Association of County Commissions of Alabama

# LOCAL RECOVERY PLAN FOR ALABAMA MID COUNTIES

Local Recovery Plan for the Alabama MID Counties in response to the 2020 Hurricanes Sally and Zeta: Clarke, Dallas, Escambia, Marengo, Perry, Washington and Wilcox

VERSION 1
SEPTEMBER 24, 2024

# Table of Contents

# I. Definitions and Acronyms

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|---|---|
| **ACCA** | Association of County Commissions of Alabama |
| **ACS** | American Community Survey |
| **ADECA** | Alabama Department of Economic and Community Affairs, State entity designated to administer federal funding in response to the Covered Disasters. |
| **CDBG-DR** | Community Development Block Grant Disaster Recovery Program. |
| **CDC/ATSDR** | Centers for Disease Control and Prevention Agency for Toxic Substances and Disease Registry |
| **FEMA** | Federal Emergency Management Agency |
| **FEMA NRI** | Federal Emergency Management Agency National Risk Index |
| **FSA** | Farm Service Agency |
| **FVL** | FEMA Verified Loss |
| **HHMID** | Hardest Hit Most Impacted and Distressed City/County identified by the federal government. |
| **HOI** | Homeowners Insurance |
| **HRAP** | State of Alabama Home Recovery Alabama Program |
| **HUD** | United States Department of Housing and Urban Development |
| **IA** | Individual Assistance Program |
| **LMI** | Low and Moderate Income |
| **LRP** | Local Recovery Plan |
| **LRPP** | Local Recovery Planning Program (State of Alabama's process to develop local strategies that identify projects and capacity enhancements that address risks to community lifelines that support health and safety while mitigating against future disasters). |
| **MID** | Most Impacted and Distressed County identified by the federal or state government. |
| **MID Recovery Zone (MRZ)** | Most Impacted and Distressed Area identified by local unmet needs assessment within Zone; a HHMID or MID county where project or program activities will be concentrated. |
| **NFIP** | National Flood Insurance Program |
| **NOAA** | National Oceanic and Atmospheric Administration |
| **PA** | Public Assistance program |
| **PHA** | Public Housing Authority |
| **PPFVL** | Personal Property FEMA Verified Loss |
| **R/ECAP** | Racially or Ethnically Concentrated Areas of Poverty |
| **RPFVL** | Real Property FEMA Verified Loss |
| **SBA** | U.S. Small Business Administration |
| **SHMP** | State Hazard Mitigation Plan |
| **SVI** | Social Vulnerability Index |
| **USDA** | US Department of Agriculture |

# II. Executive Summary

In 2020, Alabama faced significant impacts from Hurricanes Sally and Zeta, leading to disaster declarations across numerous counties. Hurricane Sally, the first to hit Alabama since 2004, made landfall on September 16 near Gulf Shores as a Category 2 hurricane, causing severe flooding and damage to agricultural areas. Just a month later, Hurricane Zeta struck, bringing Category 3 winds and widespread power outages. The inland counties, including Clarke, Dallas, Escambia, Marengo, Perry, Washington, and Wilcox, were notably affected, facing challenges in recovery due to limited experience and resources.

In response, the State of Alabama established the 2020 Community Development Block Grant Disaster Recovery (CDBG-DR) Grant for Hurricanes Sally and Zeta Action Plan and the Local Recovery Planning Program (LRPP) for the HHMID and MID counties. Led by the Association of County Commissions of Alabama (ACCA), the 7 MID Counties collaborated via a planning consortium to develop this Local Recovery Plan (LRP) for comprehensive recovery strategies, ensuring that resources are effectively directed to the communities in need within Clarke, Dallas, Escambia, Marengo, Perry, Washington, and Wilcox counties. This LRP aims to support long-term recovery and resilience in the most impacted and distressed areas, identified as the Most Impacted and Distressed Recovery Zones (MID Recovery Zones).

To address these needs, the State of Alabama identified the housing and recovery and resilience project activity types to be considered by each MID County as part of this planning process including, Affordable Multifamily Rental Housing, Homeowner Buyouts, Homebuyer Assistance, Mitigation, Economic Resilience, Infrastructure & Public Facility Improvements and Public Services.

**A Commitment to Equity and Support for Vulnerable Communities**

In the aftermath of Hurricanes Sally and Zeta, the need for a comprehensive and equitable LRP is paramount. These devastating storms significantly impacted our region, with the most vulnerable populations—especially Low to Moderate Income (LMI) individuals—suffering the greatest losses. The LRP is designed not only to rebuild physical infrastructure but also to address the social inequities exacerbated by these disasters. By prioritizing equity, the plan ensures that vulnerable communities receive the necessary resources and support to recover and thrive.

Equity is the cornerstone of the LRP for Hurricanes Sally and Zeta. The recovery efforts are specifically tailored to meet the needs of vulnerable communities, ensuring they are not left behind in the rebuilding process. The plan adopts a multi-faceted approach, focusing on inclusive decision-making, targeted resource allocation, and the removal of systemic barriers that hinder vulnerable individuals from benefiting from recovery resources.

The Local Recovery Plan for Hurricanes Sally and Zeta serves as a blueprint for building a more equitable and resilient community. By centering equity in the recovery process, the plan not only addresses the immediate needs of those most affected by the hurricanes but also lays the foundation for a more just and inclusive future.

# III. Citizen Participation

This Citizen Participation Plan is intended to guide and coordinate all organizations working together to conduct a robust community engagement process. The goals of Community Outreach are to:

- Identify stakeholders
- Solicit unmet needs data and information
- Solicit feedback on identified MID Recovery Zones
- Identify project typologies and scenarios
- Solicit feedback on project scenarios

This plan outlines the various ways citizen participation can be encouraged and facilitated throughout the LRP planning process. See Appendix A for

This Citizen Participation Plan was created to comply with the requirements specified in the two Federal Register Notices (Vol. 87, No.23 (Feb. 3, 2022) and Vol. 87, No.100 (May 24, 2022)) for the CDBG-DR grant awarded to the State of Alabama in response to Hurricanes Sally and Zeta. This plan is intended to satisfy the requirements of 24 CFR 570.486 and outline the policy and procedure

## A. Consultation

During preparation of the Local Recovery Plan, in conformance with Local Recovery Planning Program guidelines, the ACCA consulted with local tribal entities, county and local agencies and governments, Federal partners, nonprofit and nongovernmental organizations, private sector business owners and associations, and other stakeholders and affected parties in the surrounding geographic area, including organizations that advocate on behalf of members of protected classes, vulnerable populations, and underserved communities affected by the disaster.

The ACCA also encourages the participation of county and regional institutions, continuums of care, and other organizations that work with those affected by the proposed activities of the LRP in the development and implementation of the plan. The ACCA encourages the participation of private and public organization including, but not limited to; agencies that manage public water and land, emergency management agencies, and internet service providers.

The ACCA encourages all citizens, especially low- and moderate-income persons, particularly those living in areas targeted with this funding, to participate in the development of the LRP, and amendments to the plan, performance reports, and other associated activities.

## B. Public Comment

The Local Recovery Plan, as well as any amendments to the Plan, are presented for review and comment through posting on the public website. The ACCA provides a period of at least fifteen (15) days to receive comments and considers all public comments received in the Plan's finalization process. Following the public comment period, the ACCA considers adoption of the Local Recovery Plan.

Public comments are collected in a twofold manner: through county-based meetings and through email and phone communication. Through a multifaceted approach to feedback collection, the ACCA uses best practices to ensure citizen participation in the planning process.

In meetings, citizen participants are provided ample opportunity to express priorities, feedback, concerns, and complaints.

The public will also be given the opportunity to provide direct feedback through phone or email communication. The ACCA has identified *Jennifer Datcher* as the point of contact for this feedback. The phone number that will be provided to the public is *334-264-7594* and the email address is *jdatcher@alabamacounties.org.*

All feedback received through both methods will be formally notated to ensure citizen concerns are considered when developing the LRP.

## C. Availability

The Commission posts the Local Recovery Plan, as well as any amendments to that Plan, on the public website for review and comment. The ACCA will provide a reasonable number of copies to citizens upon request.

The Local Recovery Plan and all associated documents are made available to citizens, citizen groups, public agencies, and other interested parties upon request. The plan and all amendments, updates, and revisions will also be made available in various formats and languages and shall be made accessible to persons with disabilities and to persons of Limited English Proficiency, when requested.

## D. Methodology

Community engagement for the Local Recovery Plan is designed to achieve the following goals:

- Meet with the County and City stakeholders to understand their goals and objectives.
- Engage the public to understand their priorities, goals, and concerns, and to gain their input on priority projects
- Provide opportunities for feedback and input
- Ensure that all internal staff and consultants are aligned in messaging
- Compile feedback and incorporate into Local Recovery Plan

The primary activity for public engagement with the development of the LRP will occur through public meetings though additional methods may also be employed to ensure opportunities for engagement are widely accessible.

## E. Engagement with Public Agencies and Officials

All communication regarding engagement, including meeting invitations and links to complete surveys, are sent via email from ACCA to relevant public agencies and officials.

Staff members and officials representing public agencies participate as part of their job or official responsibilities. When agency leaders believe the decision-making process is valuable to their agency, they attend themselves or assign staff to attend meetings or complete surveys.

## F. Engagement with Stakeholders

A stakeholder is defined as a person or group of people who are likely to be affected by or affect change. Often, stakeholder identification is limited to formally organized interest groups. The Public Stakeholder list was developed with an effort to include minority, low-income, refugee,

immigrant populations, vulnerable and historically disadvantaged communities. The multiple methods of outreach included mailing of flyers, posting notifications in emails, and sending emailed invites, where email addresses were available. full stakeholder list is provided in Appendix A.

Engagement with stakeholders during plan development was conducted through in-person meetings. Information regarding the meetings was sent via email invitation and newspaper publication. The meeting locations are county-based to ensure that stakeholders in all relevant areas are included. One meeting per county occurred in the following: Escambia, Clarke, Washington, Marengo, Perry, Dallas, and Wilcox.

The goal of the meeting series is to: Receive feedback on the unmet needs analysis, MID Recovery zones, and identified hazard; and to review and identify project typologies/scenarios for use of funds.

## G. Engagement with Citizens

Citizen Engagement is an essential, although often challenging, part of the planning process. Residents and property owners fall into different groups based on gender, age, employment, income, cultural heritage, etc., which influences their level of interest and willingness to participate in decision-making processes. By providing multiple opportunities to engage, and promoting a transparent decision-making process, the ACCA helps mitigate some of these challenges to citizen engagement. Additionally, through stakeholder engagement, especially with organizations that work closely with affected vulnerable populations, the ACCA encourages public participation and engagement with the development and implementation of the LRP and ensure that the needs of affected communities and community members are considered.

Meeting locations are county-based to ensure comprehensive participation from relevant stakeholders. There are two meetings per county in the following counties: Escambia, Clarke, Washington, Marengo, Perry, Dallas, and Wilcox. Meetings will be advertised via email invitation, newspaper publication, and mail invitation. The goal of these meetings is to present the plan to the public to solicit input on project typologies/scenarios.

## H. Accessibility

Meetings are advertised widely and unbiasedly to ensure engagement from a diverse group of community members.

The location of each meeting is in a public building constructed to ADA accessibility standards. Each county meeting occurs twice to ensure the community is provided with ample opportunity to participate. Translation services and disability accommodation services will be provided when requested.

## I. Vulnerable Populations

By conducting multiple meetings per county, the ACCA can specifically target vulnerable populations who may see travel time as a barrier to meaningful participation.

Additionally, through first engaging with stakeholder groups that represent vulnerable populations, the ACCA can ensure that the needs of these populations are considered in this Public Outreach and Participation Plan as well as in the Local Recovery Plan.

### J. Limited English Proficiency

A four-factor analysis was completed by the ACCA prior to the publication of notices for conducting a public meeting. This analysis did not identify a significant need for translation services for public meetings or the requirement to provide translated documents for public posting. See Appendix A for LEP four factor analysis.

If requested, the ACCA will provide translations of all relevant documents, including the LRP and any amendments.

## IV. Introduction and Background

Located in southern Alabama, Clarke, Dallas, Escambia, Marengo, Perry, Washington, and Wilcox counties are rich in history and natural beauty, each offering unique cultural and historical attractions. Clarke County is known for its timber and wildlife, while Dallas County, home to Selma, played a pivotal role in the Civil Rights Movement. Escambia County blends cultural heritage with economic activity, and Marengo County boasts significant antebellum architecture. Perry County is historically significant in civil rights, Washington County is one of the oldest counties in the state, and Wilcox County is characterized by its rural charm and natural resources. These counties face common rural challenges, including economic development, access to healthcare, education, technology and infrastructure, and tangled title and literacy (including technology literacy) issues. Limited resources, population decline, and the need for disaster resilience further complicate efforts to improve quality of life and economic opportunities in these rural communities.

Following feedback from the public meetings in the 7 counties, and as demonstarted in the unmet needs analysis acorss the counties, many single-family households still face significant unmet need following the 2020 storms. Due to the mutltitude of challenges invididuals of these rural counties face, assistance was not applied for or they were not approved for assitance. While single-family housing programs are not eligible under this Local Recovery Plan Program, several other housing programs have been proposed to address the remaining unmet needs in these communities.

This plan identifies regional and county specific demographics, vulnerabilities, unmet housing, economic and infrastructure needs following the 2020 Huricanes, and hazards and risks to identify MID Recovery Zones, mitigation needs and eligible project activities.

