Category 1
- Tropical Storm
- Tropical Depression
- Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - National Risk Index Census Tracts



6/16/2025, 6:02:15 PM

1:288,895

County Boundaries

Municipal Boundaries

National Risk Index Census Tracts (zoom to activate)

Very High

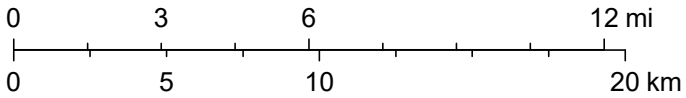
Relatively High

Relatively Moderate

Relatively Low

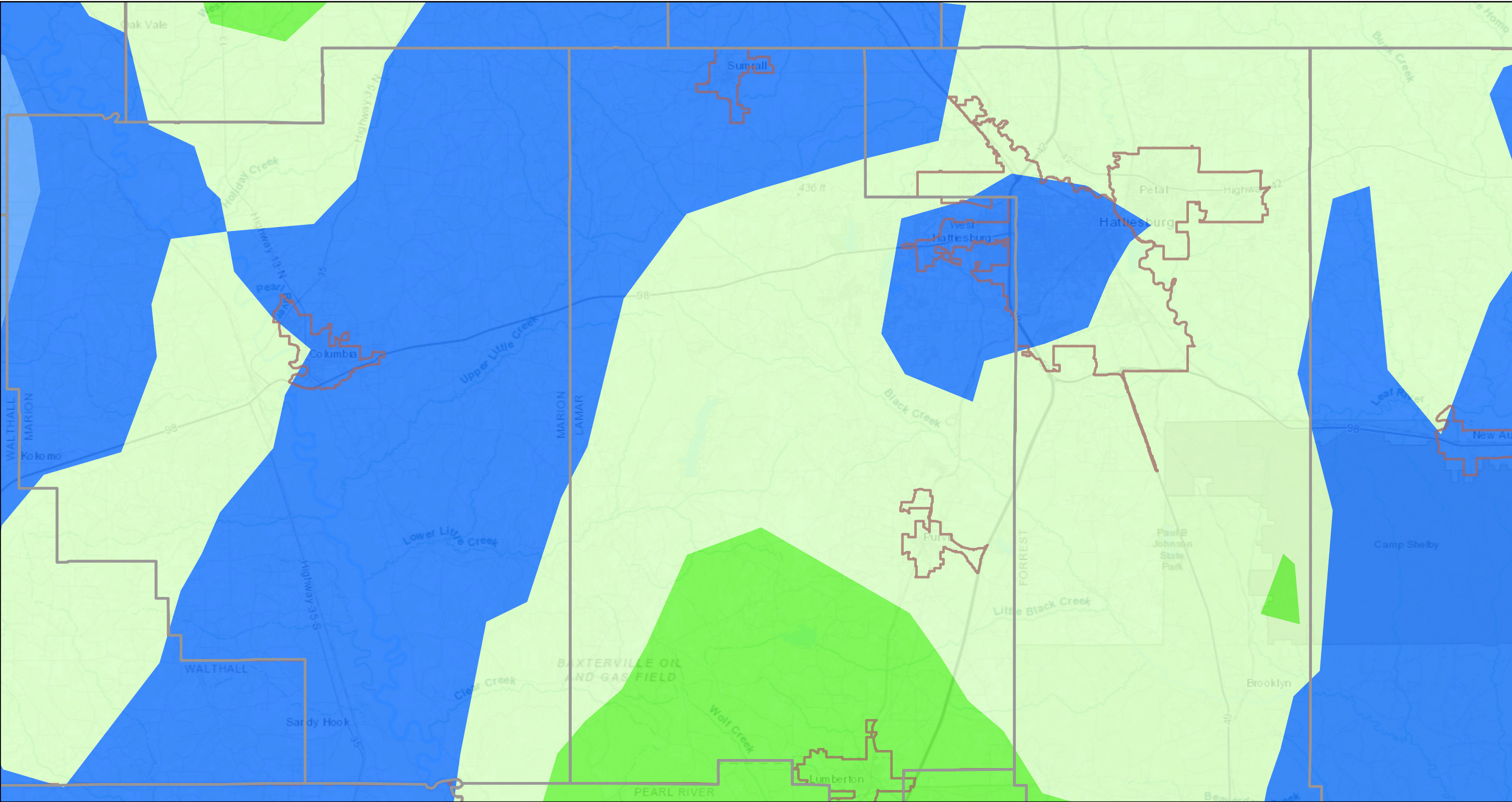
Very Low

Citations



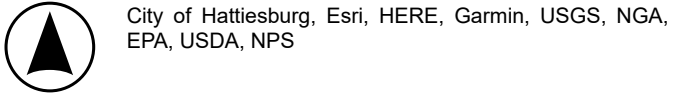
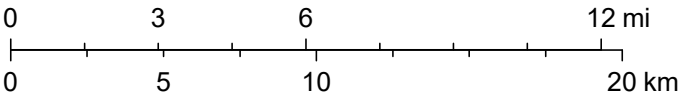
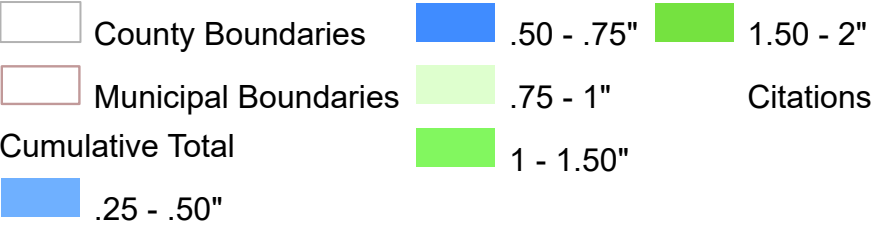
City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - NWS Quantitative Precipitation Forecast

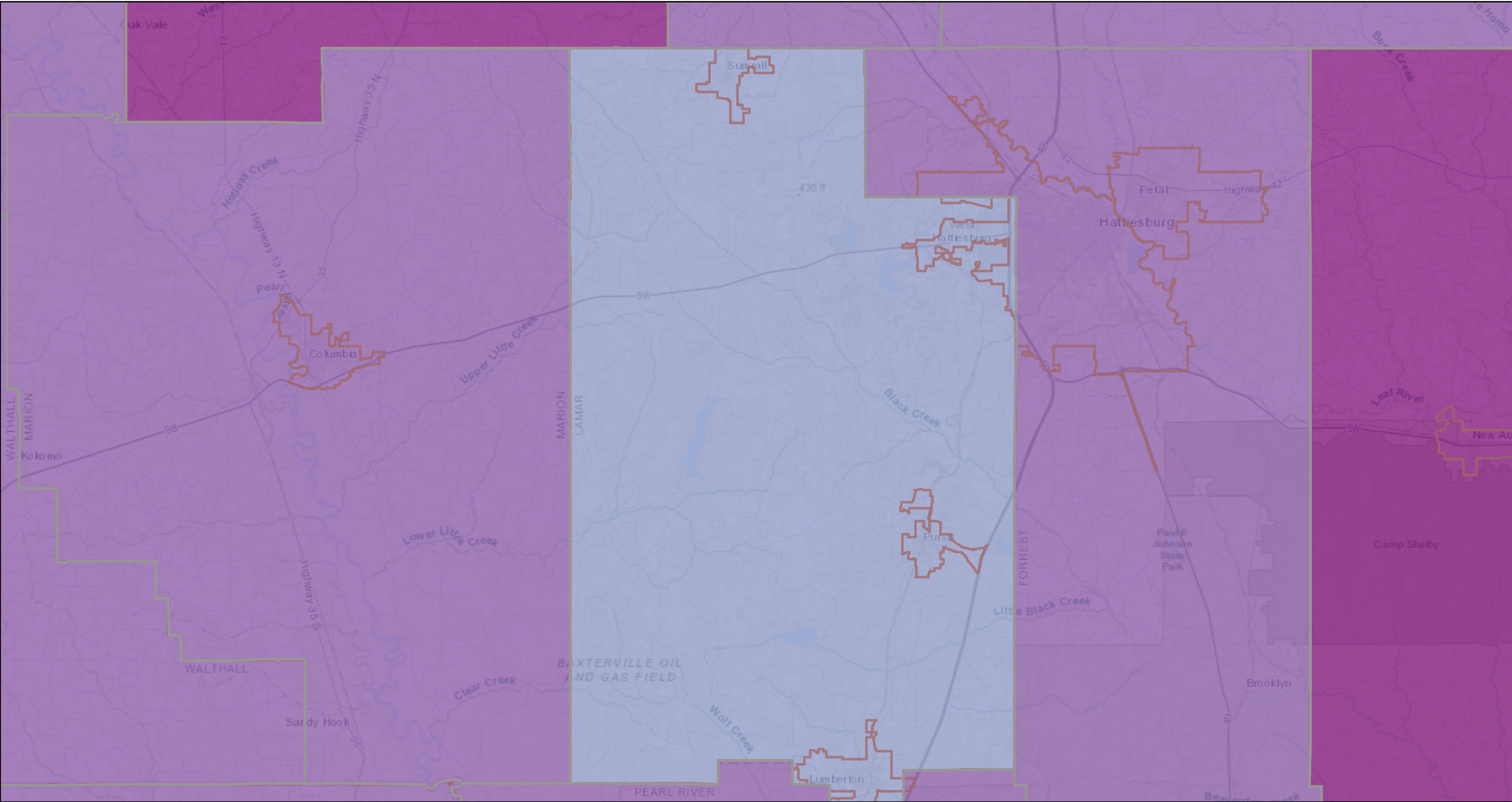


6/16/2025, 6:10:22 PM

1:288,895



Lamar Co, MS - Residential Structures in SFHA with Flood Insurance



6/16/2025, 5:52:59 PM

1:288,895

County Boundaries

Municipal Boundaries

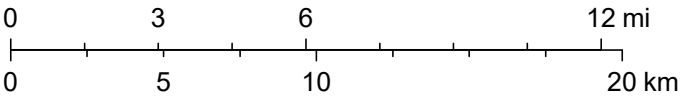
Residential Structures in SFHA with Flood Insurance

0 - 10%

10.01 - 20%

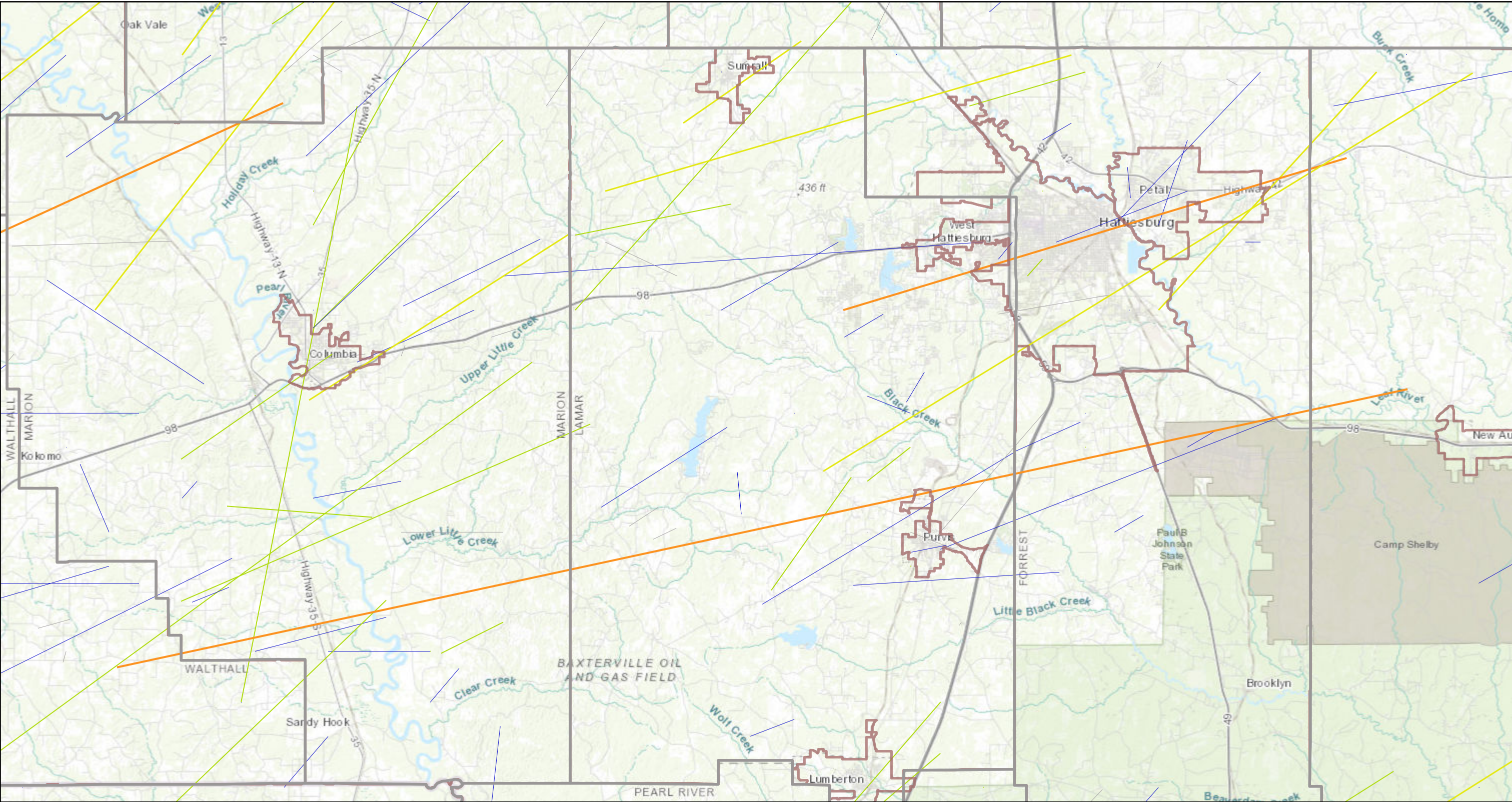
40.01 - 70%

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - NOAA Historical Tornado Tracks (1950-2022)



6/16/2025, 6:04:44 PM

1:288,895

County Boundaries

Municipal Boundaries

NOAA - Historical Tornado Tracks: 1950-2022

EF-4

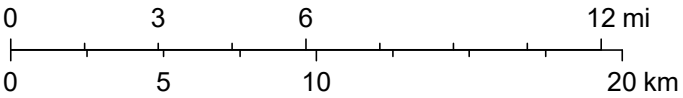
EF-3

EF-2

EF-1

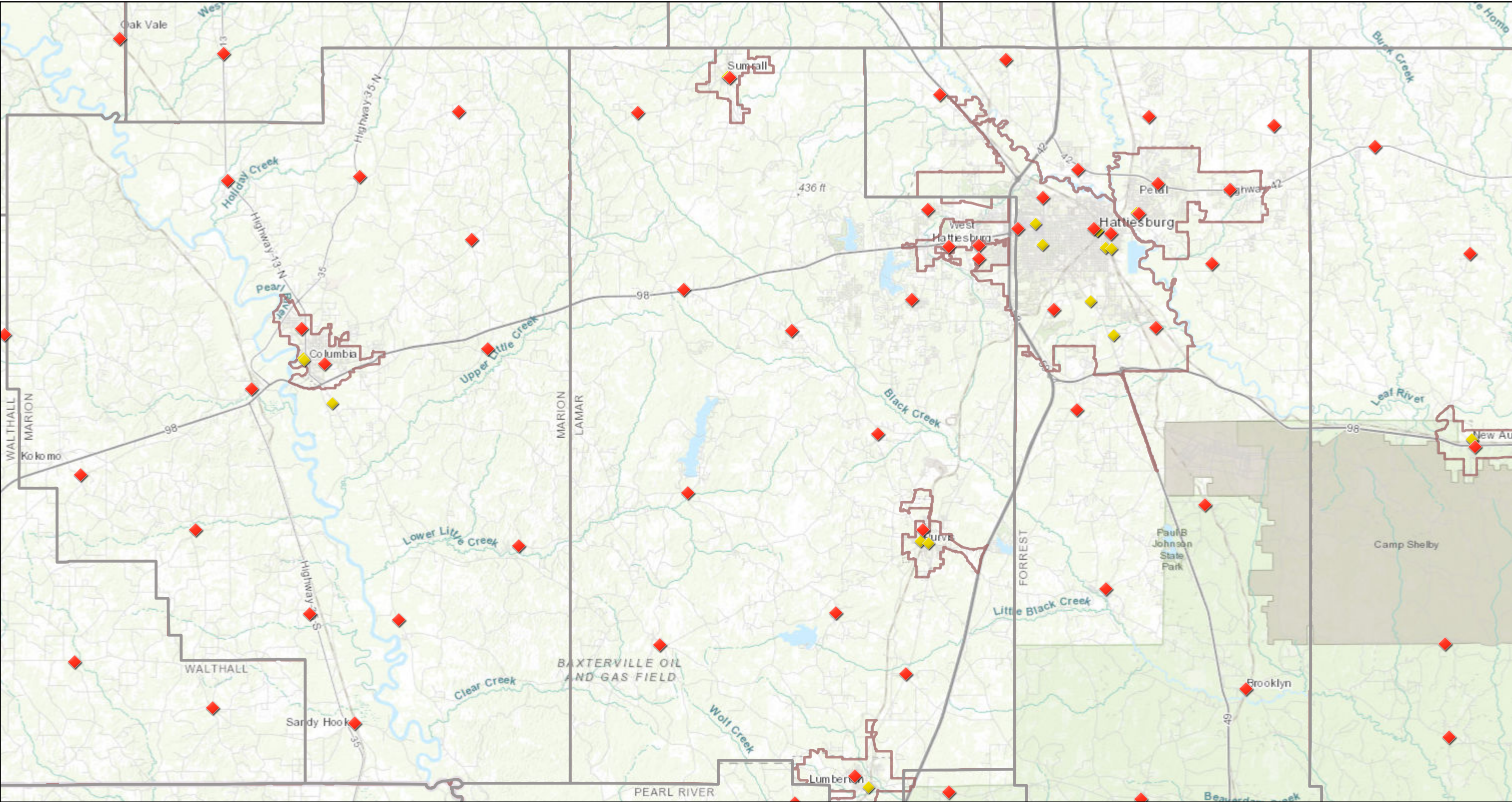
EF-0

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

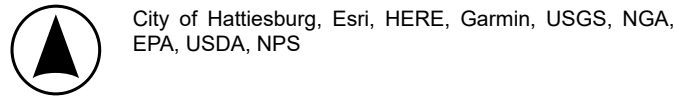
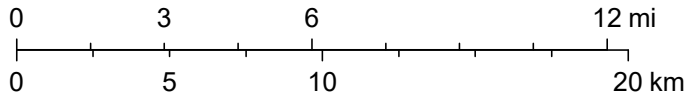
Lamar Co, MS - Fire & Local Law Enforcement Stations



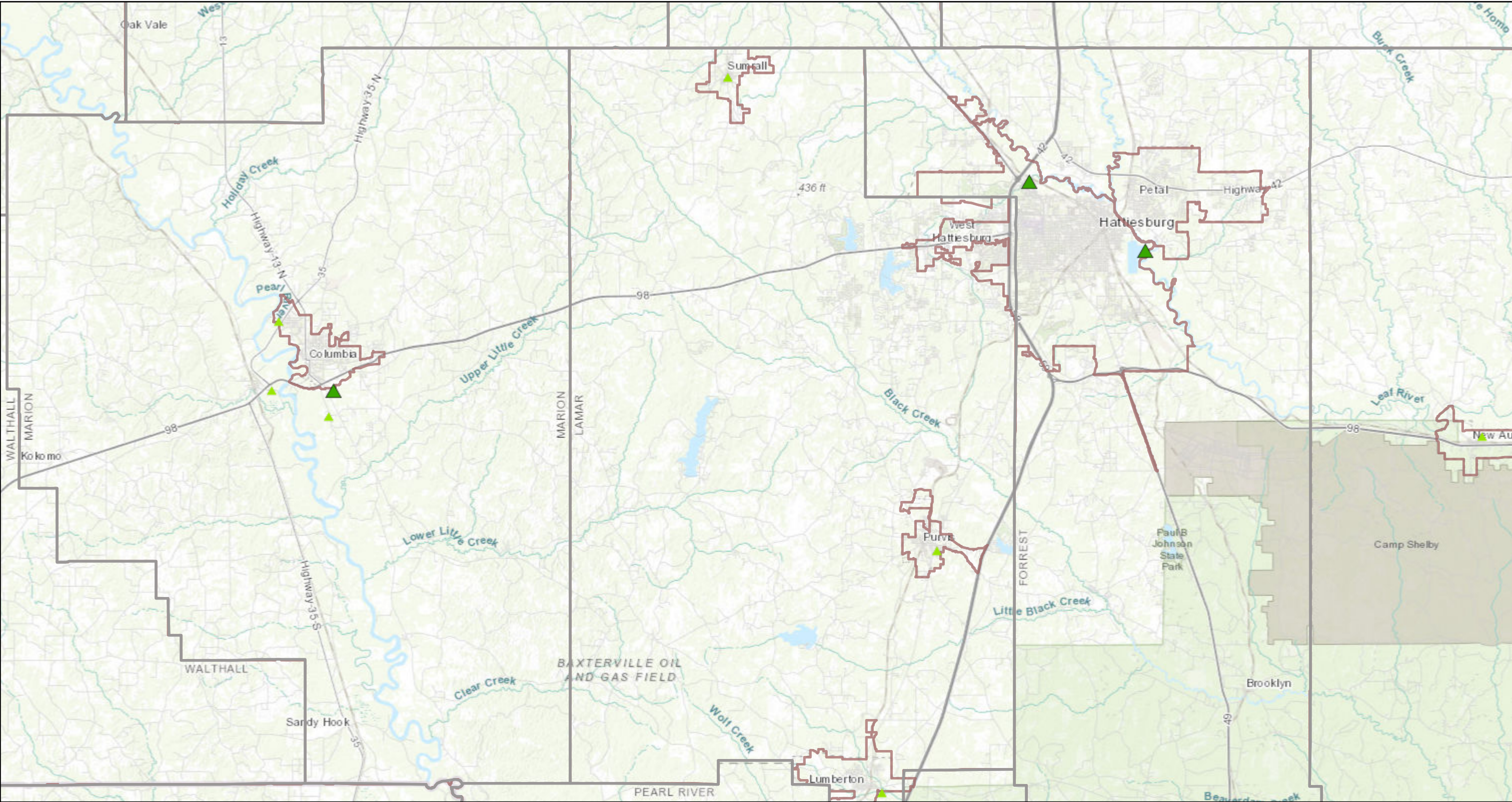
6/16/2025, 5:29:04 PM

1:288,895

-  Fire Stations
-  Local Law Enforcement Locations
-  County Boundaries
-  Municipal Boundaries
- Citations



Lamar Co, MS - Wastewater Treatment Facilities



6/16/2025, 5:46:51 PM

1:288,895

Wastewater Treatment Plants (FRS)

County Boundaries

Municipal Boundaries

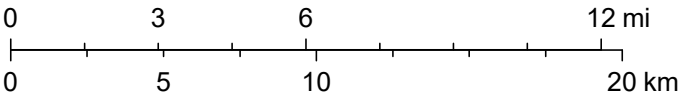
▲

Major

▲

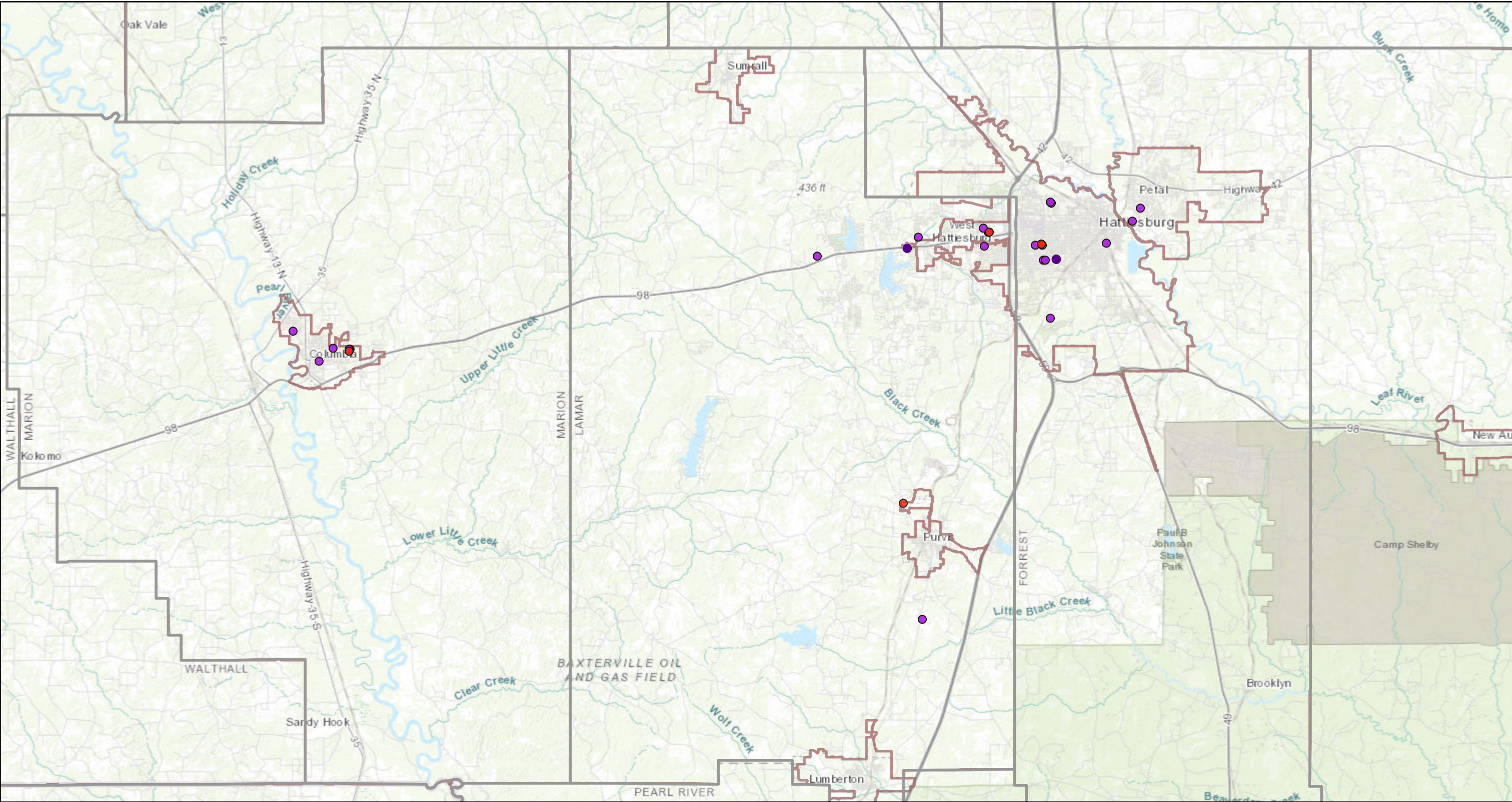
Minor

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Hospitals, Nursing Homes, Urgent Care



6/16/2025, 5:42:56 PM

1:288,895

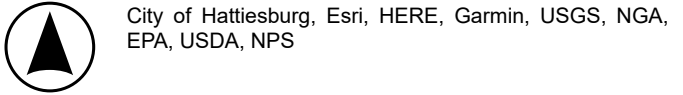
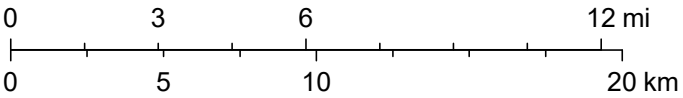
- Hospitals