## V. Unmet Needs Assessment Methodology

### A. Introduction

The Unmet Needs Assessment was completed using similar methods from the state of Alabama's 2020 Disaster Recovery Action Plan for Housing, Infrastructure and Economic areas, as outlined in the following sections.

### A. Housing Unmet Needs Assessment

Information was compiled to document damages to owner-occupied and renter households, households based on residence type, insurance status, and gross income range per household

for each county. For this analysis, full applicant-level data collected through FEMA's IA program was used. Datasets for Sally and Zeta are as of April 6, 2024[1].

Furthermore, the analysis performed defaulted to HUD's definitions of unmet need for owner-occupied and renter households.

To calculate the level of damage for **owner-occupied** households, the following criteria was used:

- **Minor-Low:** Less than $3,000 of FEMA inspected real property damage.
- **Minor-High:** $3,000 to $7,999 of FEMA inspected real property damage.
- **Major-Low:** $8,000 to $14,999 of FEMA inspected real property damage and/or 1 to 3.9 feet of flooding on the first floor.
- **Major-High:** $15,000 to $28,800 of FEMA inspected real property damage and/or 4 to 5.9 feet of flooding on the first floor.
- **Severe:** Greater than $28,800 of FEMA inspected real property damage or determined destroyed and/or 6 or more feet of flooding on the first floor.

To calculate the level of damage for **rental** households, the following criteria was used:

- **Minor-Low**: Less than $1,000 of FEMA inspected personal property damage.
- **Minor-High:** $1,000 to $1,999 of FEMA inspected personal property damage or determination of "Moderate" damage by the FEMA inspector.
- **Major-Low:** $2,000 to $3,499 of FEMA inspected personal property damage or 1 to 3.9 feet of flooding on the first floor or determination of "Major" damage by the FEMA inspector.
- **Major-High:** $3,500 to $7,499 of FEMA inspected personal property damage or 4 to 5.9 feet of flooding on the first floor.
- **Severe:** Greater than $7,500 of FEMA inspected personal property damage or determined destroyed and/or 6 or more feet of flooding on the first floor or determination of "Destroyed" by the FEMA inspector.

The average cost for full home repairs for a specific disaster within each of the FEMA IA damage categories is calculated using the observed differences in real property damage costs, determined by the Small Business Administration (SBA) for its disaster loan program and the subset of homes inspected by both SBA and FEMA after Hurricanes Sally and Zeta. Since SBA inspects for full repair costs, it presumes to reflect the full cost to repair the home, which is generally more than FEMA estimates on the cost to make the home habitable. SBA data mentioned is from the publicly available SBA Disaster Loan Data on the SBA website[2]. In addition, the state of Alabama's 2020 Disaster Recovery Action Plan is utilized as ACCA does not have a data sharing agreement to access the more granular data set at the time of writing this plan. The National Flood Insurance Program (NFIP) Data is also utilized and pulled from the FEMA Open Data Sets[3].

[1] Open FEMA Dataset: Individuals and Households Program - Valid Registrations - v1, https://www.fema.gov/openfema-data-page/individuals-and-households-program-valid-registrations-v1

[2] SBA Disaster Loan Data, Public Access: https://www.sba.gov/document/report-sba-disaster-loan-data

[3] FEMA Open Data sets, NFIP Data: https://www.fema.gov/openfema-data-page/fima-nfip-redacted-claims-v2

For each household that was determined to have unmet housing needs, their estimated average total estimated loss was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

After calculating total estimated losses, an additional 15% is added to the calculation to account for resilience costs for buildings to withstand future disasters. To calculate total unmet need, assistance received from FEMA IA, SBA and NFIP is summarized and subtracted from the total estimated total loss with the added resilience costs. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program (HRAP) as there is no publicly available data for assistance received across the 7 MID counties.

The total unmet housing need was summarized at the Zip Code level for each county to assist in the calculation of identifying the Mid Recovery zones.

## B. Infrastructure Unmet Needs Assessment

For the purposes of this analysis, the full applicant-level data was collected through FEMA's Public Assistance (PA) program. Datasets pulled and utilized for Sally and Zeta are as of April 6, 2024[4].

The FEMA PA Program can provide immediate assistance to impacted jurisdictions for emergency protective measures, permanent repairs to infrastructure, and community facilities. The Federal cost share for public assistance, typically, is not less than seventy-five percent (75%) of the eligible project cost, requiring the applicant to contribute the remaining twenty-five percent (25%) in cost share.[5] However, for Hurricane Sally under 4563-DR-AL Amendment 007 and for Hurricane Zeta under 4573-DR-AL Amendment 004, the Federal share was amended to ninety percent (90%) and ten percent (10%) state/local contribution.

The unmet needs analysis conducted for each county includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share (10%) for PA Categories C through G. CDBG-DR Funds are not used for PA costs in Categories A, B and Z and are not considered in the calculation for unmet needs, but are still highlighted in the local share calculation.[6] The total unmet infrastructure need was summarized at the Zip Code level for each county to assist in the calculation of identifying the Mid Recovery zones.

## C. Economic Unmet Needs Assessment

The economic unmet needs assessment was conducted using the Small Business Administration business loan data for applications with approved or denied loans. An additional fifteen percent (15%) in resilience costs was factored into the total estimated loss. The total amount paid out for

[4] Open FEMA, Public Assistance Datasets: https://www.fema.gov/about/openfema/data-sets#public

[5] 44 C.F.R. § 206.47(b): eCFR :: 44 CFR 206.47 -- Cost-share adjustments.

[6] Public Assistance Program and Policy Guide Version 4 (fema.gov)

real estate losses was subtracted from the total estimated loss to determine the remaining economic unmet needs in each county. The total unmet economic need was summarized at the Zip Code level for each county to assist in the calculation of identifying the Mid Recovery zones.

## D. Vulnerable Populations

Vulnerable populations were identified within each county to identify the geographic areas that are the most vulnerable to and recovery from disasters. Vulnerable populations include those identified as part of a protected class (i.e., Age, Race, Ethnicity, National Origin, Religion, Sex (including gender identity and sexual orientation), Familial Status, and Disability), hard-to-reach, underserved, historically disadvantaged areas, and economically distressed areas. Geographically underserved and historically disadvantaged areas include but are not limited to: Racially or Ethnically Concentrated Areas of Poverty (R/ECAP); Promise Zones; Opportunity Zones; Neighborhood Revitalization Strategy Areas (NRSAs); and Tribal areas.

For the purposes of this LRP, vulnerable population areas were identified by reviewing the 2020 CDC/ATSDR[7] Social Vulnerability Index (SVI) ratings and geographically underserved and historically disadvantaged areas in each county. Social vulnerability refers to a community's capacity to prepare for and respond to the stress of hazardous events ranging from natural disasters, such as hurricanes or disease outbreaks, to human caused threats, such as toxic chemical spills.

- **The CDC/ATSDR SVI** is a place-based index designed to identify and quantify communities experiencing social vulnerability by analyzing16 social factors, including unemployment, minority status, and disability, and groups these factors into four related themes: socioeconomic status, household composition & disability, race & ethnicity & language, and housing & transportation. This index is used to explore in analysis to understand how planning on a local level can alleviate the impact of disasters on communities. The SVI ranks counties and census tracts to compare their relative vulnerability to other areas of the state. Rankings are based on percentiles, with values ranging from 0 (low) to 1 (high). SVI ranks the census tracts and counties based on social factors. Below is an overview of the variables within each theme:
    - **Socioeconomic Status:** Below 150% Poverty, Unemployed, Housing Costs Burden, No High School Diploma, No Health Insurance.
    - **Household Characteristics:** Aged 65 and Older, Aged 17 and Younger, Civilian with a Disability, Single-Parent Household, English Language Proficiency.
    - **Racial and Ethnic Minority Status**: Hispanic or Latino; Black and African American; American Indian and Alaska Native; Asian; Native Hawaiian and Other Pacific Islander; Two or More Races; Other Races.
    - **Housing Type/Transportation**: Multi-Unit Structures, Mobile Homes, Crowding, No Vehicle, Group Quarters.
- **R/ECAPs**[8]; are defined by HUD where census tracts have a non-white population of 50 percent or more and 40 percent or more of individuals in the census tract are living at or below the poverty line.

[7] Data source: CDC/ATSDR SVI

[8] Data source: HUD GIS Helpdesk, R/ECAP. Published August 21, 2023.

- **Promise Zones**[9] are high poverty communities where the federal government partners with local leaders to increase economic activity, improve educational opportunities, leverage private investment, reduce violent crime, enhance public health and address other priorities identified by the community. It was identified that there are no Promise Zones within the State of Alabama at the time of writing this plan.
- **Opportunity Zones**[10] are economically distressed communities, defined by individual census tract, nominated by America's governors, and certified by the U.S. Secretary of the Treasury via his delegation of that authority to the Internal Revenue Service. The Opportunity Zones initiative is not a top-down government program from Washington but an incentive to spur private and public investment in America's underserved communities.
- **NRSAs**[11] are areas that are designated by community development block grant (CDBG) grantees for revitalization and reviewed and approved by the U.S. Department of Housing and Urban Development (HUD). It was identified that there are no NRSAs within the 7 County area at the time of writing this plan.
- **Tribal Areas**[12] are areas of land that are reserved for tribes. Tribal areas may either be state recognized or federally recognized.

By identifying vulnerable populations in addition to unmet needs, each county can ensure an equity focused recovery process. Vulnerable individuals are not only included in the recovery process but are prioritized in the efforts through the identification of the MID Recovery Zones.

# VI. MID Recovery Zones Identification Methodology

To effectively measure the reduction of risk and to ensure that limited funding goes to the places and people that need them the most, each county identified Most Impacted and Distressed (MID) Recovery Zones (MRZ). These MRZ are geographical locations that contain the most vulnerable populations that have been impacted by the Hurricanes and still have the greatest total remaining need.

During the Planning Charettes in May, several of the counties' planning stakeholders, particularly County Commissioners and County Engineers in Escambia, Dallas and Perry counties, provided feedback that the initial MRZs identified for their county were too narrow and did not accurately capture what they thought would be the MRZ. From that discussion, the methodology for identifying the MRZ was refined to the methodology outlined below to expand the number of census tracts included in the MRZ to better reflect the reality of the situation in some of the counties and to provide the opportunity to serve more vulnerable populations.

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. These zones were determined by examining

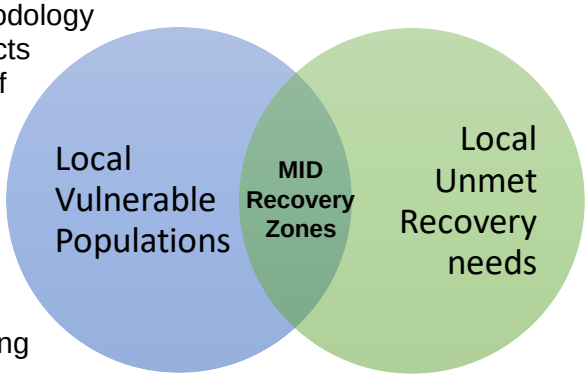


**Figure 1 MID Recovery Zone Overview**

[9] Data source: HUD Exchange, Promise Zones Overview.
[10] Data source: Designated Qualified Opportunity Zones under Internal Revenue Code §1400Z–2 Notice 2018–48
[11] Data source: HUD GIS Helpdesk, Revitalization Areas. Published July 31, 2023.
[12] Data source: US Census Bureau American Indian Geography

where these areas intersect with specific census tracts. Each tract was then ranked on a scale from 0 to 20, with a maximum of 10 points available for each category. Census tracts scoring between 15 and 20 are classified as MID Recovery Zones. Below are the details of the ranking methodology:

1. **Unmet Needs Score** – Unmet needs scores were developed through the process of using the total unmet need dollar amounts, which were available only by zip code, and applying a score from 1-10 to the associated census tract the zip code fell in. The unmet needs dollar amounts were derived from combining the total unmet housing, infrastructure, and economic needs and yielded a total dollar amount. To translate these unmet needs into scores, the three zip codes with the highest unmet need dollar amounts were identified and given a score based on the following methodology. Ceilings to scores were established based on zip code highest need position in the top three identified zip codes (first, second, third). The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated. For example, if the zip code that was identified to have the highest need in the county fell inside of a census tract and covered the entire area, meaning the zip code was larger than that census tract, that census tract would get a score of 10 since 100% of that census tract is part of the larger zip code. In some instances, some zip codes only covered part of a census tract and were given scores based on the associated geographic coverage. For example, if the second-highest zip code in a county fell inside of a census tract but only covered 50% or half of that census tract, a score of 4 was given (half of the maximum score of 8 for the zip code with the second highest unmet need). Furthermore, census tracts that did not include a zip code identified with the top three highest unmet need; it was given a score of 0.

2. **Vulnerability Score –** Disadvantaged areas which consists of Racially or Ethnically Concentrated Areas of Poverty (R/ECAP) and/or Opportunity Zones for the seven counties in Alabama, and the CDC Social Vulnerability Index (SVI) were used to provide a vulnerability score for each census tract. Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score. The scoring for the 5 SVI categories is as follows: Very Low = 2; Relatively Low = 4; Relatively Moderate = 6; Relatively High = 8; and Very High = 10. The CDC/ATSDR Social Vulnerability Index 2022 State Database was used in this plan and was accessed April 2024[13].

[13] CDC/ATSDR SVI: https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

# VII. Mitigation Assessment

## A. Introduction

In accordance with HUD and LRPP guidance, the following Mitigation Needs Assessment was completed. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

This mitigation needs assessment analyzes regional wide risks with specific sections detailing hazards in the most impacted areas.