Urgent Care Facilities

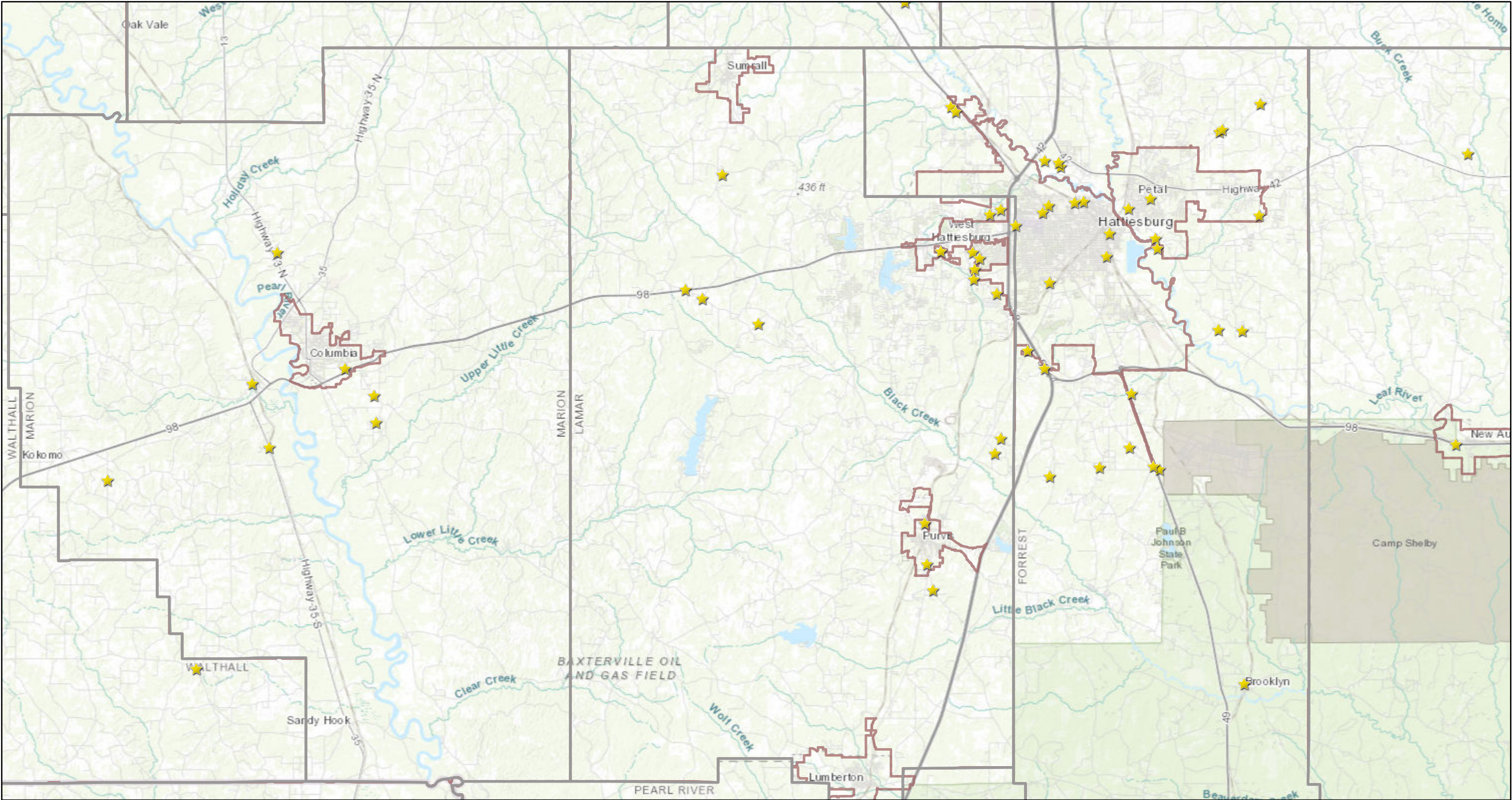
Municipal Boundaries
- Nursing Homes

County Boundaries

Citations



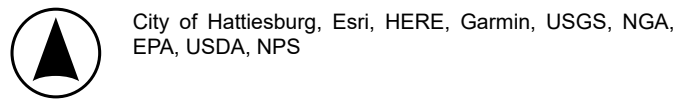
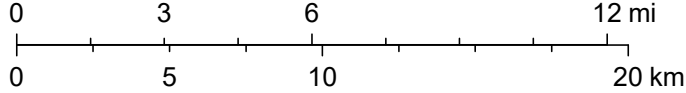
Lamar Co, MS - Mobile Home Parks



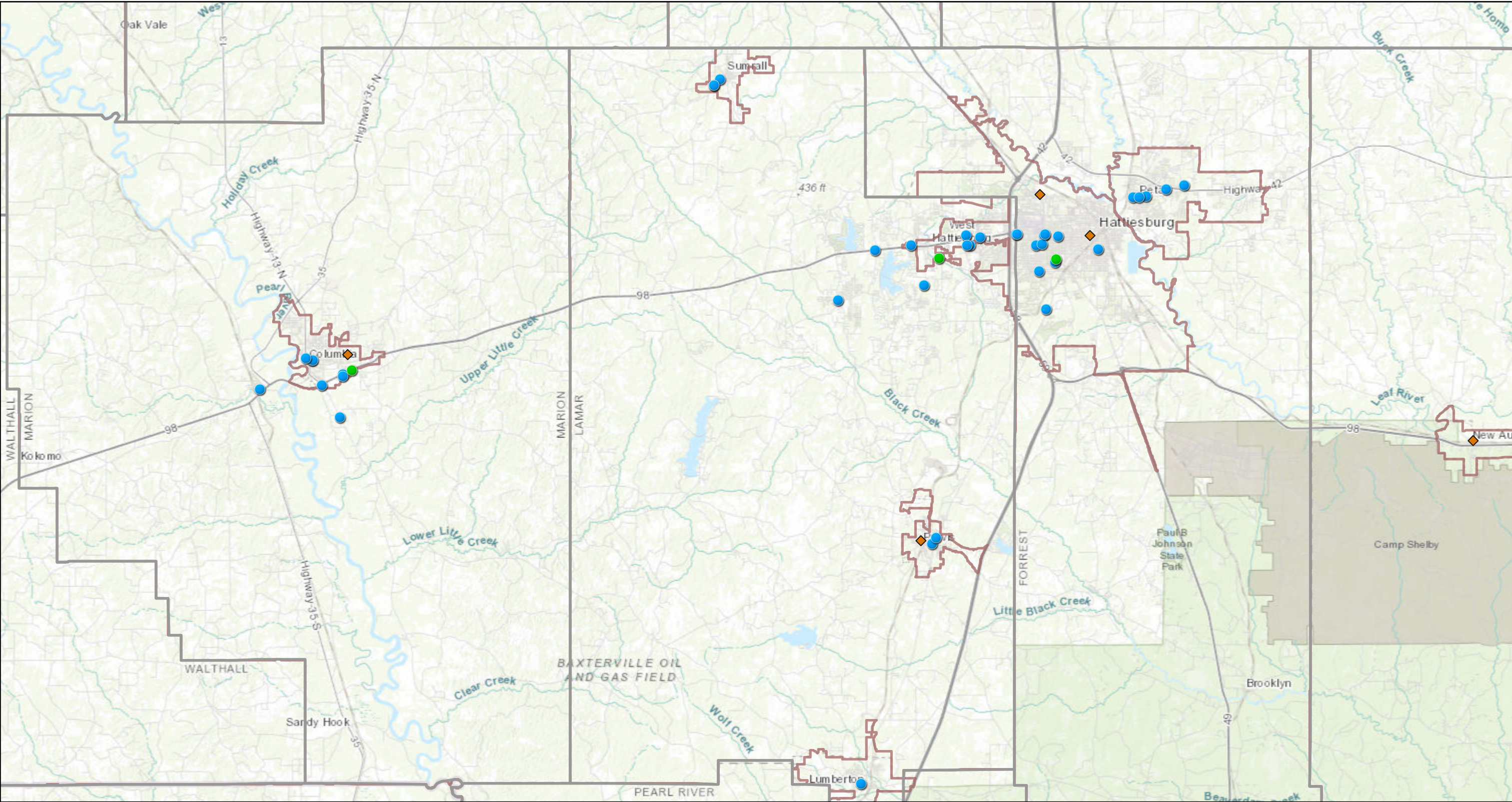
6/16/2025, 5:30:24 PM

1:288,895

- ★ Mobile Home Parks
- County Boundaries
- Municipal Boundaries
- Citations



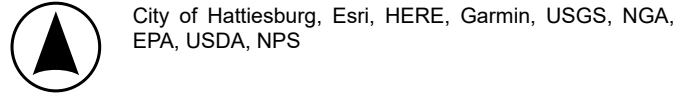
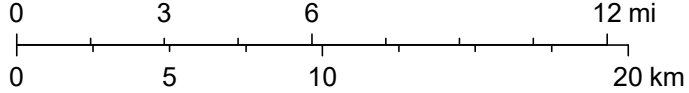
Lamar Co, MS - Pharmacies, Dialysis Centers & Public Health Departments



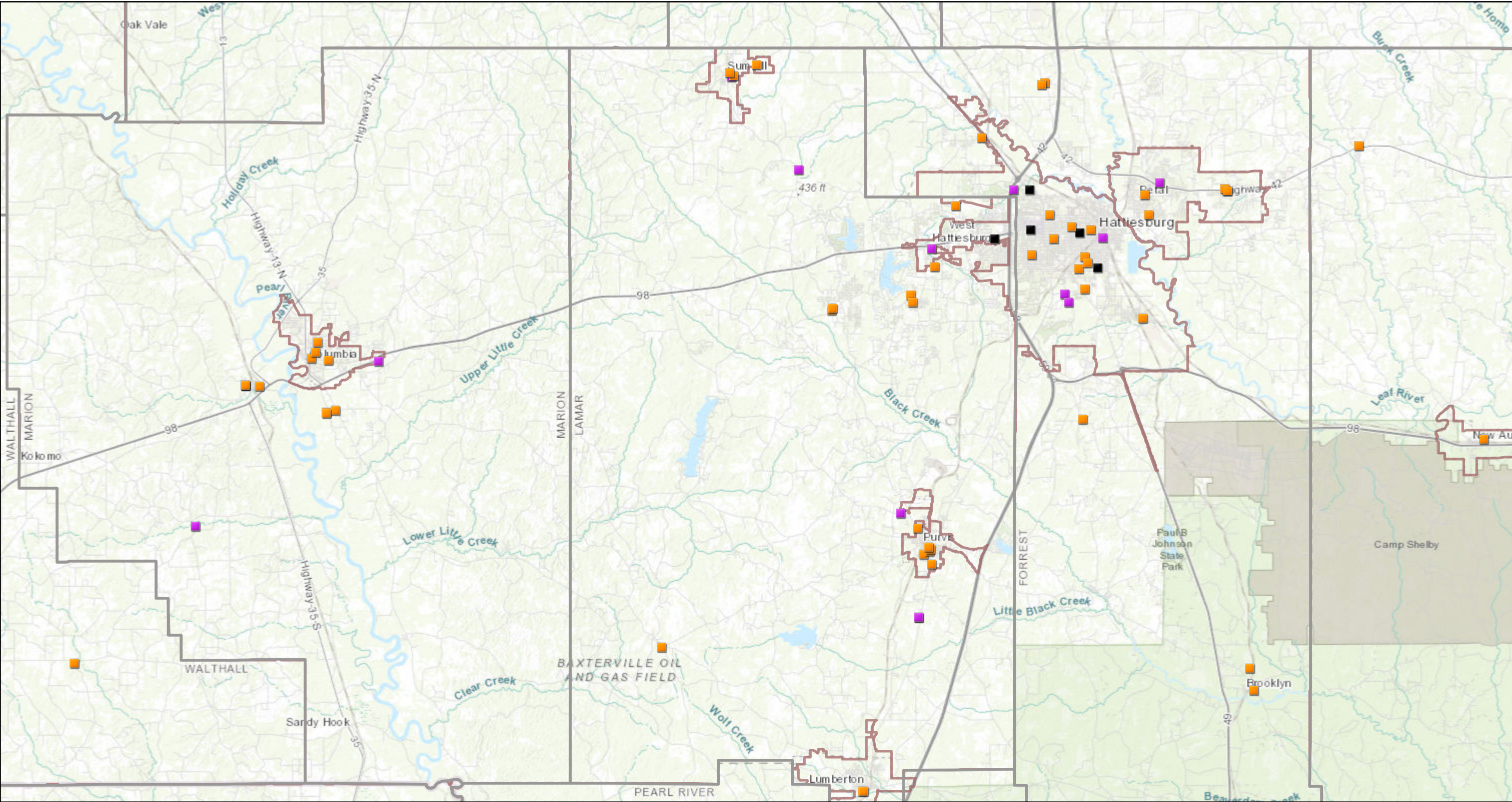
6/16/2025, 5:44:32 PM

1:288,895

- Dialysis Centers (RxOpen)
- Pharmacies (RxOpen)
- ◆ Public Health Departments
- Municipal Boundaries
- County Boundaries
- Citations



Lamar Co, MS - Public & Private Schools and Colleges & Universities



6/16/2025, 5:31:43 PM

1:288,895

- Public Schools

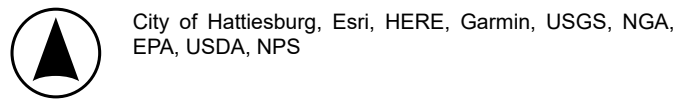
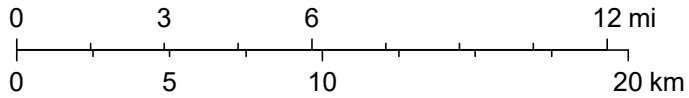
Private Schools