## B. Methodology

For this plan, the 2023 State Hazard Mitigation Plan, county or regional hazard mitigation plans, and data from the FEMA National Risk Index, along with Stakeholder input was reviewed to develop a multi-hazard risk-based mitigation needs assessment. This mitigation assessment section provides an overview of the hazards, risks and community lifelines for the 7-county area. County specific details for their most relevant hazards are provided in each of the county section plans.

## C. Hazard Identification and Risk

This section addresses quantitative and qualitative descriptions of the top regional hazards.

### Dam Failure

Dam failure is the uncontrolled release of water and any associated waste from a dam. This hazard often results from a combination of natural and human causes and may follow other hazards, such as hurricanes and earthquakes. Common causes of dam failure include the flooding caused by prolonged rainfall and overtopping caused by poor design or debris blockage.

According to the National Inventory of Dams[14] Alabama has 2,266 total dams with an average age of 57 years. Dams within the database have a hazard potential rating of High, Significant, Low and Undetermined and are defined as:

- **High Hazard Potential:** if there was a dam failure to occur the downstream flooding would likely result in loss of human life and there would be widespread damage to homes, industrial and commercial buildings, important utilities, highways, or railroads.
- **Significant Hazard Potential:** if a dam were to fail the downstream flooding would likely result in disruption of access to critical facilities, damage to public and private facilities, and require difficult mitigation efforts.
- **Low Hazard Potential**: if a dam were to fail the downstream flooding would likely result in slight damage to farm buildings, forest or agricultural land, or minor roads.
- **Undetermined:** the risk hazard has not been determined by the National Inventory of Dams.

[14] National Inventory of Dams, https://nid.sec.usace.army.mil/#/

In the event of dam failure, all community lifelines are at risk as dam failure can result in catastrophic loss of life and property. Flooded roads can make transportation impossible, making it difficult for emergency services to reach affected communities. The infrastructure may also be damaged or washed away. Crops and livestock may be destroyed, and power outages can lead to a loss of energy-dependent structures and services. Additionally, clean drinking water may be scarce or unattainable.

Until June 7, 2023, Alabama did not have a dam safety program[15] which historically led to Alabama being disqualified from accessing federal infrastructure funds for dam-related inspections, training, and rehabilitation. Because of this, dams across the state including the 7 counties mentioned in this plan may not have received adequate funding to prevent and mitigate potential dam failures.

## Drought

A drought is a water shortage originating from a deficiency in expected precipitation caused by unusual weather patterns that can have negative impacts on agriculture, animals, and/or people. A drought may be short-term (several weeks to month) or long-term which can span over years.

When a drought occurs in Alabama, the social, economic, and environmental impacts have the potential to be severe and widespread. The following are examples of the potential effects of drought in the State of Alabama, including effects the state has experienced in past drought events:

- Damage to livestock and crops.
- Increased local vulnerabilities to sinkholes and wildfire.
- Water usage conflicts.
- Accelerated coastal erosion.
    - Damaged fisheries.
    - High energy demand and inflated energy prices due to the loss of hydropower.

Figure 2 provides an overview of the drought risk for the 7 MID counties.

In the event of a drought, the main lifeline impacted is food, water, and shelter. Crops and animals require water to thrive and grow, without which they stress and ultimately die.

[15] https://www.alabama-asce.org/alabama-establishes-first-state-dam-safety-program/

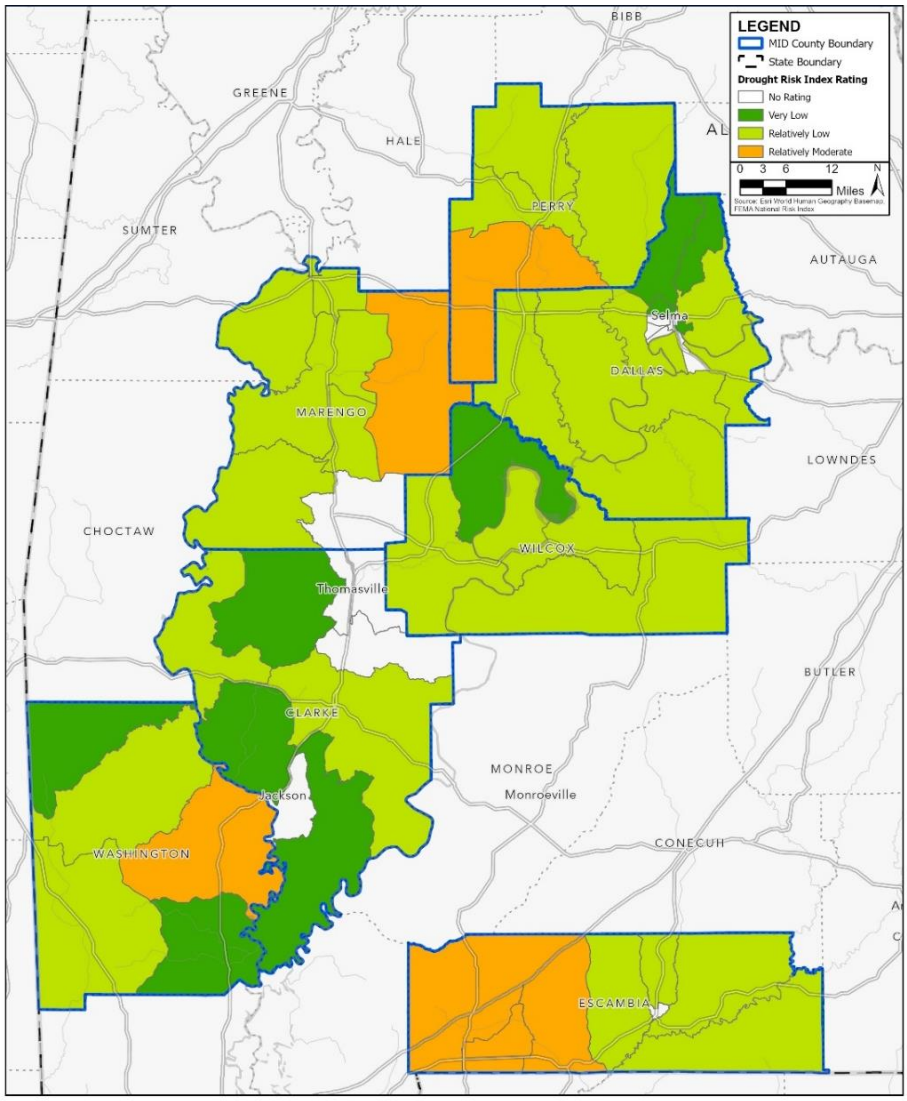


**Figure 2 Drought Risk in MID Counties by Census Tract**

## Extreme Temperatures

### Extreme Cold

Many homes and buildings, especially in rural areas, lack proper insulation or heating leading to the risk of broken water pipes, and hypothermia especially for vulnerable populations. Additionally, extreme cold temperatures may be accompanied by ice or snow and municipalities generally do not have the resources on hand, such as salt, sand, and snow removal equipment, to deal with winter weather. While the probability of occurrence is low, this hazard is considered a risk to the region as the infrastructure is not in place to handle extremely cold temperatures.

### Extreme Heat

Extreme heat is a period of excessively hot weather with higher-than-average temperatures combined with high humidity. Temperatures above 100 °F are generally considered dangerous and can lead to heat stroke, heat exhaustion, heat syncope and heat cramps. Severe heat can also place significant stress on plants and livestock.

Figure 3 provides an overview of the heat wave risk across the region, varying from relatively low to very high.

Extreme cold and extreme heat pose a risk to all individuals and lifelines. During these extreme weather conditions, vulnerable populations are the most at risk. Heat stroke and related conditions can result in death during extreme heat, while during extreme cold hypothermia, frostbite, carbon monoxide poisoning caused from unsafe heating practices are the greatest threats to people. Power outages are more likely to occur during either of these weather events due to the strain that is put on the physical and electrical system, which can result in communication outages, stress on emergency services and make food supplies unavailable.

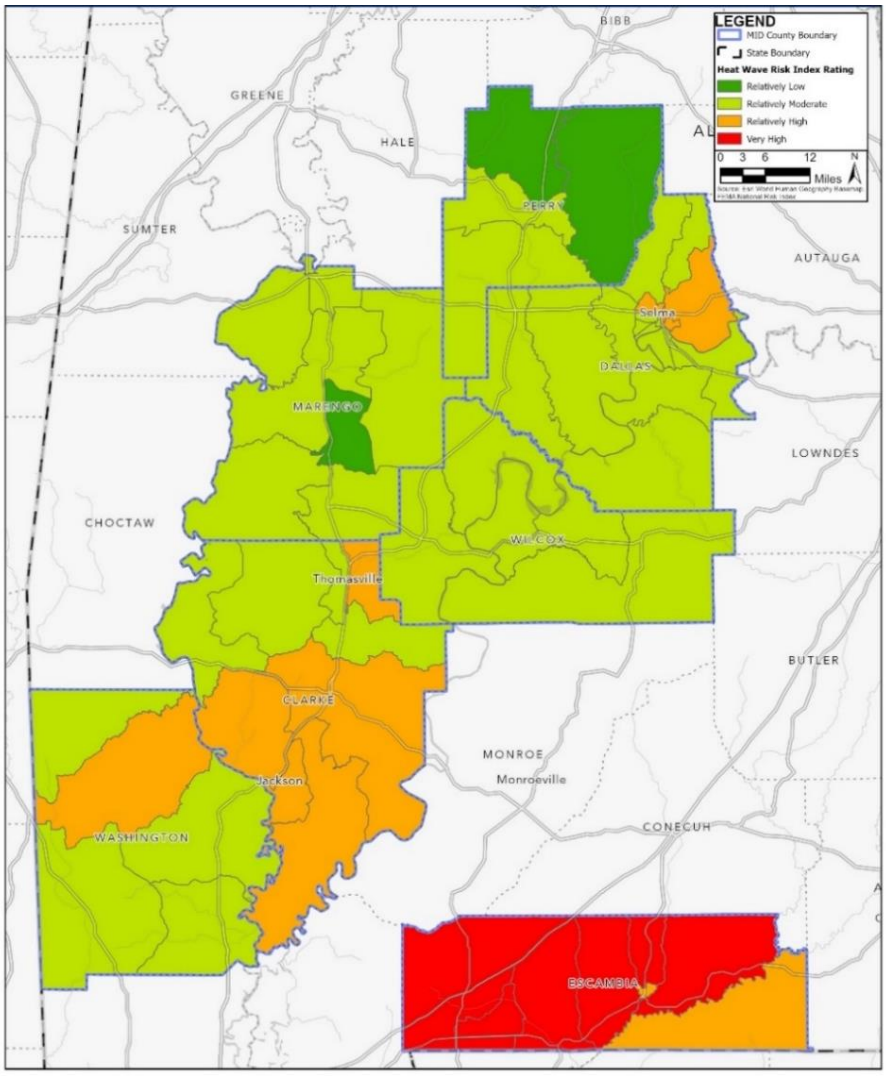


**Figure 3 Heat Wave Risk in MID Counties by Census Tract**

## Hurricanes and Coastal Storms

Hurricanes are spinning, low-pressure storms that draw surface low-latitude air into their centers and attain strength, ranging from weak tropical waves to the most intense hurricanes. NOAA defines a hurricane as a tropical cyclone with maximum sustained winds of 74 mph or higher.

Hurricanes produce dangerous conditions due to flooding and high winds. Rainfall can cause ravine flooding and flash floods, creating dangerous conditions for residents and first responders. High wind speeds are typical with tropical cyclones, even resulting in tornadoes, which can damage homes and critical infrastructure.

Hurricanes are complicated events that involve multiple hazards, including storm surges, flooding, high winds, and tornadoes. As hurricanes move inland and weaken, wind-related damages may therefore be assigned to other hazard categories (such as tropical storms or strong/high winds). Figure 4 provides an overview of the hurricane risk across the region, with areas ranging from relatively low to very high risk with the greatest risk occurring in the counties closest to the Gulf of Mexico.

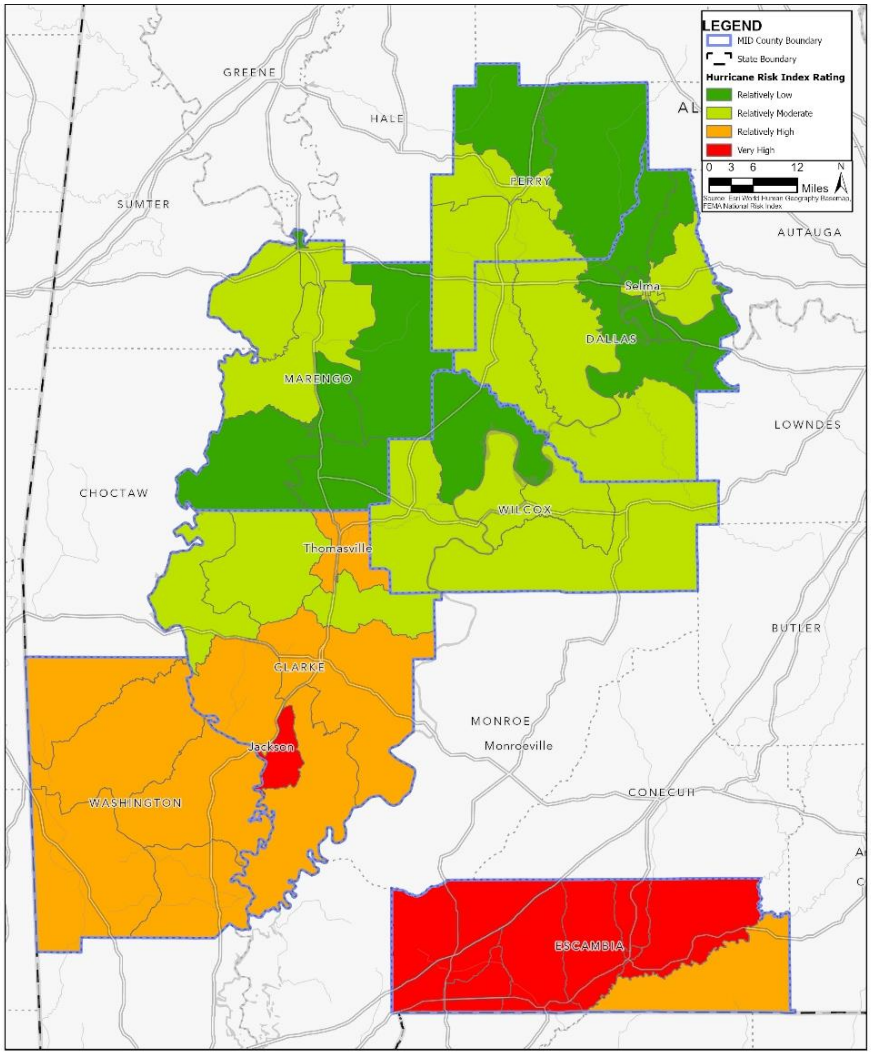


**Figure 4 Hurricane Risk in MID Counties by Census Tract**

In the event of a hurricane, all community lifelines are at risk. Downed trees due to high winds, and flooded roads due to significant rainfall can render transportation impossible, making it difficult for emergency services to reach affected communities. The infrastructure may also be damaged or washed away. Crops and livestock may be destroyed, and power outages can lead to a loss of energy-dependent structures and services for weeks. Additionally, clean drinking water may be scarce or unattainable.

## Flooding

### Coastal Flooding

Coastal flooding is when low-lying coastal areas flood due to the vertical rise above normal water level caused by strong, persistent onshore wind, high astronomical tide, and/or low atmospheric pressure, resulting in flooding that causes damage and erosion. Coastal flooding is common during tropical storms and hurricanes. There are many factors that determine the extent of the risk of coastal flooding during any given event, but in general coastal flooding and storm surge is most damaging when it occurs along a shallowly sloped shoreline, during high tide, in developed areas with limited natural buffers and in the right front quadrant of a tropical storm or hurricane. Figure 5 provides an overview of the coastal flood risk in the region, which is very low to no risk due to the proximity of these 7 counties to the Gulf Coast. Where the Alabama and Tombigbee Rivers meet at the southern tips of Clarke and Washington Counties, there is a very low risk for coastal flooding.

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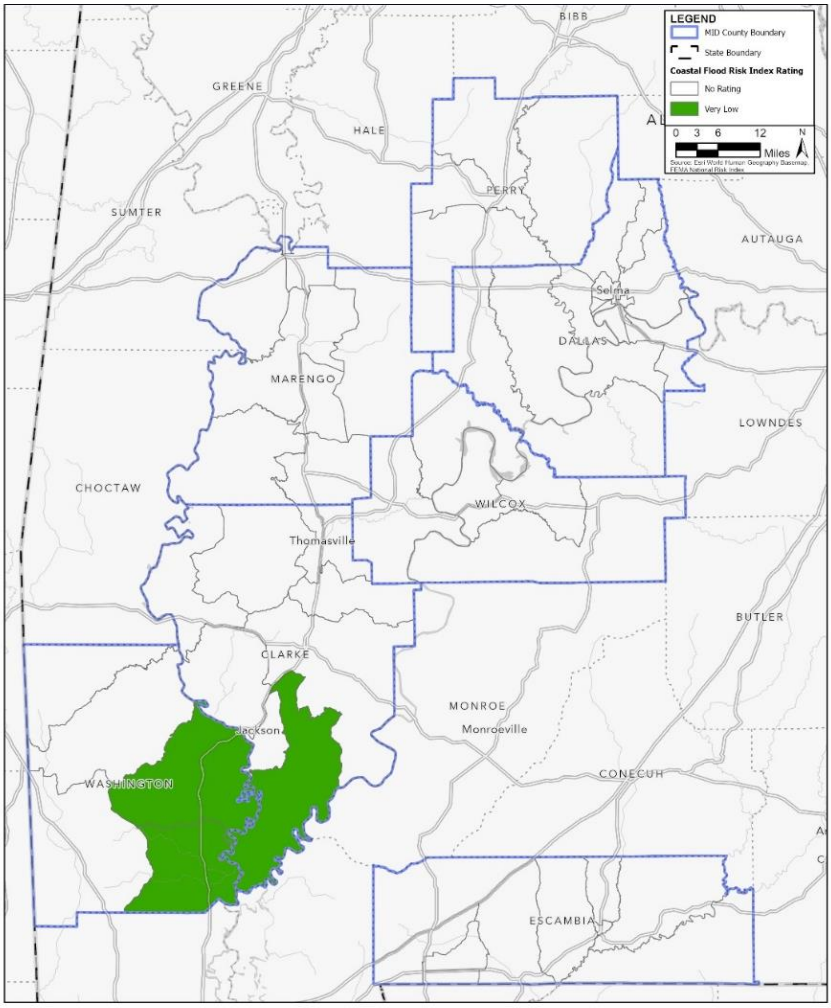



**Figure 5 Coastal Flood Risk in MID Counties by Census Tract**

**Riverine Flooding**

Riverine flooding, or flash flooding, occurs when areas near streams and low-lying areas flood due to the rapid rise of water due to intense rainfall, dam failure or blockages from debris. Flash flooding usually starts as a shorter-term localized flooding event; however, it may transition into an ongoing widespread flooding event. Injuries and deaths can occur when people are swept away by flood currents or when bacteria and disease are spread by floodwaters. Extensive property and roadway damage can occur due to the force or volume of floodwater. The debris carried by the moving water can also cause damage by running into walls of buildings, foundations, roads and bridges. Standing water from floods can damage plywood, gypsum wallboard, and household goods. Floodwater usually transports sediments, debris, contaminants such as oil, farm and lawn chemicals, and untreated sewage. When floodwaters recede, these contaminants remain in flooded buildings and on their contents. It is important to note that even when flooding does not cause property damage or loss of life, it can cause economic disruption. Figure 6 provides and overview of the riverine flood risk in the region, which is very low to relatively high.

In the event of a flooding event, all community lifelines are at risk. Flooded roads can make transportation impossible, making it difficult for emergency services to reach affected communities. The infrastructure may also be damaged or washed away. Crops and livestock may be destroyed, and power outages can lead to a loss of energy-dependent structures and services for weeks. Additionally, clean drinking water may be scarce or unattainable.

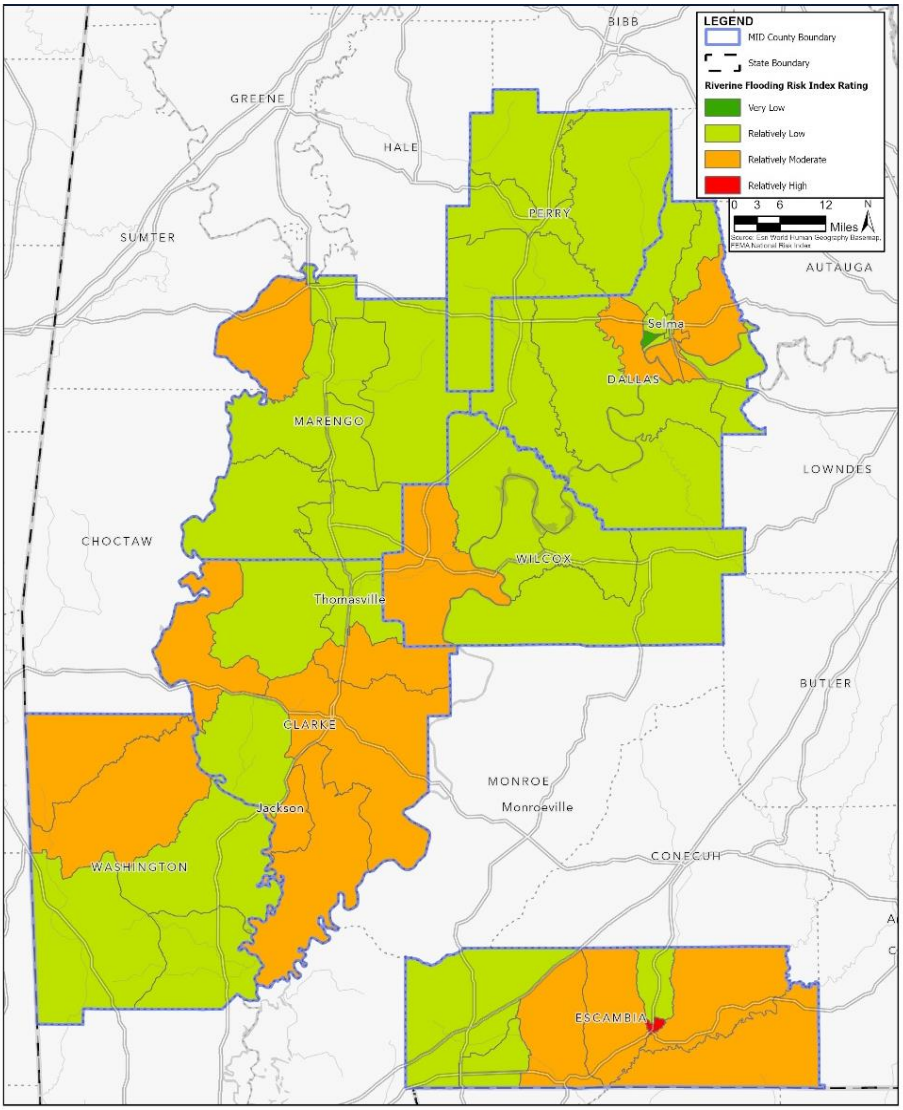



**Figure 6 Riverine Flooding Risk in MID Counties by Census Tract**

## Severe Storms

A severe storm is a broad event category that may include lightning, hail, strong winds, intense rainfall and flooding. All these hazards can have an impact on the economy, agriculture, infrastructure, and housing.

### Hail

Hail is a form of frozen precipitation that can occur during severe storms. While thunderstorms that produce hail are more common in the Great Plains, where the temperature contrasts associated with the jet stream are greatest, there is still a relatively high risk for hail in parts of Alabama as shown in Figure 7.

Hail can pose a serious threat to various aspects of life. It has the potential to cause extensive damage to transportation methods, including airplanes and vehicles. Hailstorms can cause visibility issues which increases the risk of accidents. Furthermore, roofs and windshields may be damaged. Hail can also negatively affect crops and roaming livestock in agricultural areas.

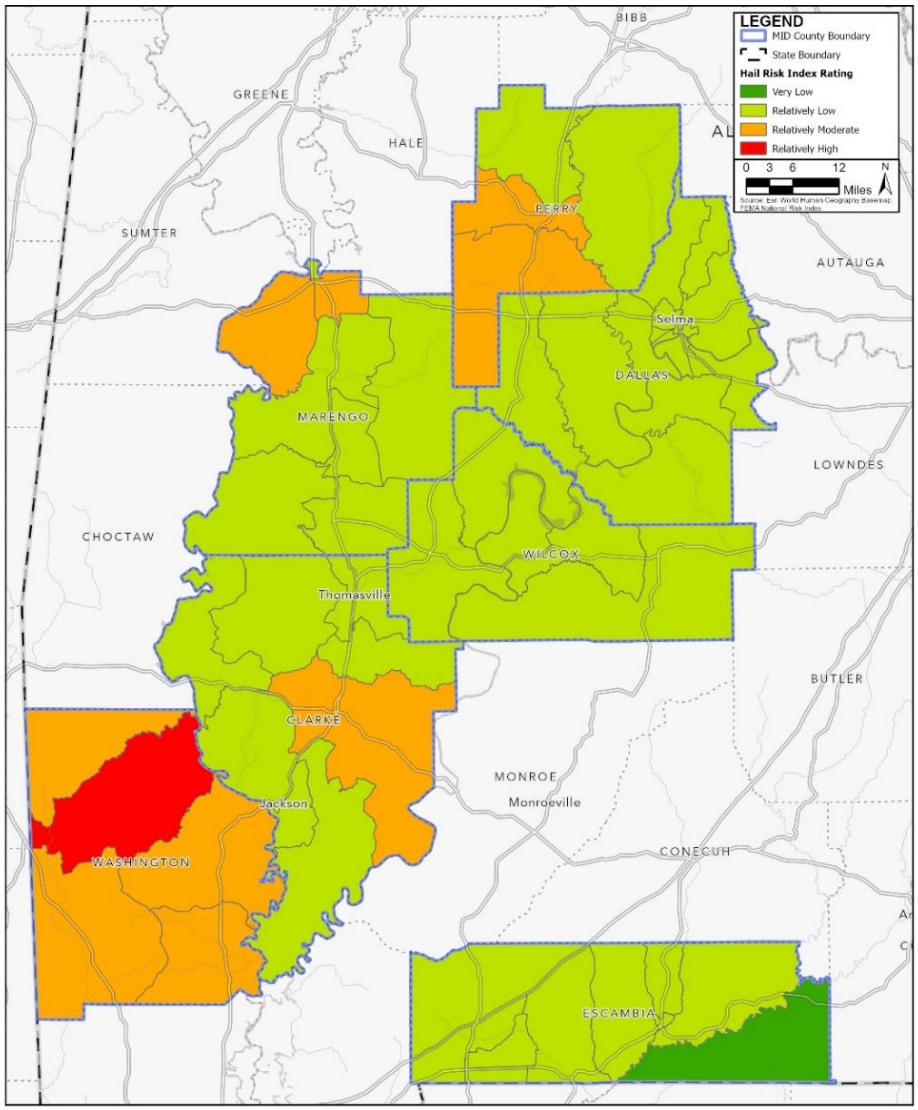



**Figure 7 Hail Risk in MID Counties by Census Tract**

**Strong Winds**

Strong winds consist of damaging winds that exceed 58 mph and are typically associated with thunderstorms, and tropical storms/hurricanes. Strong winds can result in flying debris, downed trees which may result in blocked roads, damaged homes and loss of power. Several parts of the region, including all of Washington County, have a relatively high risk for strong winds as shown in Figure 8.