Colleges and Universities

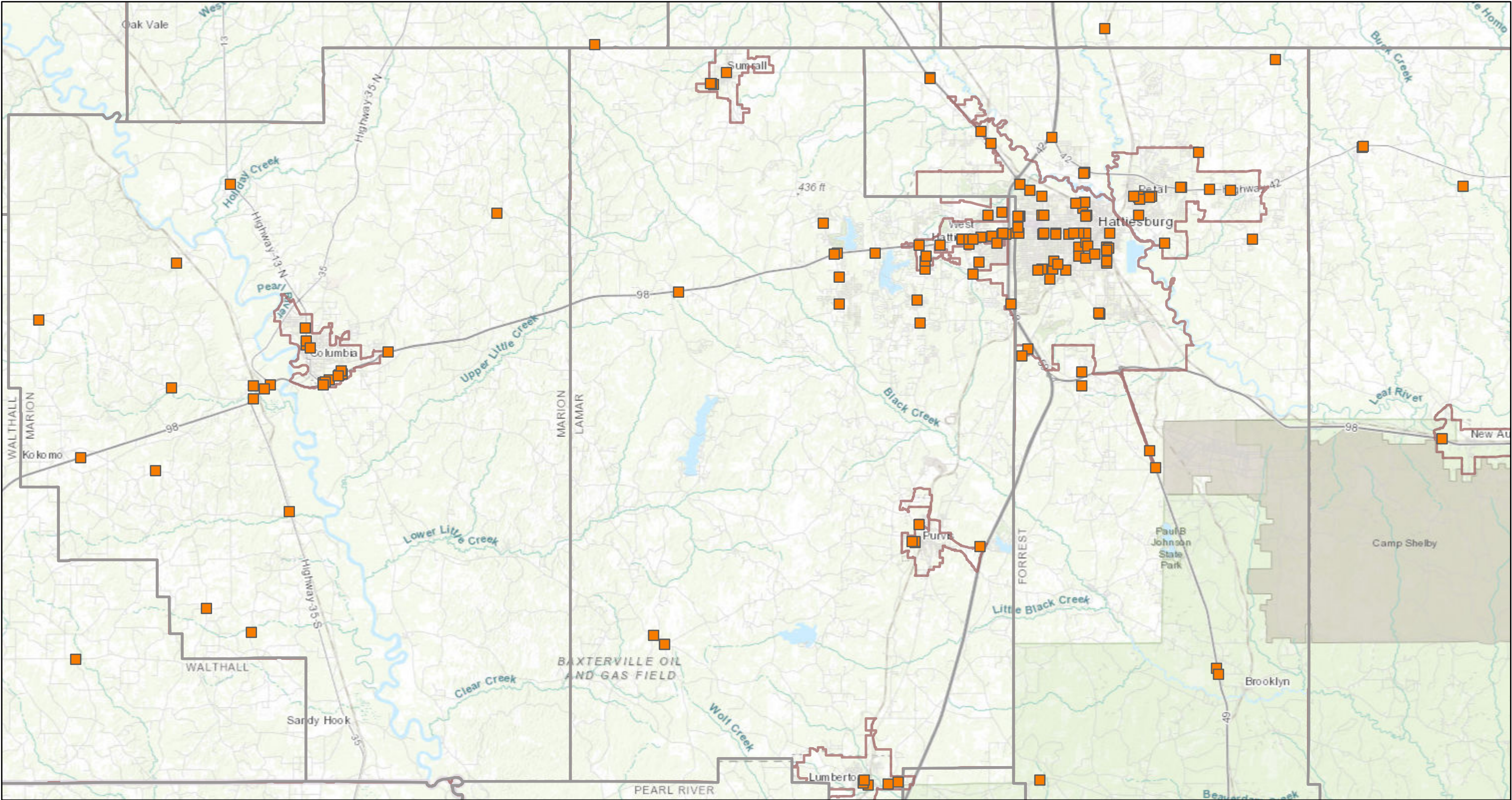
County Boundaries

Municipal Boundaries

Citations



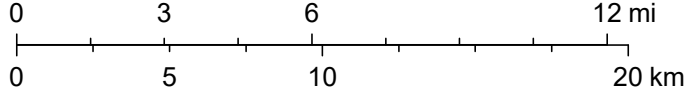
Lamar Co, MS - SNAP Authorized Retailers



6/16/2025, 5:33:05 PM

1:288,895

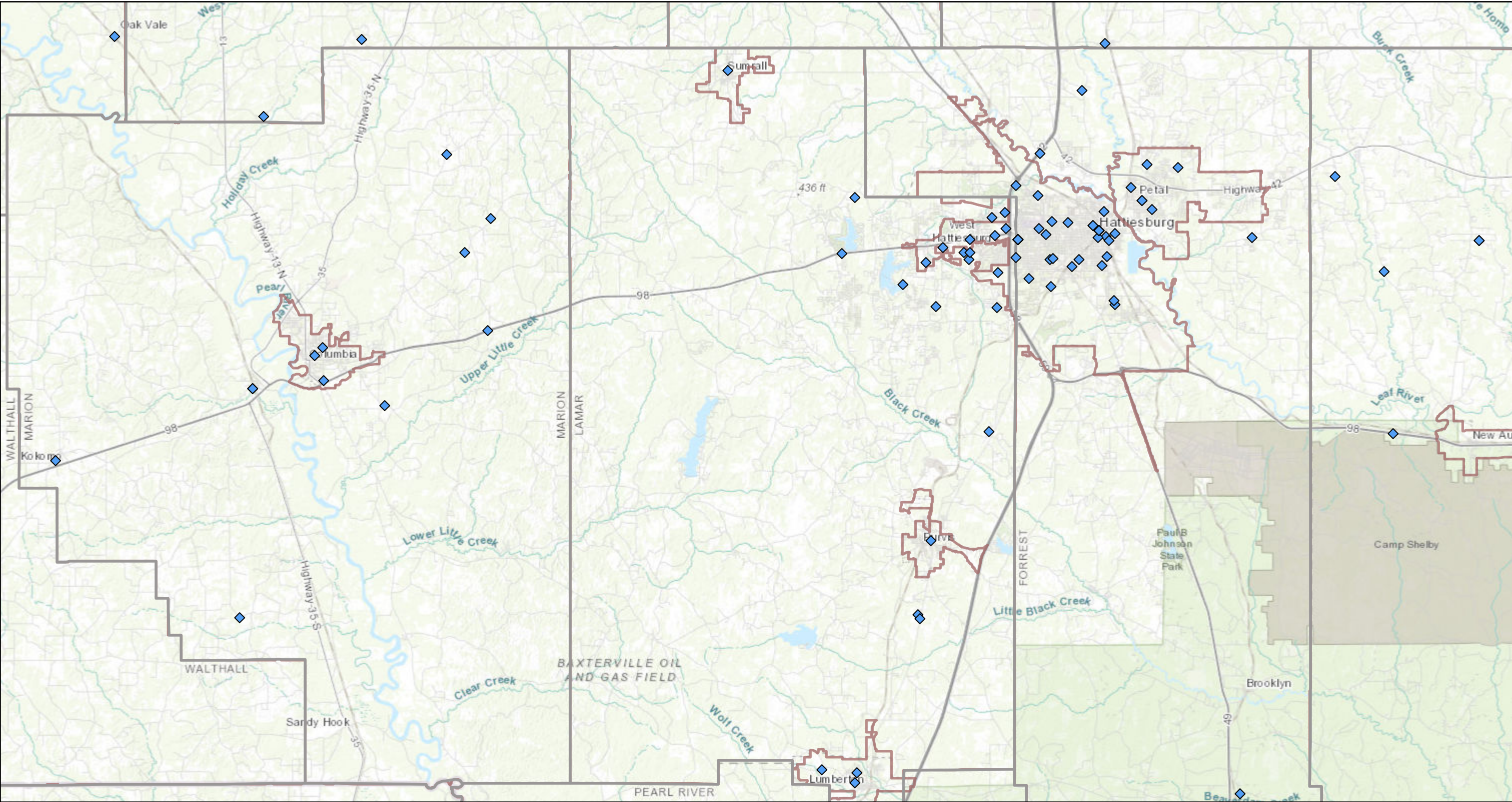
-  SNAP Authorized Retailers (zoom in to activate)
-  County Boundaries
-  Municipal Boundaries
- Citations





City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA,
EPA, USDA, NPS

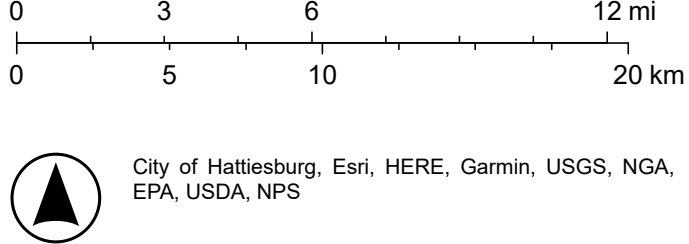
Lamar Co, MS - All Places of Worship



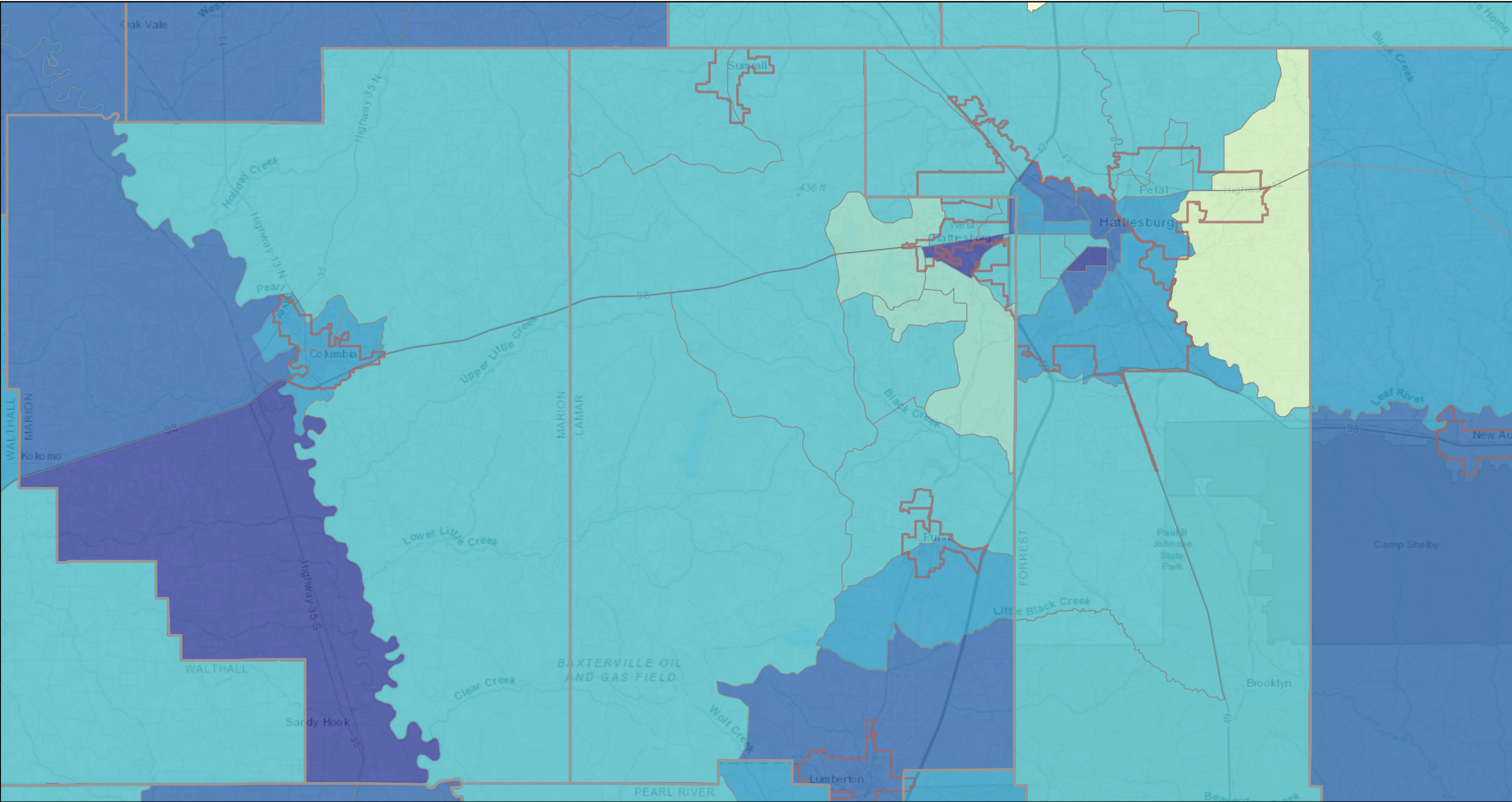
6/16/2025, 5:45:53 PM

1:288,895

- ◆ All Places Of Worship
- County Boundaries
- Municipal Boundaries
- Citations



Lamar Co, MS - FEMA Community Resilience Challenges Index



6/16/2025, 6:12:36 PM

1:288,895

- County Boundaries
- Municipal Boundaries
- Census Tracts – FEMA Community Resilience Challenges Index (CRCI): Potential Challenges to Resilience
- Highest challenges (95th - 100th percentile)
- High challenges (85th - 95th percentile)
- Medium-high challenges (70th - 85th percentile)

- Medium challenges (30th - 70th percentile)
- Medium-low challenges (15th - 30th percentile)
- Low challenges (5th -15th percentile)
- Lowest challenges (up to 5th percentile)