All lifelines may be impacted by strong winds due to the high risk of damage in affected areas. High winds are generally contained in small areas; however, high winds can affect larger areas where tornadoes and hurricanes may develop. Safety and security may be affected, causing delays in areas due to downed trees and power lines. With power outages, those relying on home use of medical equipment may be at risk.

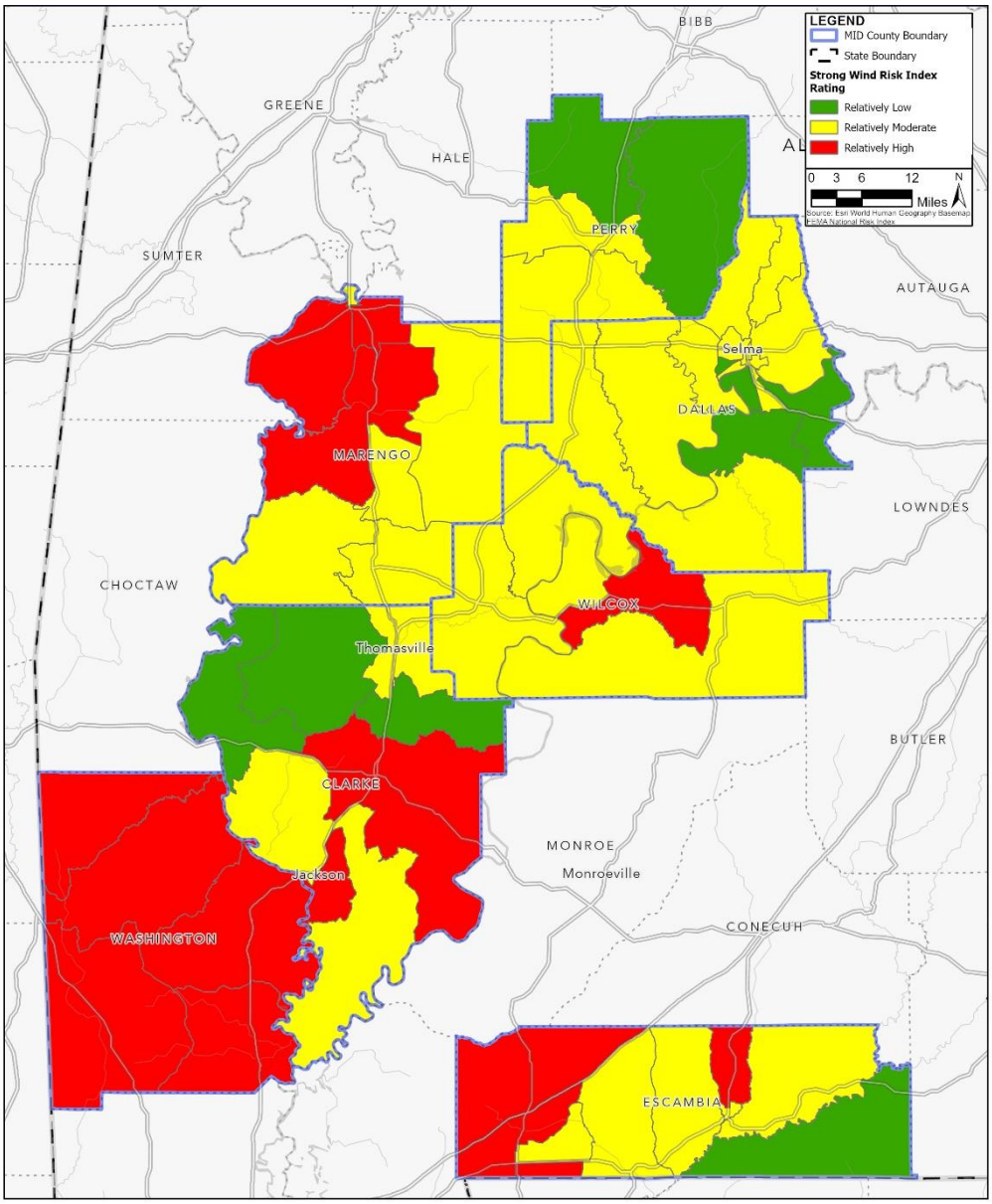



**Figure 8 Strong Winds Risk in MID Counties by Census Tract**

## Tornadoes

Tornadoes are narrow, violently rotating columns of air that extend from the base of thunderstorms to the ground. A tornado is not always apparent and is only visible if it forms a condensation funnel made up of water droplets, dust, and debris. Tornadoes can result in property, crops, economic damage and the loss of life and injury. The damage is the result of the high wind velocities and wind-blown debris. Tornadoes can be difficult to predict; however, past occurrences and basic weather patterns can help to identify areas that are susceptible to the formation of tornadoes. Several parts of the region, especially in the more southern counties, have a relatively high risk of tornadoes as shown in Figure 9.

All lifelines may be impacted by tornadoes due to the high risk of damage in affected areas. Tornadoes can create localized or widespread damage. Safety and security may be affected, causing delays in areas due to downed trees and power lines. With power outages, those relying on home use of medical equipment may be at risk.

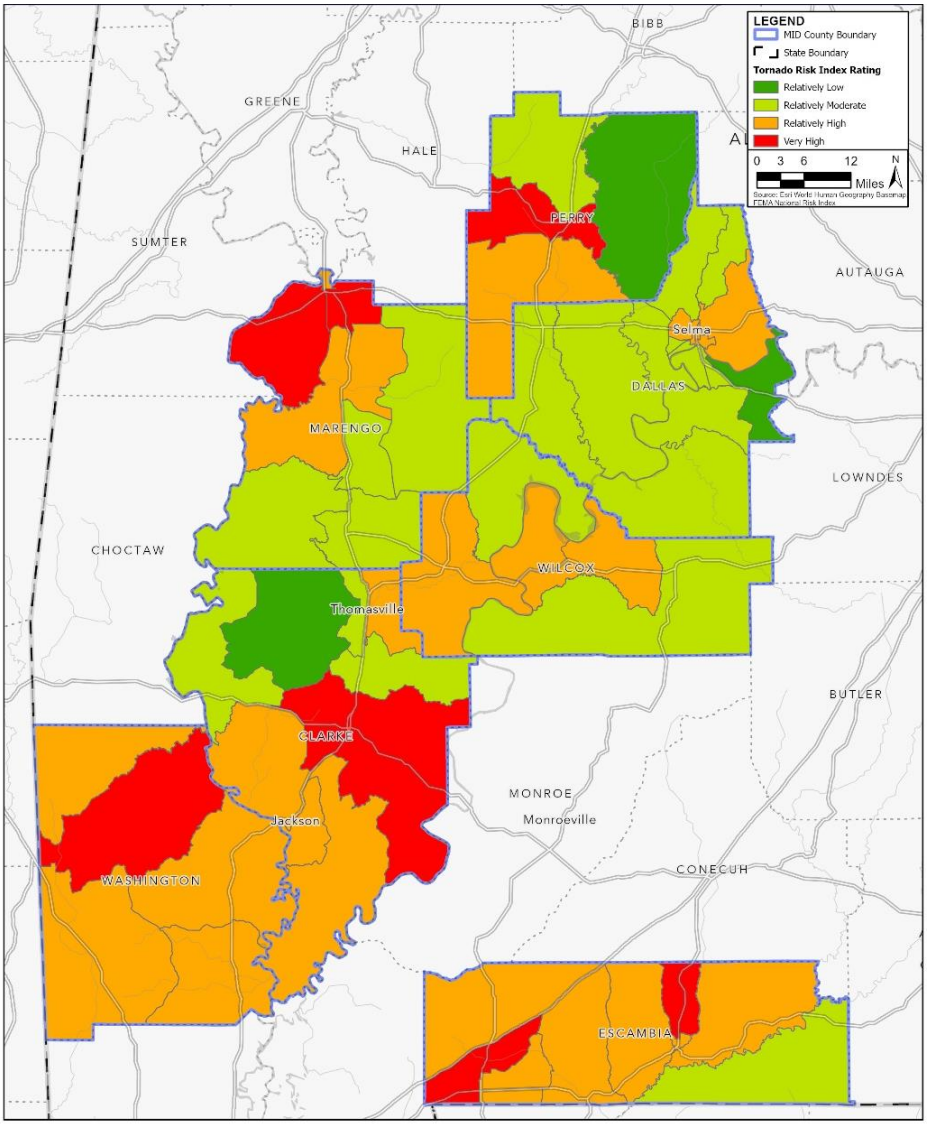



**Figure 9 Tornado Risk in MID Counties by Census Tract**

## Wildfire

A wildfire is an unplanned and uncontrolled burning as it spreads through vegetation, and in some cases, structures. There are two types of wildfires: (1) wild land fires and (2) urban-wild land interface fires. Wild land fires occur in areas where there is no development, except for utilities and infrastructure; Urban-wild land interface fires occur in developed areas near or within the vegetative cover. Wildfire events occur most often in the summer and under drought conditions. Wildfires can start as slow burning fires along the forest floor, killing and damaging trees and usually spread more quickly as they reach the tops of trees. Wildfires can vary greatly in terms of size, location, intensity, and duration. The greatest threat to people and property exists with urban-wild land interface fires. The risk for wildfires is greatest (relatively moderate) in the southernmost counties, as shown in Figure 10.

All lifelines are threatened by wildfires as they can cause significant disruptions to transportation, communication, power, gas services, and water supply. In addition, they can harm air quality and result in the loss of property, crops, resources, animals, and human lives.

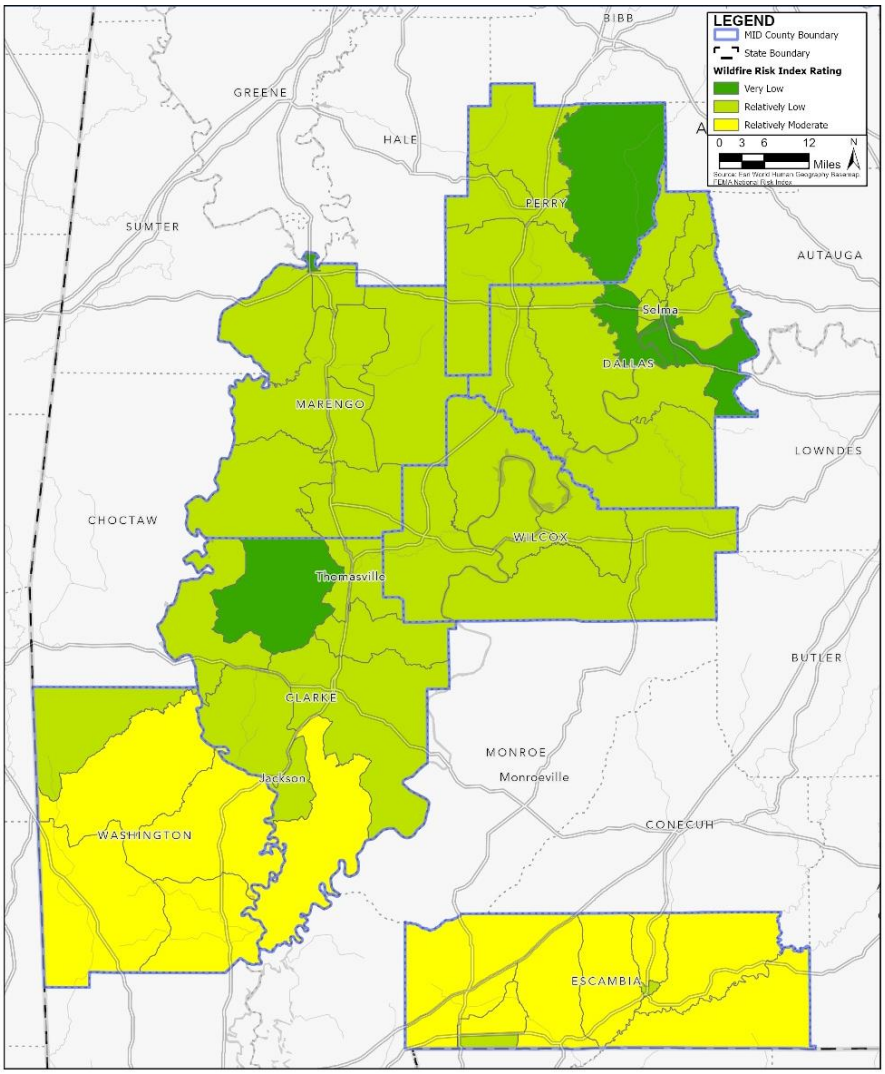



**Figure 10 Wildfire Risk in MID Counties by Census Tract**

## D. Community Lifelines

Critical service areas or community lifelines refer to indispensable services that enable continuous operation of critical business and government functions after a disaster event and are essential to human health, safety and economic security. To best address unmet mitigation needs impacting emergency response and critical service areas, this plan provides a quantitative analysis of significant potential impacts and risks of hazards as highlighted in the previous section, and overview of the seven critical service areas listed across the 7 MID Counties. The below definitions and data are from FEMA's Critical Lifelines Toolkit[16] and FEMA's National Response Framework[17]. These critical service areas are interdependent and an impact in one service area is likely to result in cascading impacts across others.


### 1. Safety and Security

The Safety and Security community lifeline consists of law enforcement and government services, including the associated assets that maintain communal security, provide search and rescue, evacuations, and firefighting capabilities, and promote responder safety.

Data Sources for the Safety and Security asset map (Figure 11)

| Variable | Critical Asset | Source |
|---|---|---|
| Law Enforcement | Yes | https://www.arcgis.com/home/item.html?id=0d79b978d71b4654bddb6ca0f4b7f830 |
| Fire/EMS | Yes | https://services1.arcgis.com/CD5mKowwN6nlaqd8/arcgis/rest/services/HVRA_Source_Data_Fire_Stations/FeatureServer |
| Local EOCs | Yes | https://www.arcgis.com/home/item.html?id=874798faedc74358bac9bbe1867af3c7 |
| Prisons | | https://www.arcgis.com/home/item.html?id=2d6109d4127d458eaf0958e4c5296b67 |
| Gov't Services – Courthouses | | https://services2.arcgis.com/FiaPA4ga0iQKduv3/arcgis/rest/services/Structures_Landmarks_v1/FeatureServer |
| Community Safety Centers/Fairground | | https://www.arcgis.com/home/item.html?id=86c323b5d44748228ef10bc8b452d9f7 |
| Public Schools | | https://www.arcgis.com/home/item.html?id=87376bdb0cb3490cbda39935626f6604 |
| Private Schools | | https://www.arcgis.com/home/item.html?id=0dfe37d2a68545a699b999804354dacf |
| Colleges & Universities | | https://www.arcgis.com/home/item.html?id=0d7bedf9d582472e9ff7a6874589b545 |
| Mobile Home Parks | | https://www.arcgis.com/home/item.html?id=4cdbccc5c538452aa91ceee277c460f9 |
| Places of Worship | | https://www.arcgis.com/home/item.html?id=97603afcff00443f874acbe03c9e794a |
| Nursing Homes | | https://www.arcgis.com/home/item.html?id=78c58035fb3942ba82af991bb4476f13 |

[16] FEMA Community Lifelines: https://www.fema.gov/emergency-managers/practitioners/lifelines

[17] FEMA National Response Framework: https://www.fema.gov/emergency-managers/national-preparedness/frameworks/response

## 2. Food, Water, Shelter

The Food, Water and Shelter lifeline support systems that enable the sustainment of life, such as water treatment; transmission and distribution systems; food retail and distribution networks; wastewater collection and treatment systems; sheltering; and agriculture.

Data Sources for the Food, Water and Shelter asset map (Figure 12):

| Variable | Critical Asset | Source |
|---|---|---|
| Food Stores | | https://www.arcgis.com/home/item.html?id=6c8c635b1ea94001a52bf28179d1e32b |
| Food Pantries | | https://www.arcgis.com/home/item.html?id=16880d896b7f4f61a7dbb648b38f56fa |
| Shelters | | https://www.arcgis.com/home/item.html?id=bcaf5fdb3db24c78afee52d4c8a02748 |
| Wastewater Treatment Plants | Yes | https://data-algeohub.opendata.arcgis.com/maps/ALGeoHub::alabama-environmental-protection-agency-eps-facility-registry-service-frs-wastewater-treatment-plants/about |

## 3. Health and Medical

The Health and Medical lifeline consist of infrastructure and service providers for medical care, public health, patient movement, fatality management, behavioral health, veterinary support, and health or medical supply chains.

Data Sources for the Health and Medical asset map (Figure 13):

| Variable | Critical Asset | Source |
|---|---|---|
| Medical Care | Yes | https://www.arcgis.com/home/item.html?id=2c36dbb008844081b017da6fd3d0d28b |

## 4. Energy

The Energy lifeline provides electric power infrastructure, composed of generation, transmission, and distribution systems, as well as gas and liquid fuel processing, transportation, and delivery systems. Disruptions can have a limiting effect on the functionality of other community lifelines.

Data Sources for the Energy asset map (Figure 14):

| Variable | Critical Asset | Source |
|---|---|---|
| Power Plants | Yes | https://hifld-geoplatform.hub.arcgis.com/search?q=power |
| Gas Stations | | https://www.arcgis.com/home/item.html?id=6c8c635b1ea94001a52bf28179d1e32b |

## 5. Communications

The Communications lifeline consists of infrastructure owners and operators of broadband internet, cellular networks, landline telephony, cable services (to include undersea cable), satellite communications services, and broadcast networks (radio and television). Communication systems encompass a large set of diverse modes of delivery and technologies, often intertwined but largely operating independently. Services include elements such as alerts, warnings, and messages, including 911 and dispatch, and includes accessibility of financial services.

Data Sources for the Communications asset map (Figure 15):

| Variable | Critical Asset | Source |
|---|---|---|
| Cell Towers | | https://www.arcgis.com/home/item.html?id=15dabb4108254481b591018be2598f3c |
| FM Transmission Towers | | https://www.arcgis.com/home/item.html?id=c3b038f2aedc4fa3a8d2fbeb4a04adec |
| Land Mobile Transmission Towers (private) | | https://www.arcgis.com/home/item.html?id=4797be545f7449b4ab7b52b9e5b52ffc |
| Land Mobile Transmission Towers (commercial) | | https://www.arcgis.com/home/item.html?id=4ec3d6fe24124d7597da4c88dfeae678 |
| Broadband Radio Service and Educational Broadband Service Transmitters | | https://www.arcgis.com/home/item.html?id=9123f543fd9f44e8ab20924ac8c979bf |
| Microwave Service Towers | | https://www.arcgis.com/home/item.html?id=06ed62e7c6b74b4781a15c4ea30b2999 |
| Banks and Finance | | https://www.arcgis.com/home/item.html?id=6c8c635b1ea94001a52bf28179d1e32b |

## 6. Transportation

The Transportation lifeline consists of multiple modes of transportation that often serve complementary functions and create redundancy, adding to the inherent resilience in overall transportation networks. Transportation infrastructure generally includes highway/roadways, mass transit, railway, aviation, maritime, pipeline, and intermodal systems.

Data Sources for the Transportation asset map (Figure 16):

| Variable | Critical Asset | Source |
|---|---|---|
| Roadways | | https://www.arcgis.com/home/item.html?id=ef89ed40fe6d46b19301391bfb99ceca |
| Railway | | https://www.arcgis.com/home/item.html?id=d209f26edc86485a9c631311e50d9940 |
| Port Facilities | | https://data-algeohub.opendata.arcgis.com/maps/ALGeoHub::alabama-port-facilities/about |
| Aviation | Yes | https://www.arcgis.com/home/item.html?id=e747ab91a11045e8b3f8a3efd093d3b5 |

## 7. Hazardous Material

The Hazardous Material systems mitigate threats to the environment and public health/welfare. This includes assessment of facilities that use, generate, and store hazardous substances, including specialized conveyance assets and efforts to identify, contain, and remove incident debris, pollution, contaminants, oil or other hazardous substances.

Data Sources for the Hazardous Material Asset Map (Figure 17):

| Variable | Critical Asset | Source |
|---|---|---|
| Toxic Release Inventory Sites | | https://ucfonline.maps.arcgis.com/home/item.html?id=76e9a521bc4245388c0d734be62bfb51 |
| Superfund Sites | | https://www.arcgis.com/home/item.html?id=c2b7cdff579c41bbba4898400aa38815 |
| Solid Waste | Yes | https://www.arcgis.com/home/item.html?id=155761d340764921ab7fb2e88257bd97 |