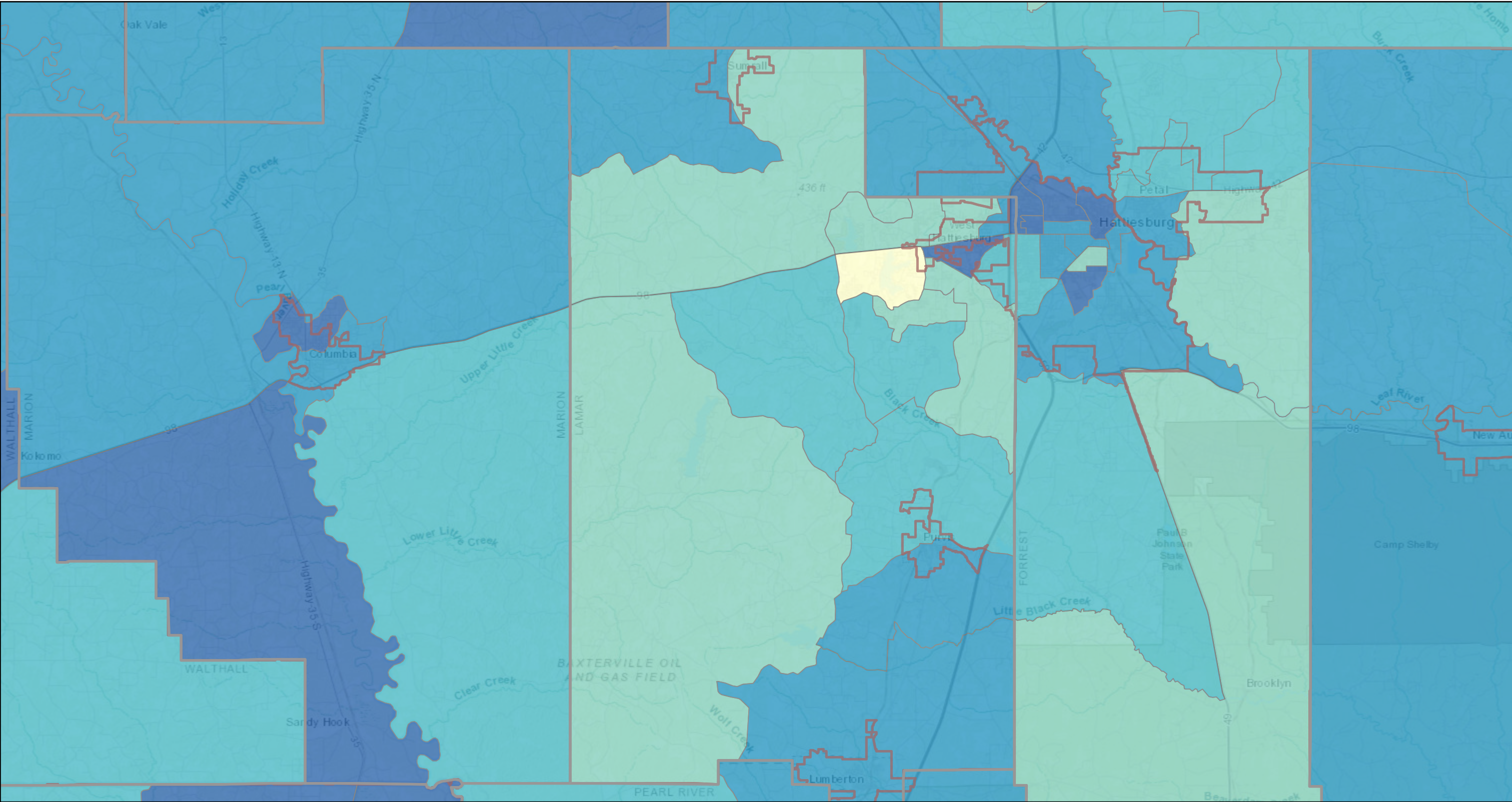
Citations

03612 mi

051020 km

City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Median Household Income



6/17/2025, 5:21:53 PM

1:288,895

County Boundaries

Municipal Boundaries

Census Tracts – Median Household Income

\$20,001 - \$40,000

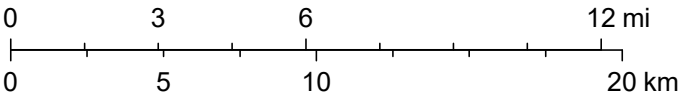
\$40,001 - \$60,000

\$60,001 - \$80,000

\$80,001 - \$100,000

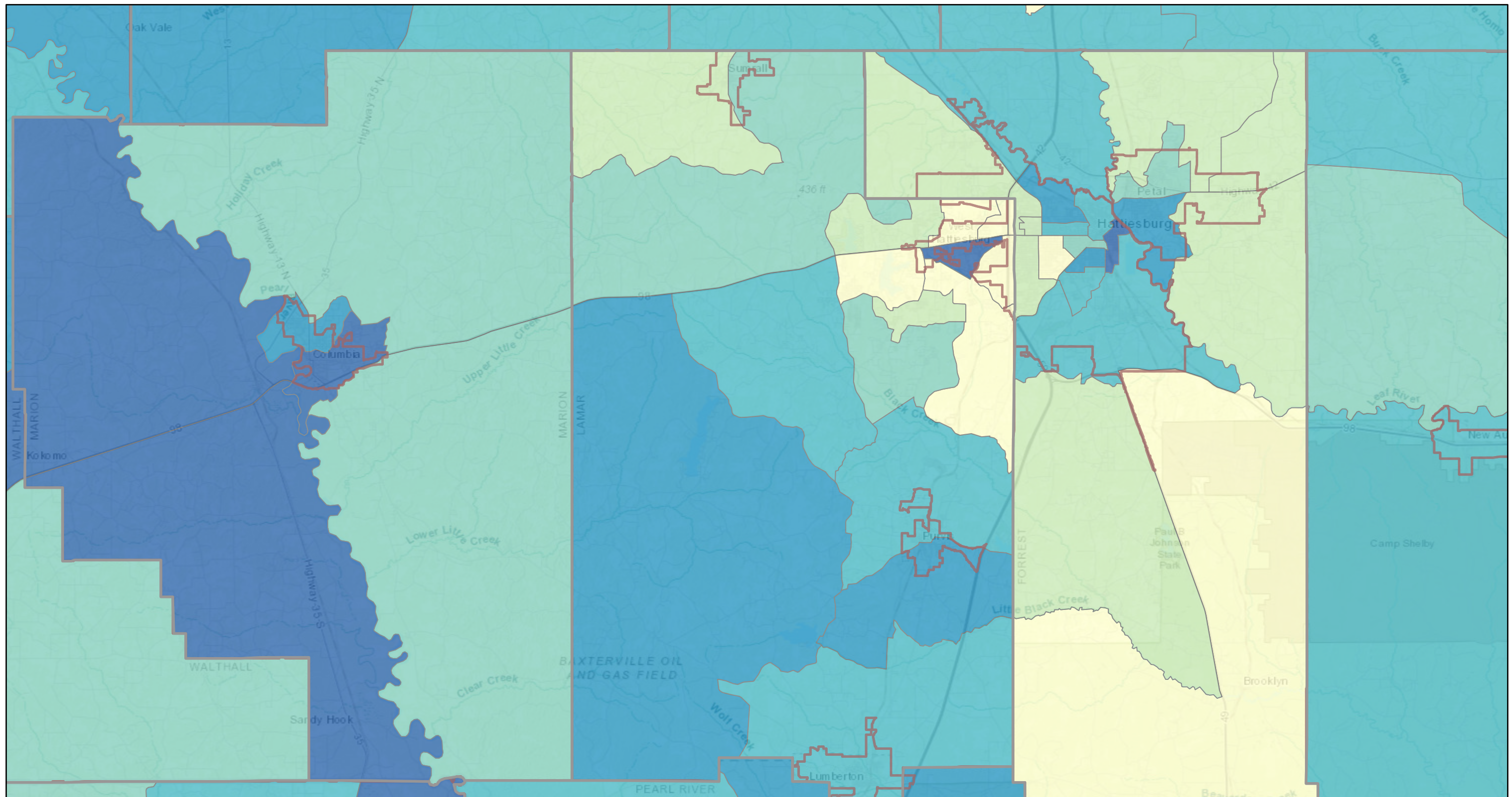
\$120,001 or more (Lower Challenge to Resilience)

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Population without High School Diploma



6/16/2025, 6:13:51 PM

1:288,895

County Boundaries

Municipal Boundaries

Census Tracts – Population without a High School Diploma

22.19 - 32.65%

15.57 - 22.18%

10.71 - 15.56%

6.91 - 10.70%

3.56 - 6.90%

0 - 3.55% (Lower Challenge to Resilience)

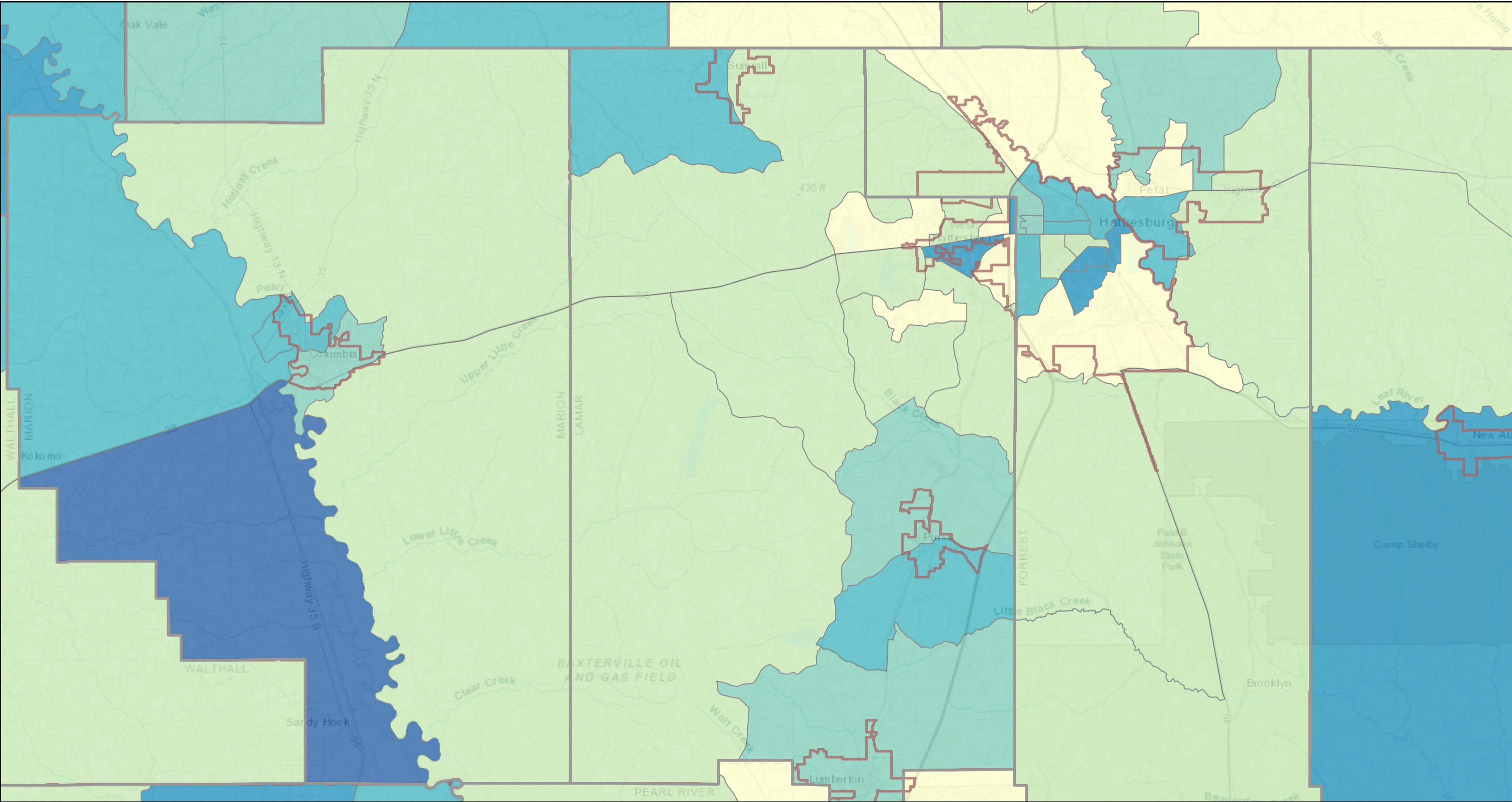
Citations

0 3 6 12 mi
0 5 10 20 km



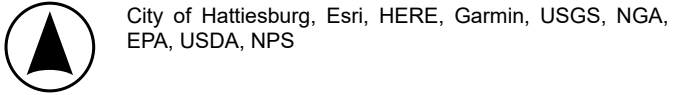
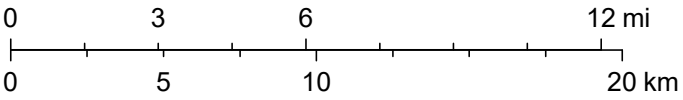
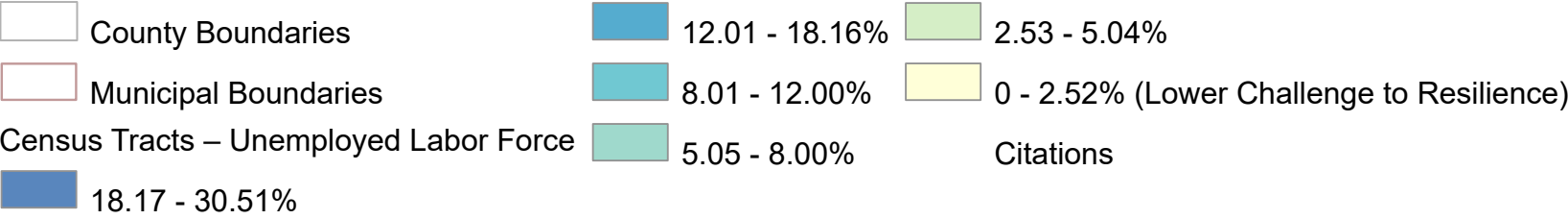
City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Unemployed Labor Force