**Figure 11 Safety and Security Lifelines Map**

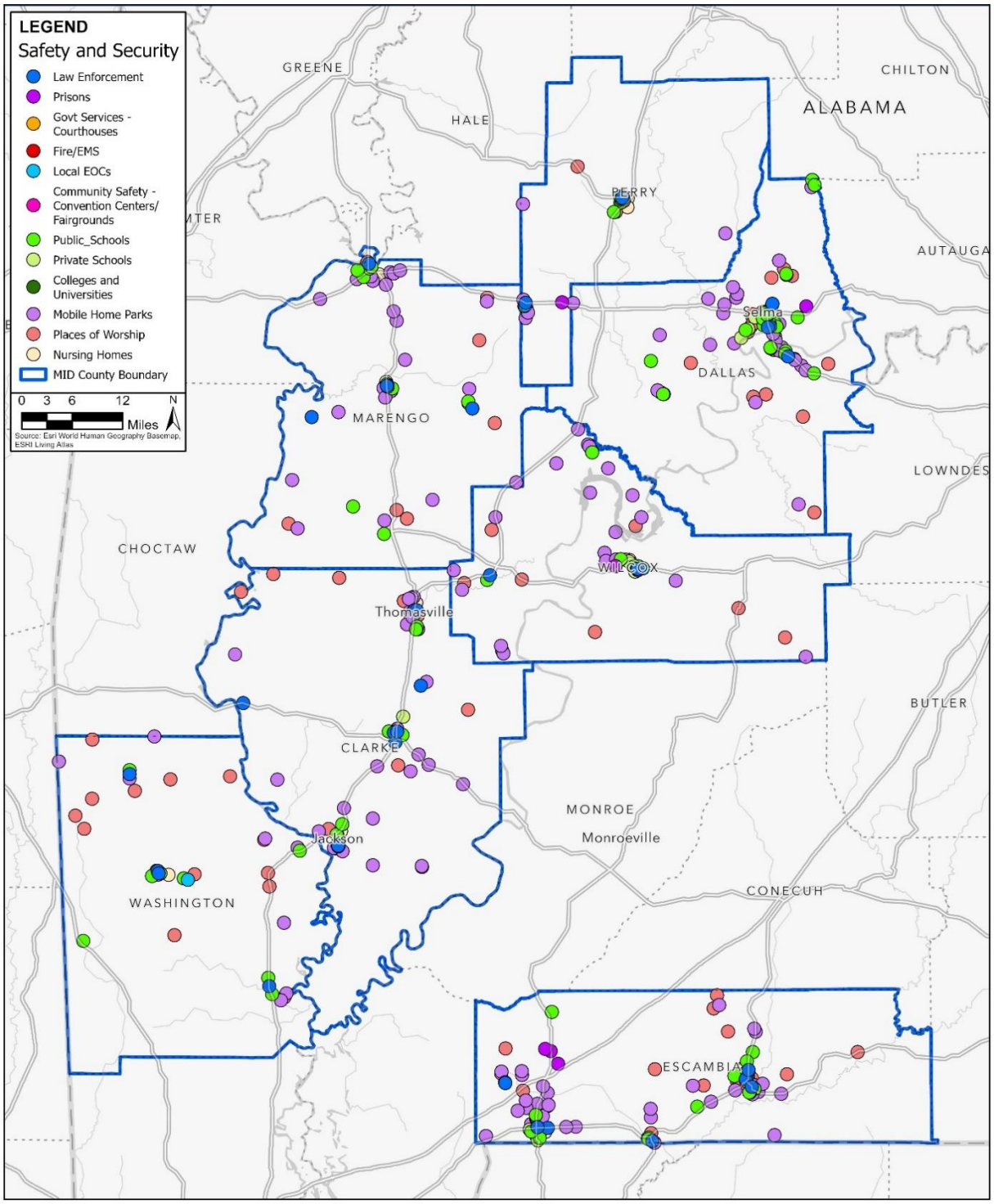


**Figure 12 Food, Water, and Shelter Lifelines Map**

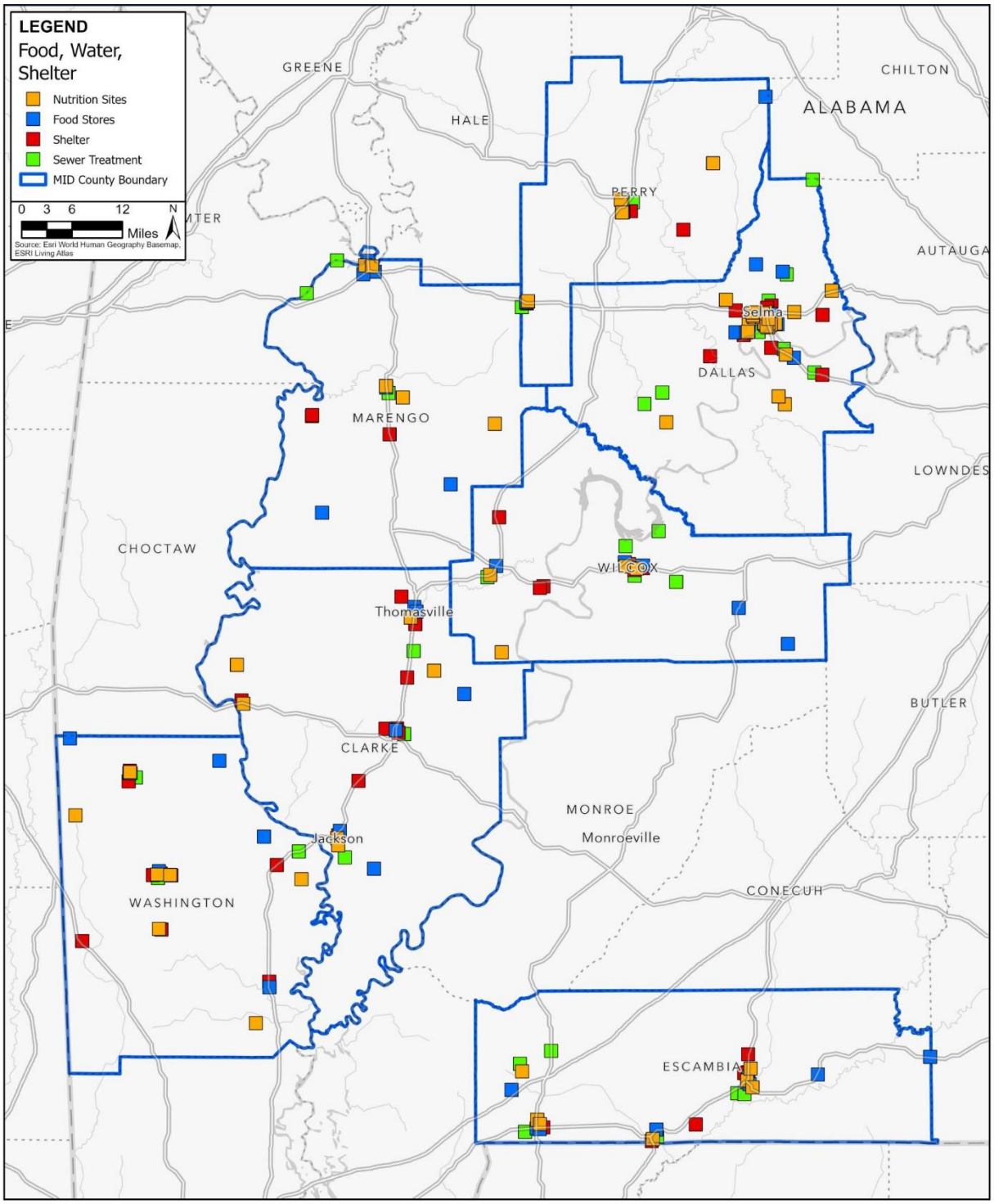
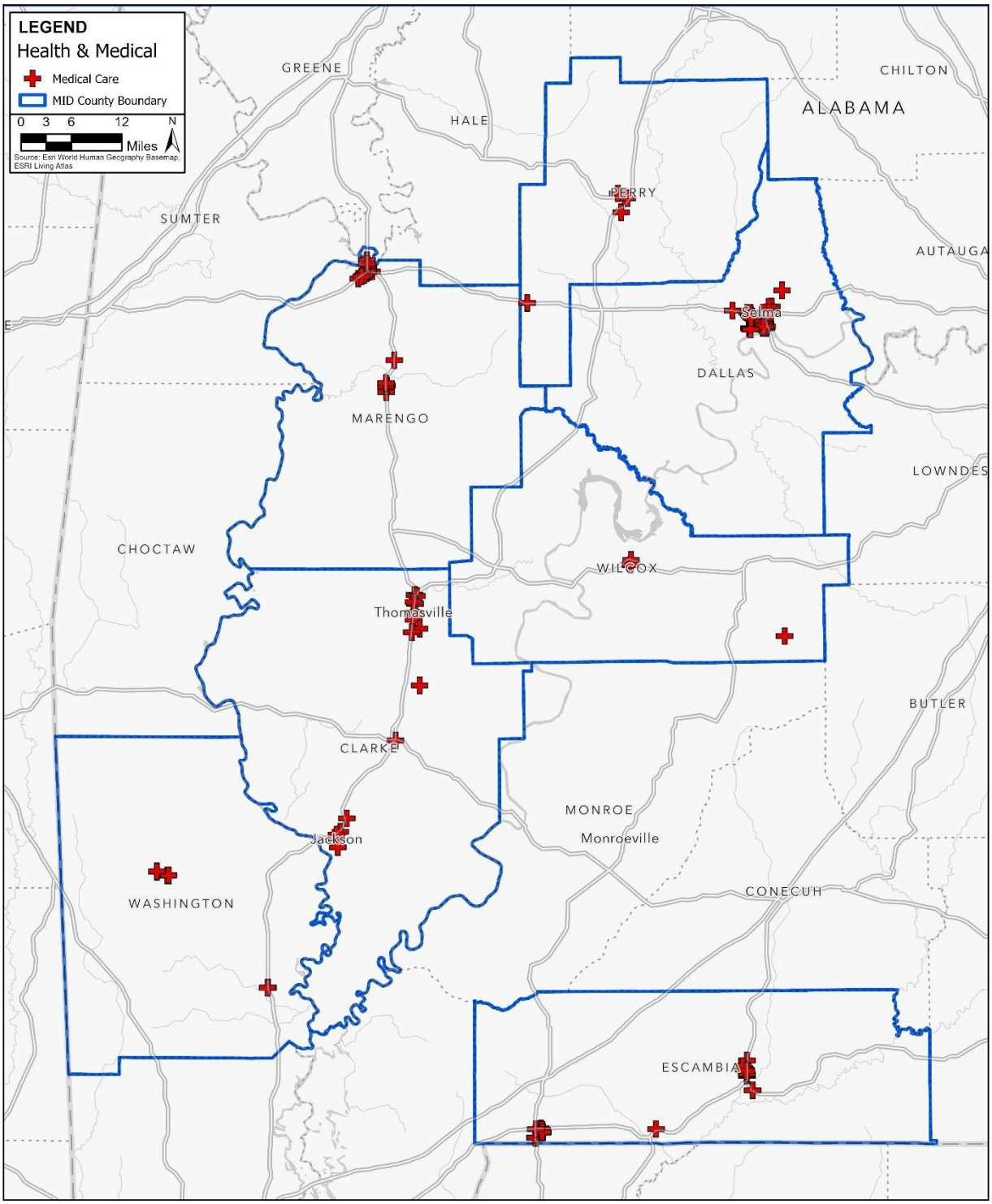