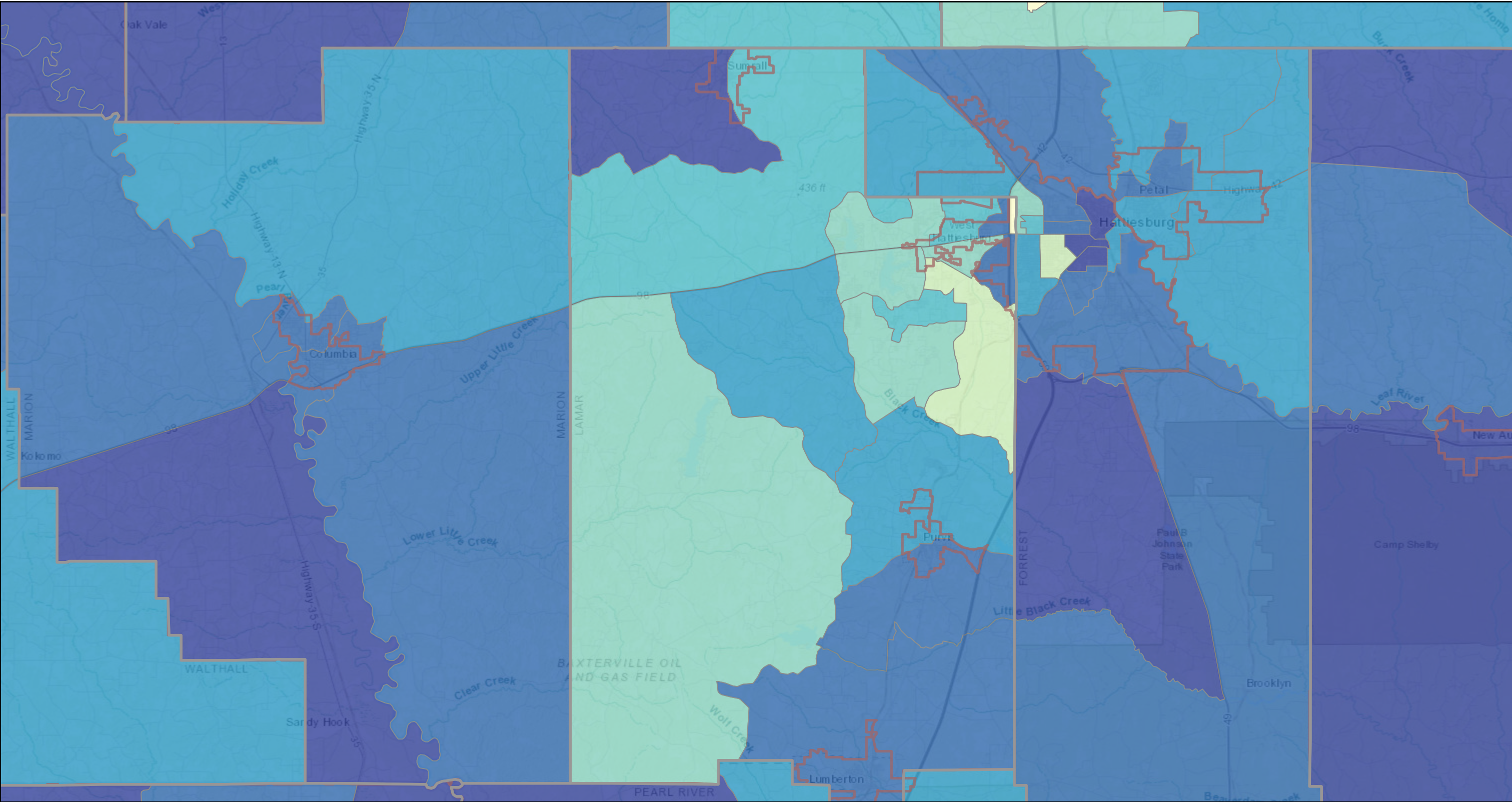


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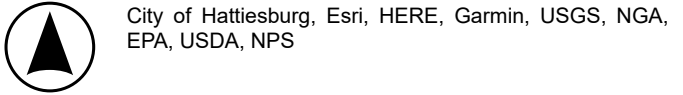
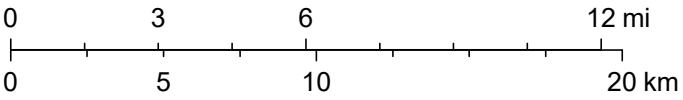
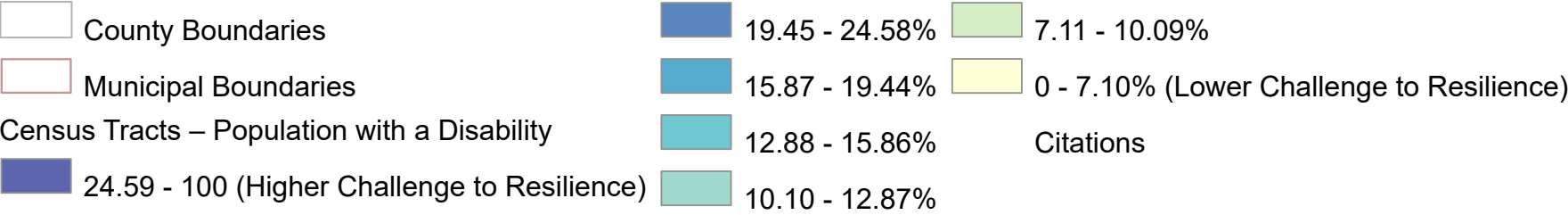


Lamar Co, MS - Population with a Disability

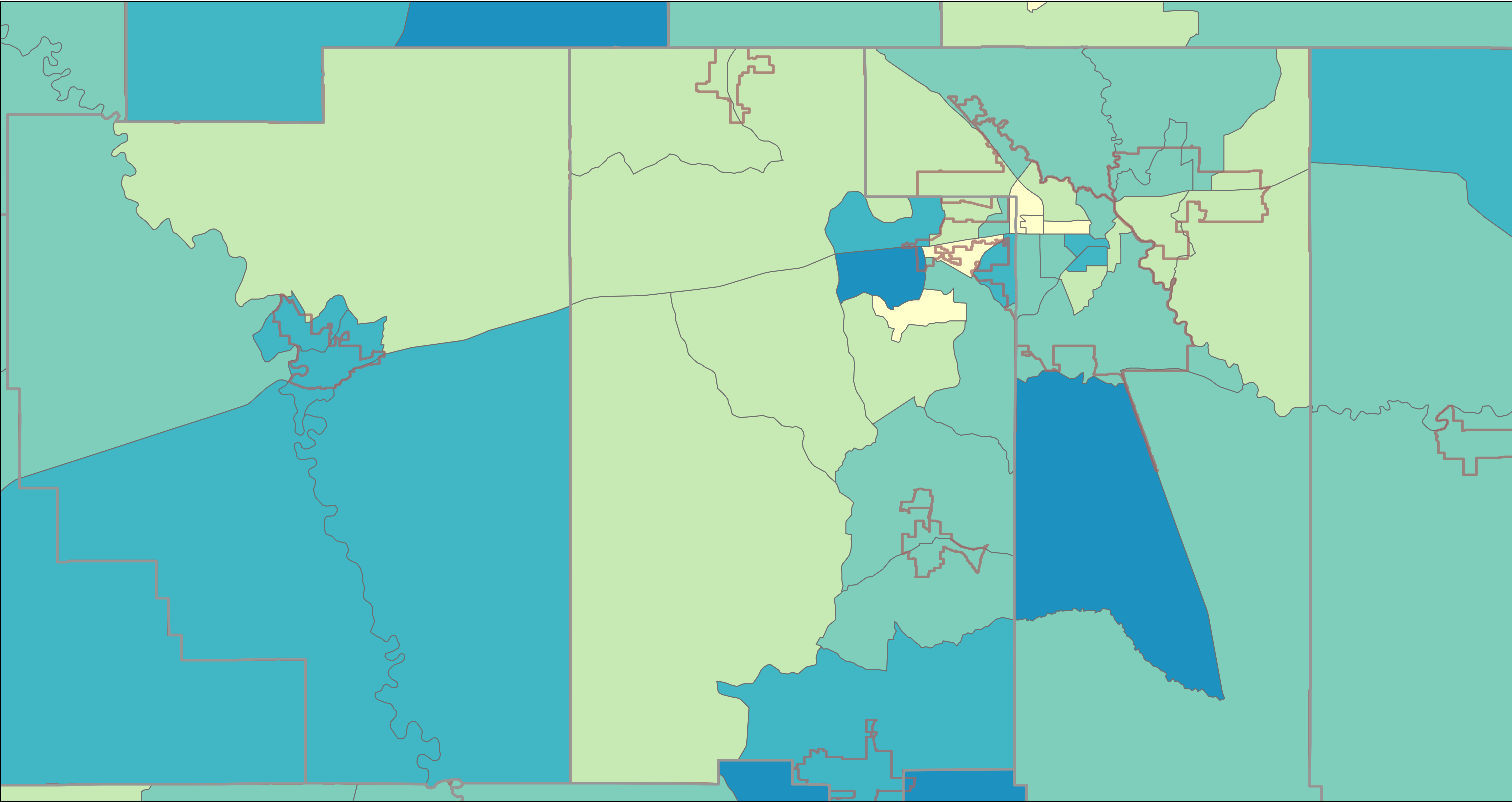


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Lamar Co, MS - Population Age 65 and Over



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County Boundaries

Municipal Boundaries

Census Tracts – Population Age 65 and Older

26.10 - 36.61%

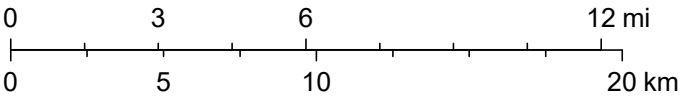
19.61 - 26.09%

14.15 - 19.60%

8.23 - 14.14%

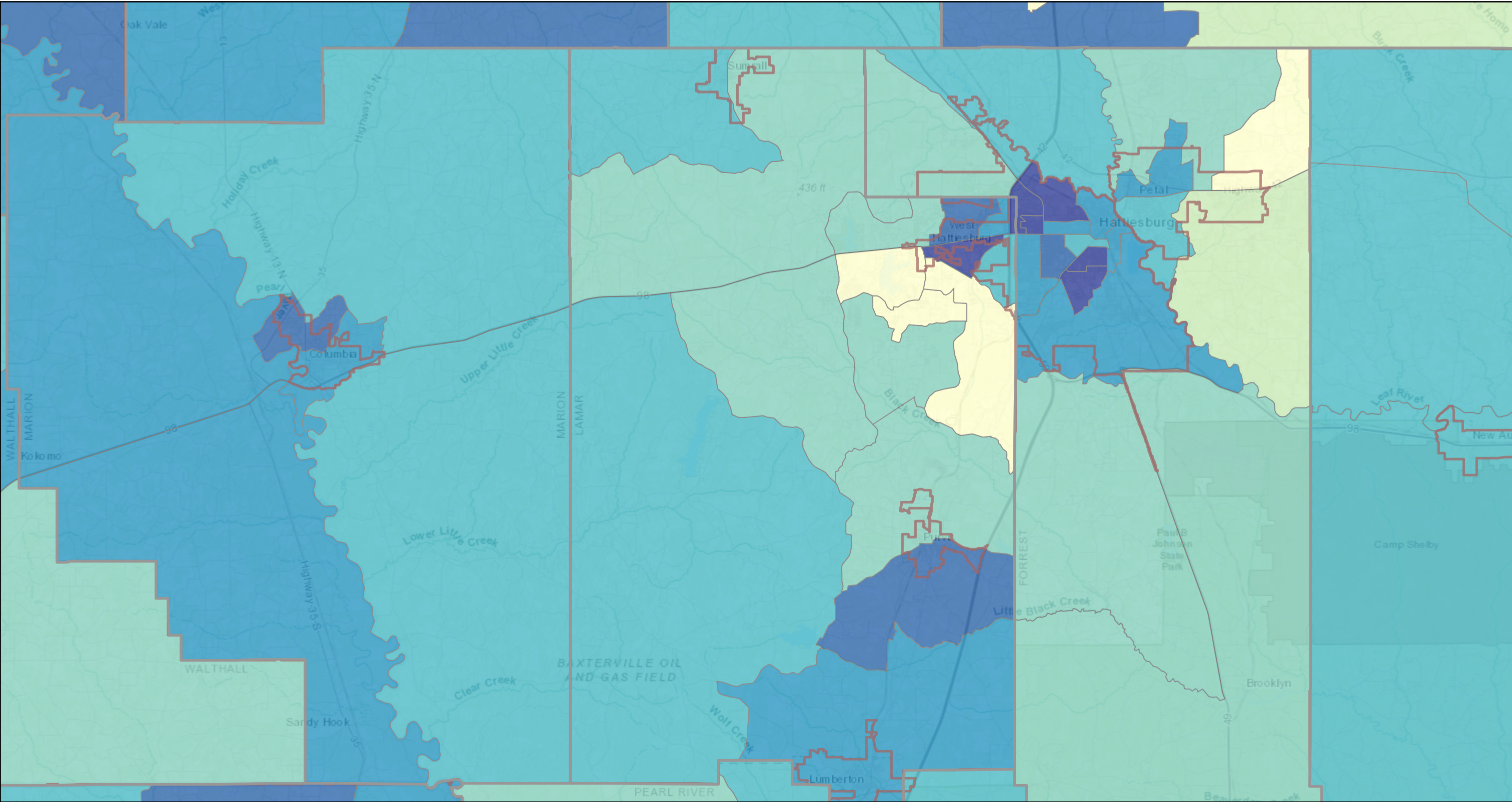
0 - 8.22% (Lower Challenge to Resilience)

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Population Below Poverty Level



6/17/2025, 5:20:25 PM

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County Boundaries

Municipal Boundaries

Census Tracts – Population Below Poverty Level

39.38 - 100% (Higher Challenge to Resilience)

27.10 - 39.37%

19.30 - 27.09%

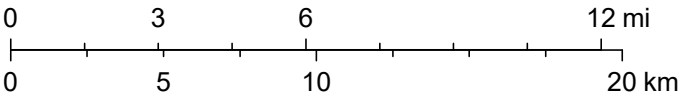
13.57 - 19.29%

9.01 - 13.56%

5.01 - 9.00%

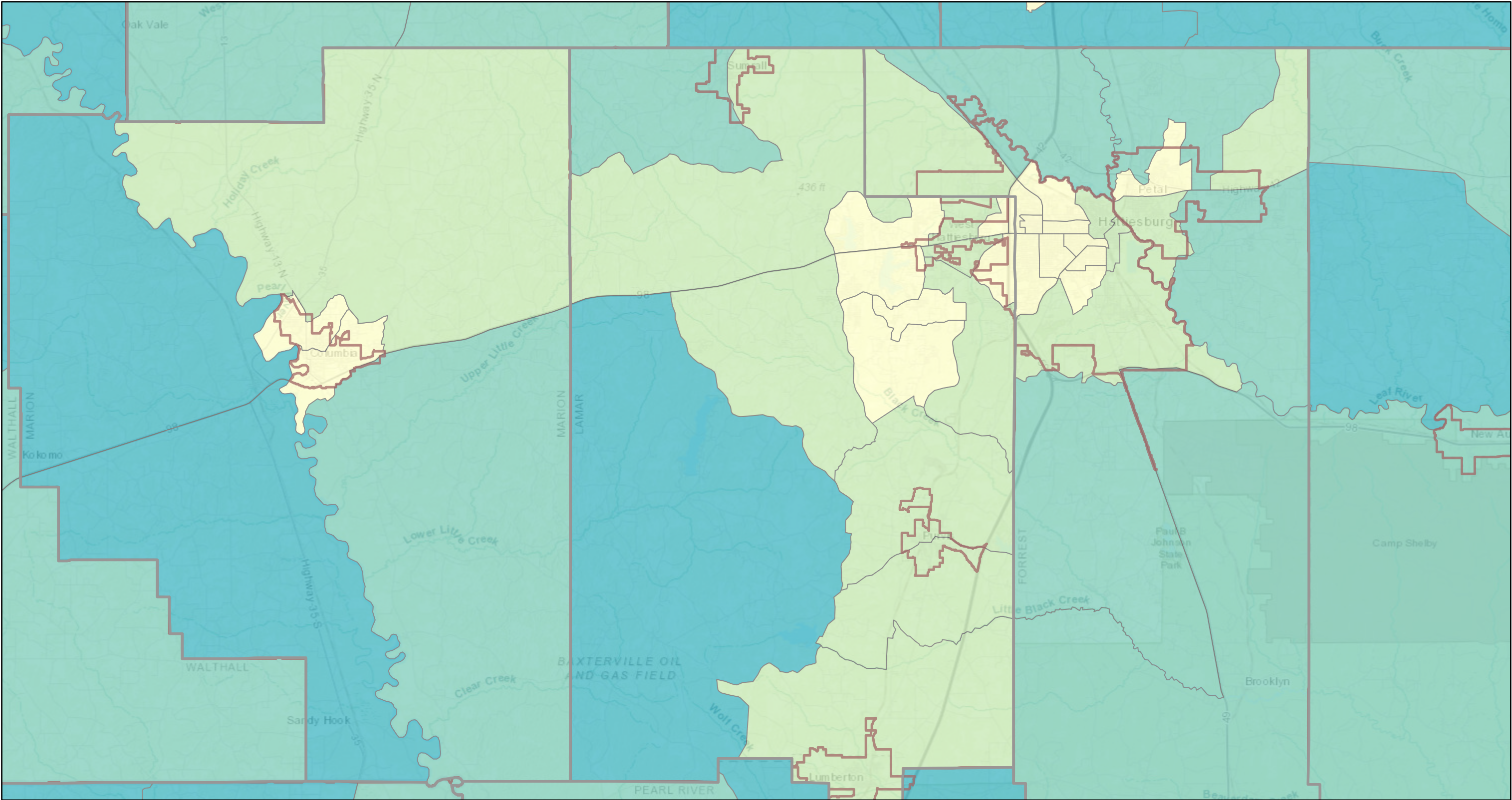
0 - 5.00% (Lower Challenge to Resilience)

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Mobile Homes as a Percentage of Housing Units



6/17/2025, 5:11:51 PM

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County Boundaries

Municipal Boundaries

Census Tracts – Mobile Homes as a Percentage of Housing Units

19.76 - 32.78%

5.84 - 19.75%

0 - 5.83% (Lower Challenge to Resilience)

32.79 - 44.89%

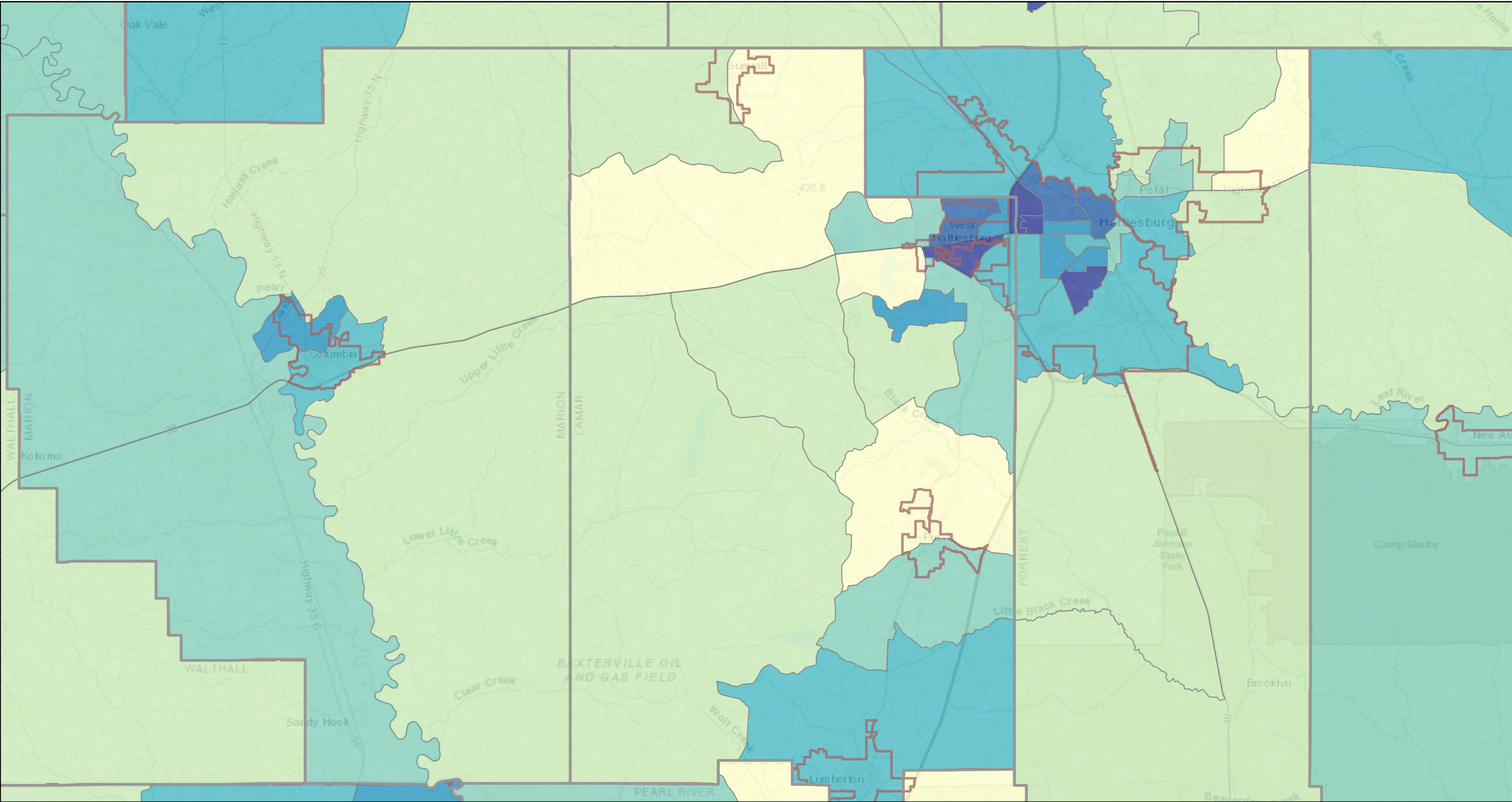
Citations

03612 mi

051020 km

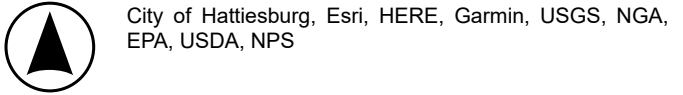
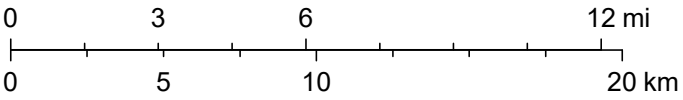
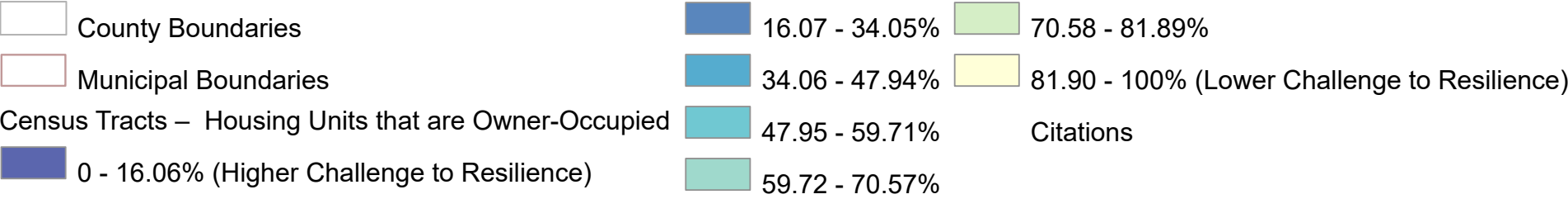
City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Owner Occupied Housing Units

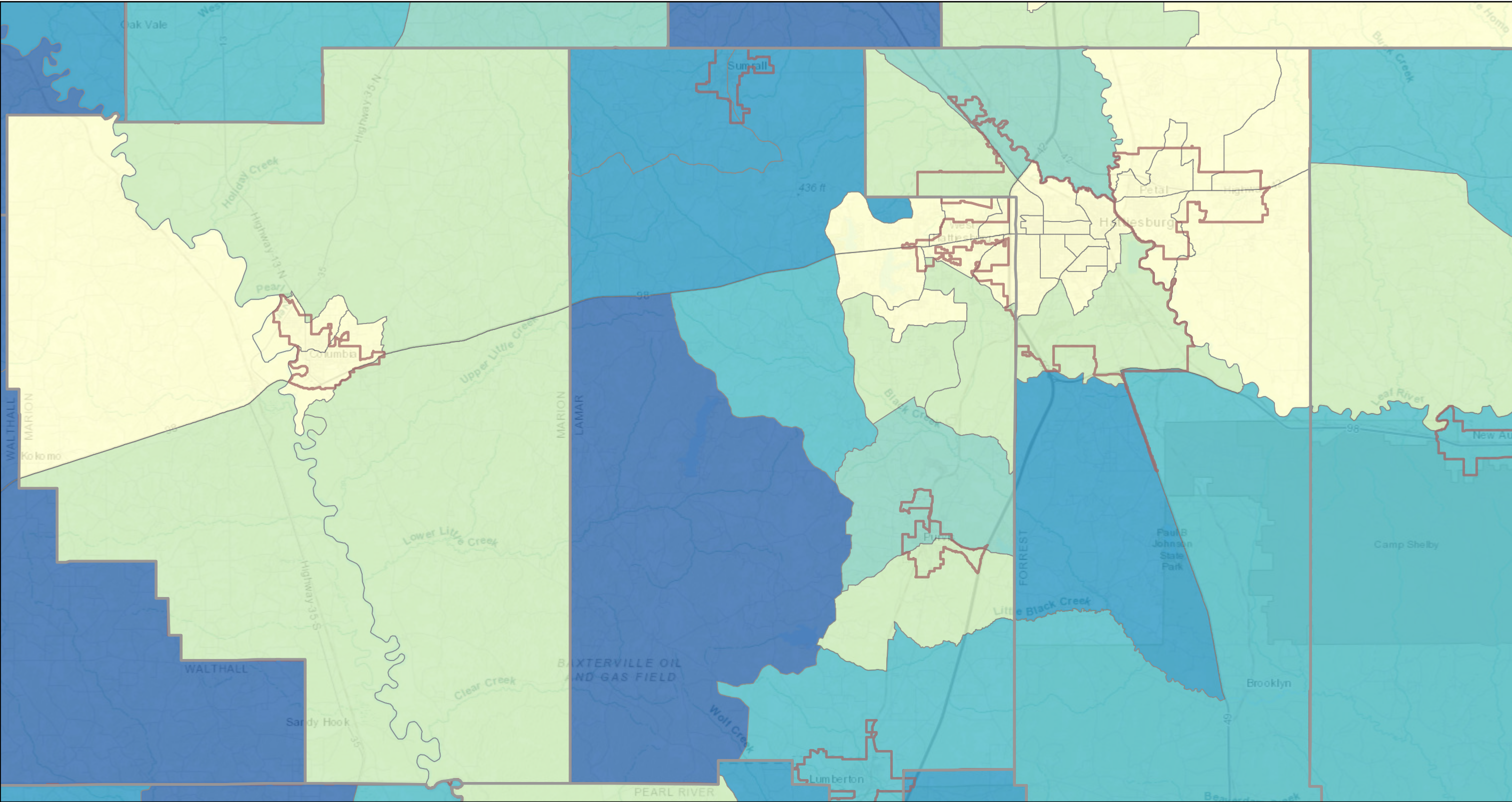


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Lamar Co, MS - FCC Broadband: Unserved Broadband Serviceable Locations



6/17/2025, 5:10:18 PM

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County Boundaries

Municipal Boundaries

Census Tracts – FCC Broadband: Unserved Broadband Serviceable Locations

1,356 - 2,155

870 - 1,355

539 - 869

286 - 538

88 - 285

0 - 87

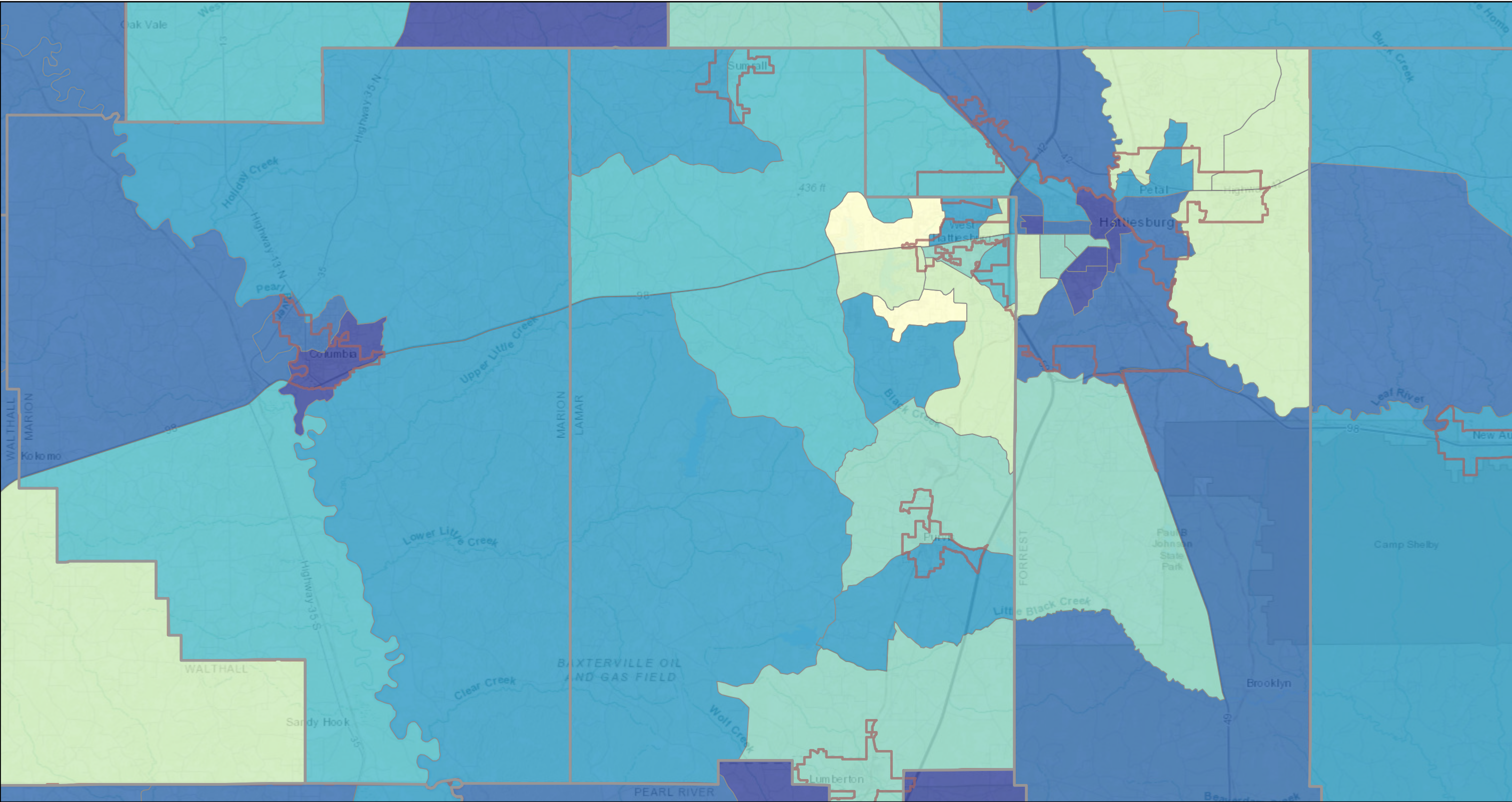
Citations

0 3 6 12 mi
0 5 10 20 km



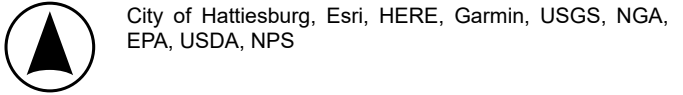
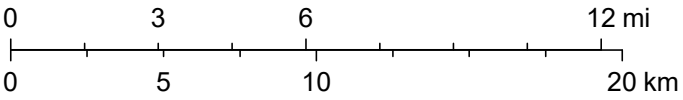
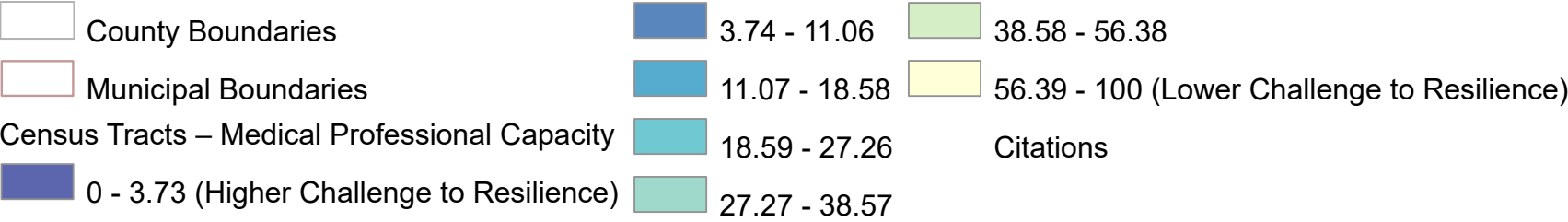
City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Medical Professional Capacity

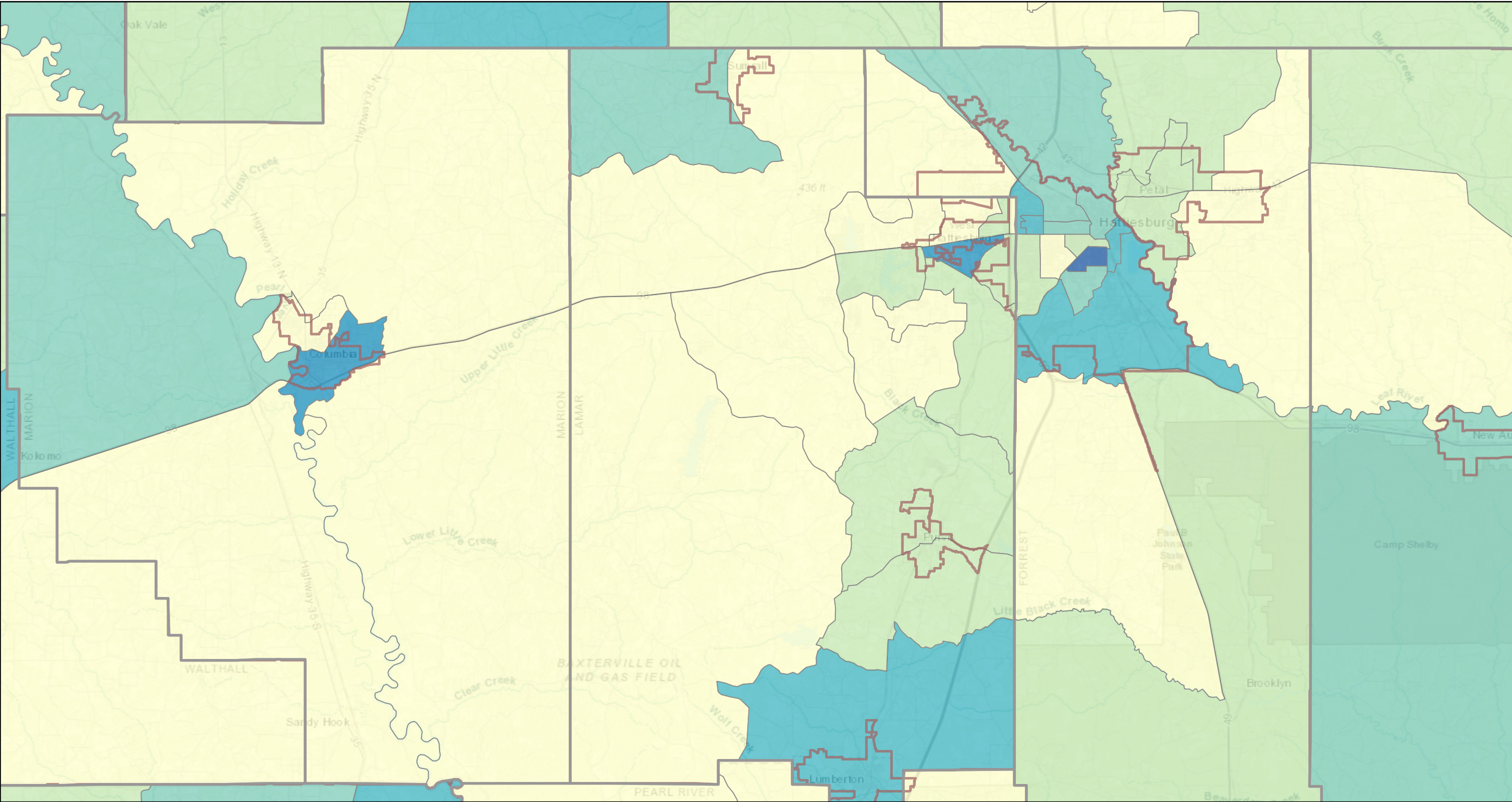


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Lamar Co, MS - Households without a Vehicle



6/17/2025, 5:05:36 PM

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County Boundaries

Municipal Boundaries

Census Tracts – Households without a Vehicle

15.77 - 27.14%

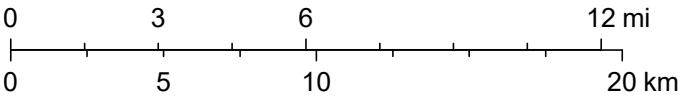
9.49 - 15.76%

5.41 - 9.48%

27.15 - 49.03%

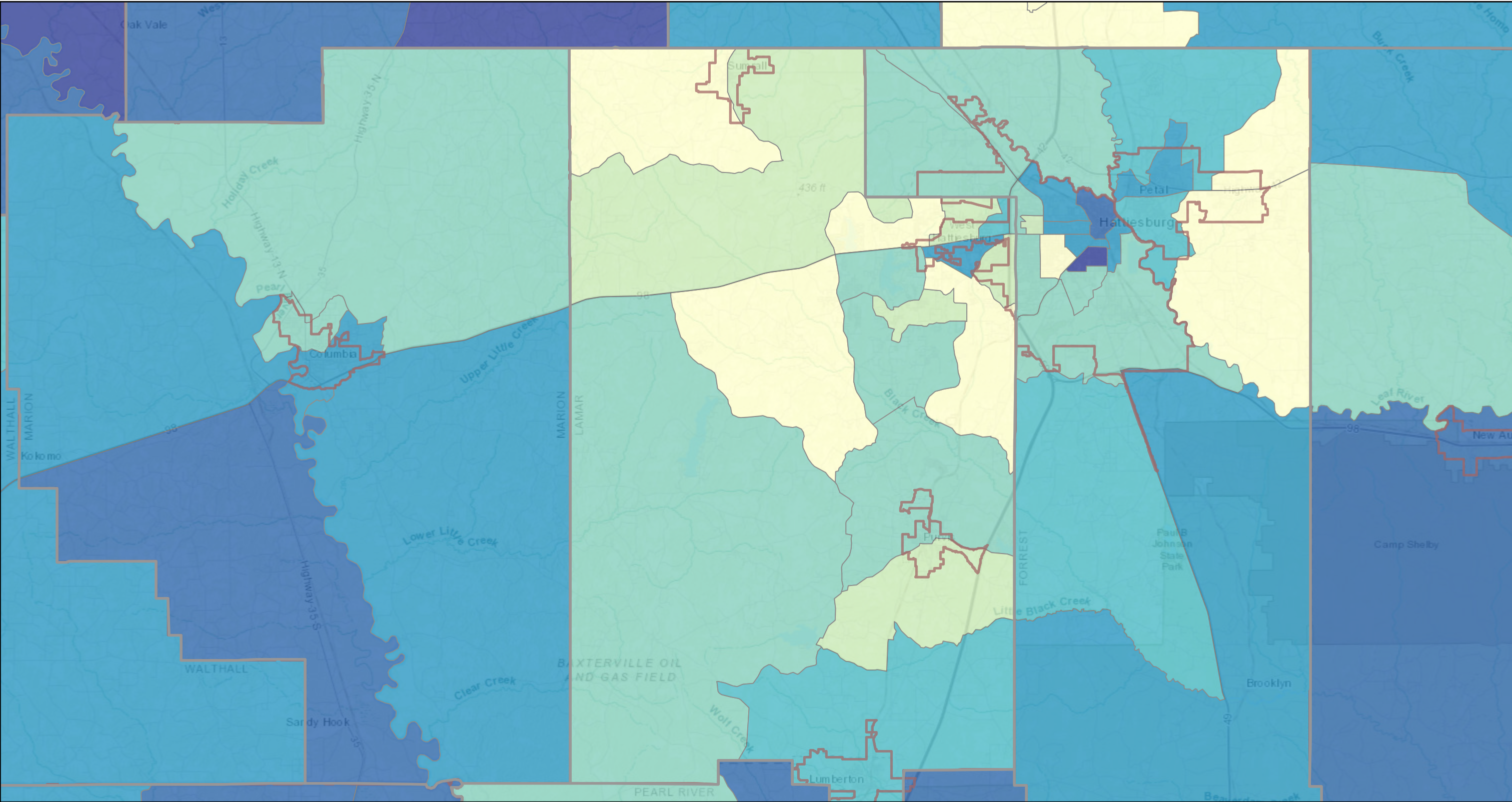
0 - 2.35% (Lower Challenge to Resilience)

Citations



City of Hattiesburg, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Lamar Co, MS - Households without a Smartphone



6/17/2025, 5:08:46 PM

1:288,895