**Figure 13 Health and Medical Community Lifelines Map**



## Figure 14 Energy Lifelines Map

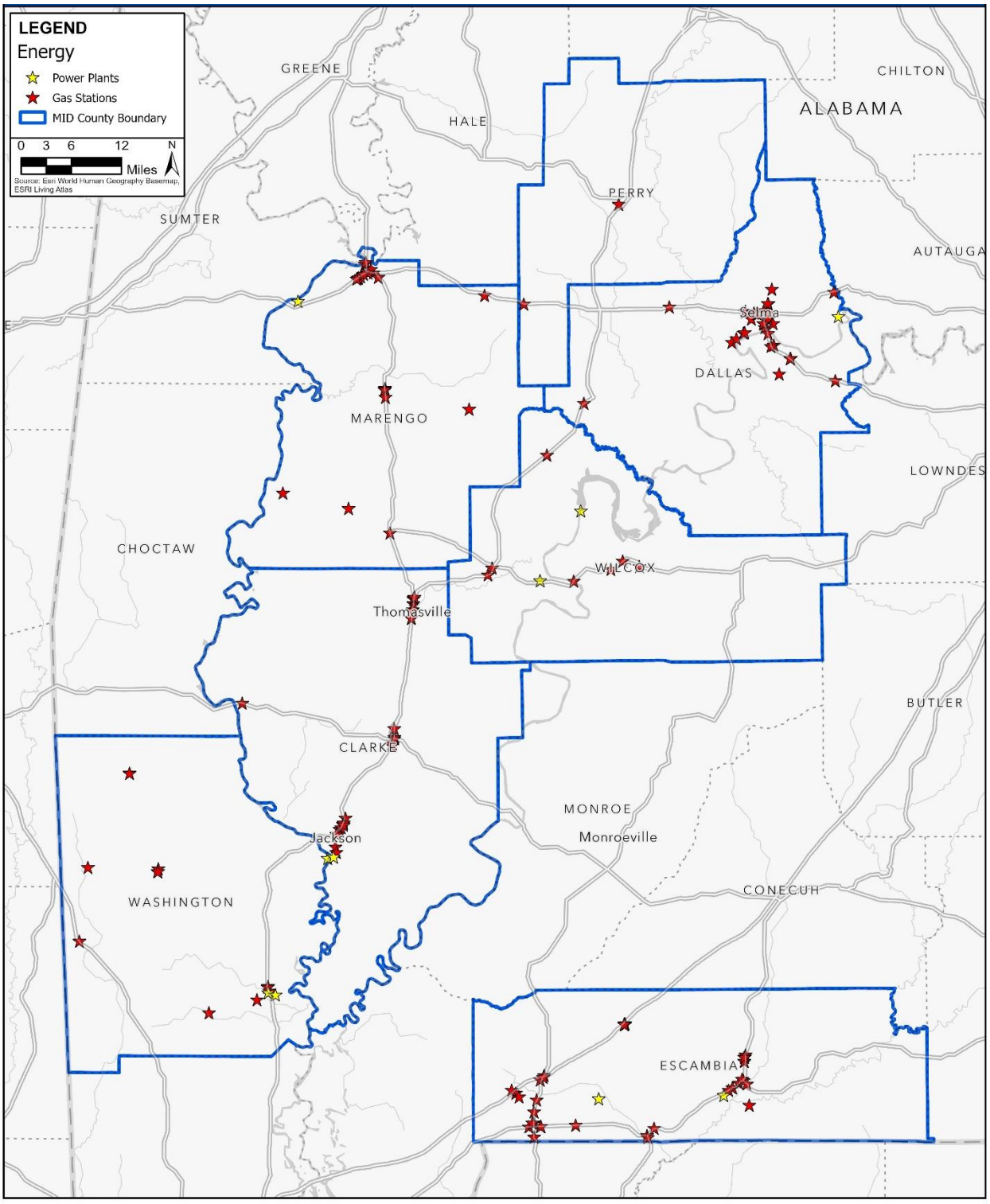


**Figure 15 Communications Community Lifeline Map**

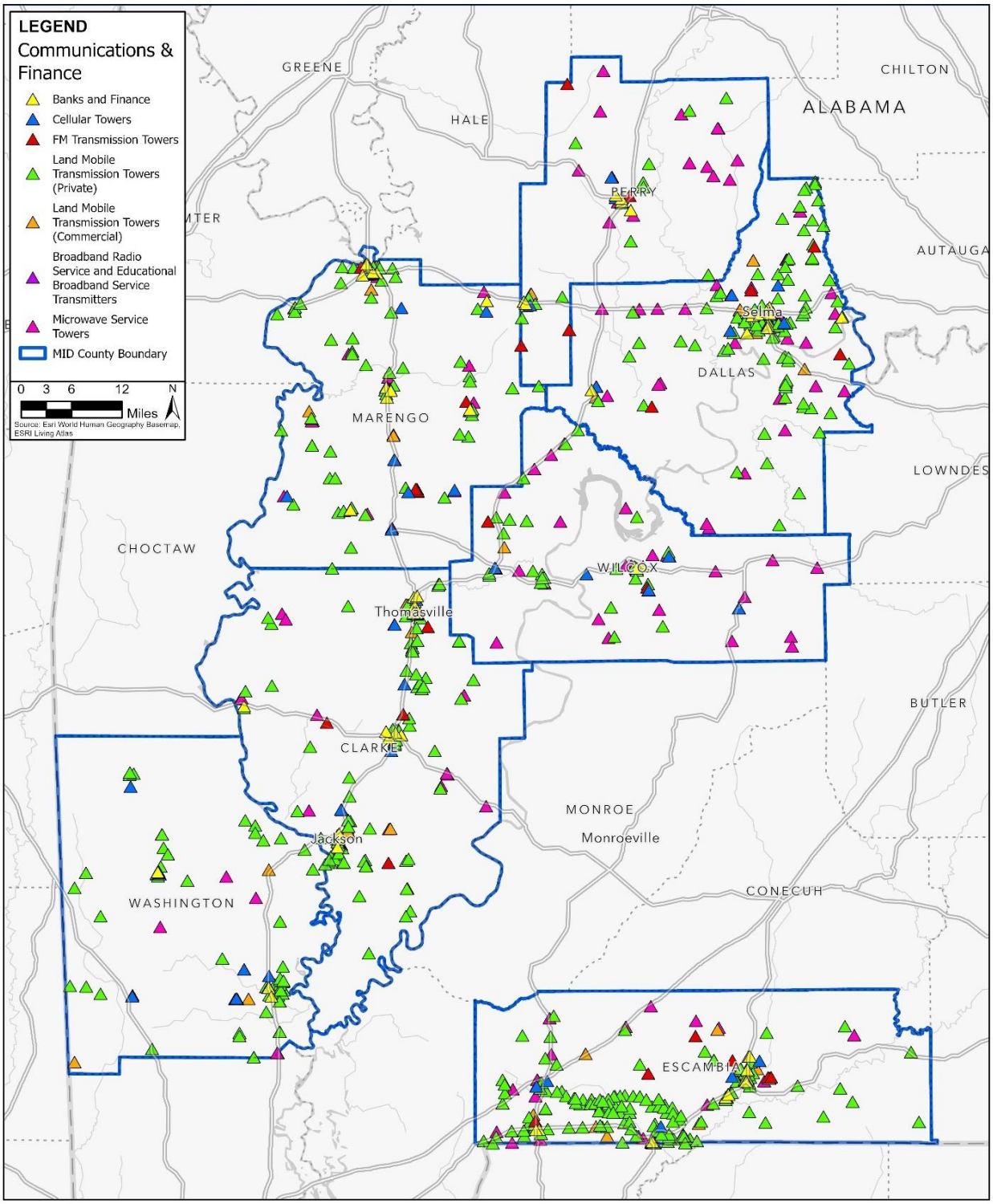


**Figure 16 Transportation Lifelines Map**

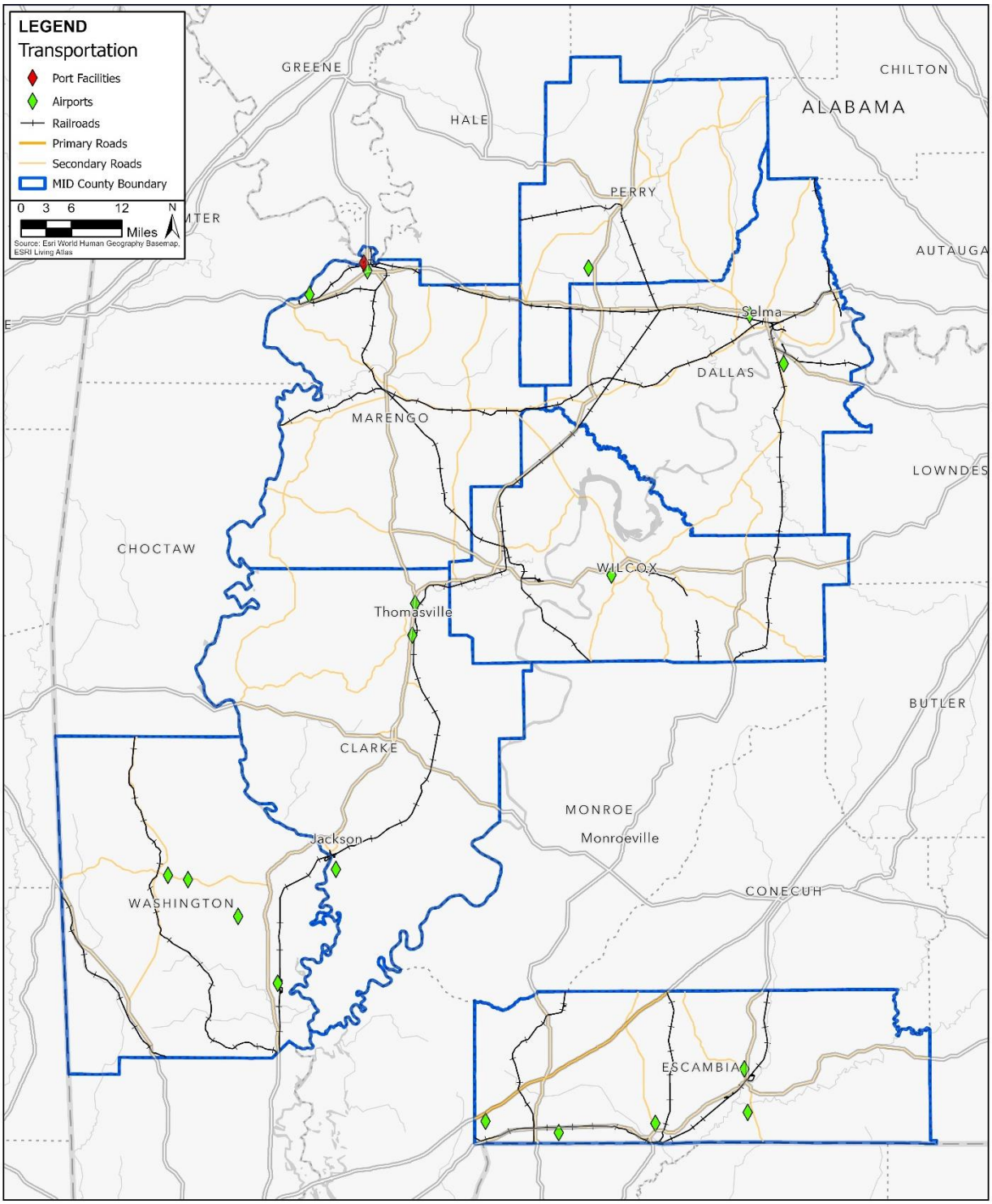
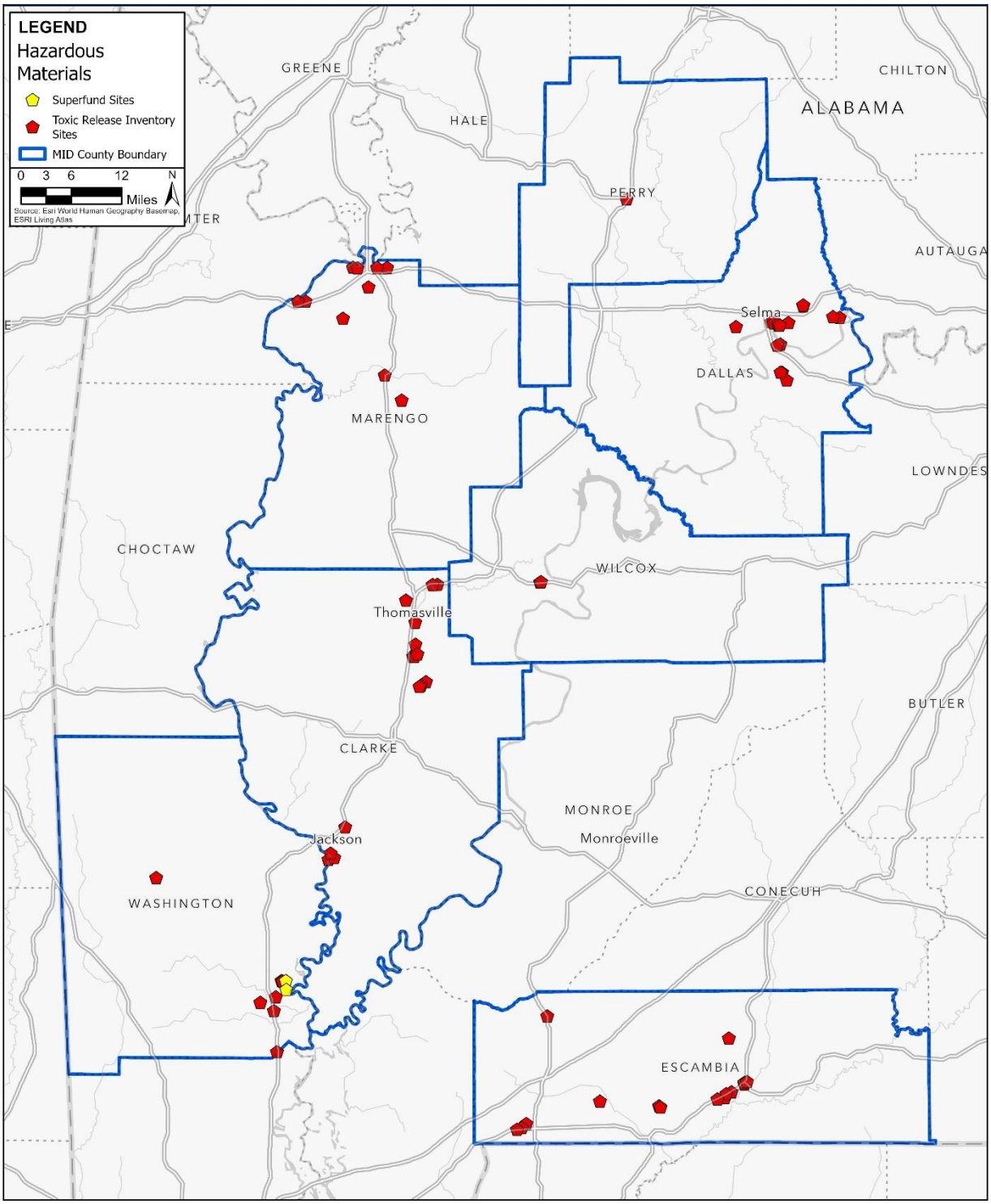


**Figure 17: Hazard Material Community Lifeline Map**



# COUNTY PLANS

# VIII. Clarke County

## A. Introduction

Clarke County is located in the southwestern section of the state at the juncture of the Tombigbee and Alabama rivers and is the center of Alabama's timber industry with over 735,000 timberland acres and producing over $2.1 million tons of timber products. Clarke County produces the most timber products of any county in the State of Alabama. Alabama's timberland industry is the third largest commercial forestland in the nation with approximately 93% of Alabama's timberland being privately owned.[18]

According to the American Community Survey (ACS) 2022 5-Year Estimates[19], Clarke County has a population of 23,058, a 4.4% decrease from 24,108 in 2019. The demographic breakdown shows a majority, 51%, are White residents, followed by 45% that are Black or African American. Housing in Clarke County includes 11,733 occupied units, with 68% being single-family homes and 25% mobile homes. In total, 97% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is high, with 72% of residents owning their homes and 28% renting. In 2020, 46% of the county's residents were considered LMI compared to 48% in 2022[20].

Clarke County was significantly impacted by Hurricanes Sally and Zeta, including downed trees that resulted in prolonged power outages and damaged homes that are still in need of repair. The hurricanes also led to localized creek flooding and flash-flooding in low-lying areas, washing out culverts and roads and trapping residents, thereby hindering access to aid and the ability to commute to work post-disaster.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Clarke County present unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see table below). Over time, ACCA, and the county reserve the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 1 Total Estimated Unmet Need for Clarke County**

| | Estimated Impact | Amount of Funds from Other Sources | Total Unmet Need |
|---|---|---|---|
| Housing | $8,269,453 | $3,207,445 | $5,062,008 |
| Infrastructure | $15,842,050 | $11,478,452 | $3,954,110 |
| Economy | $188,348 | $39,700 | $148,648 |
| **Total** | **$24,299,851** | **$14,725,597** | **$9,164,766** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[18] 2021 Alabama Forestry Report, https://forestry.alabama.gov/Pages/Management/Forms/Forest_Resource_Report_2021.pdf

[19] https://data.census.gov/ - Tables B02001, B25024, B25003

[20] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Clarke County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated because of impacts from the 2020 storms. The assessment below utilizes federal and state resources, including data provided by FEMA, and SBA, among other sources, to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. The unmet needs assessment focuses on Clarke County's housing, infrastructure, and economic impacts, with specific sections detailing needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

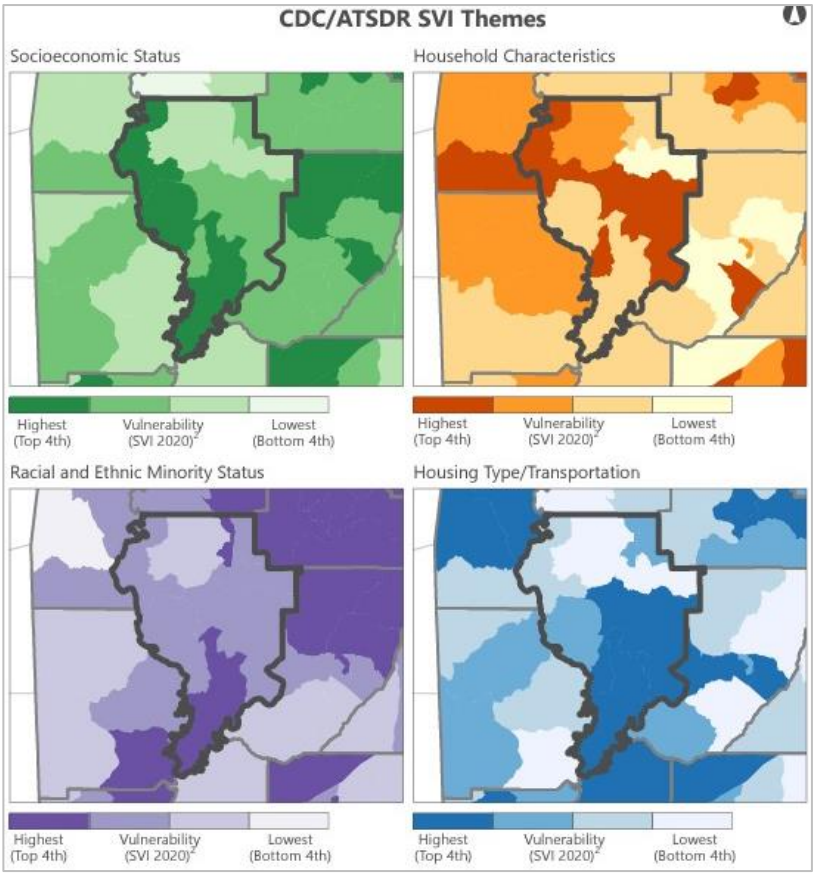
The demographic profile of Clarke County has not changed much since the state of Alabama's 2020 Disaster Recovery Action Plan was published and detailed demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county. An overview of vulnerable and LMI populations is provided below.

**Vulnerable Populations**

Clarke County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Clarke County has identified vulnerable population areas using the CDC/ATSDR Overall SVI and geographically underserved and historically disadvantaged areas. Clarke County has two identified disadvantages areas: Opportunity Zones and R/ECAP. Clarke County does not have any Promise Zones, Neighborhood Revitalization Strategy Areas, or Tribal areas within the county.

Figure 18 Clarke County SVI Themes[21] show cases the vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

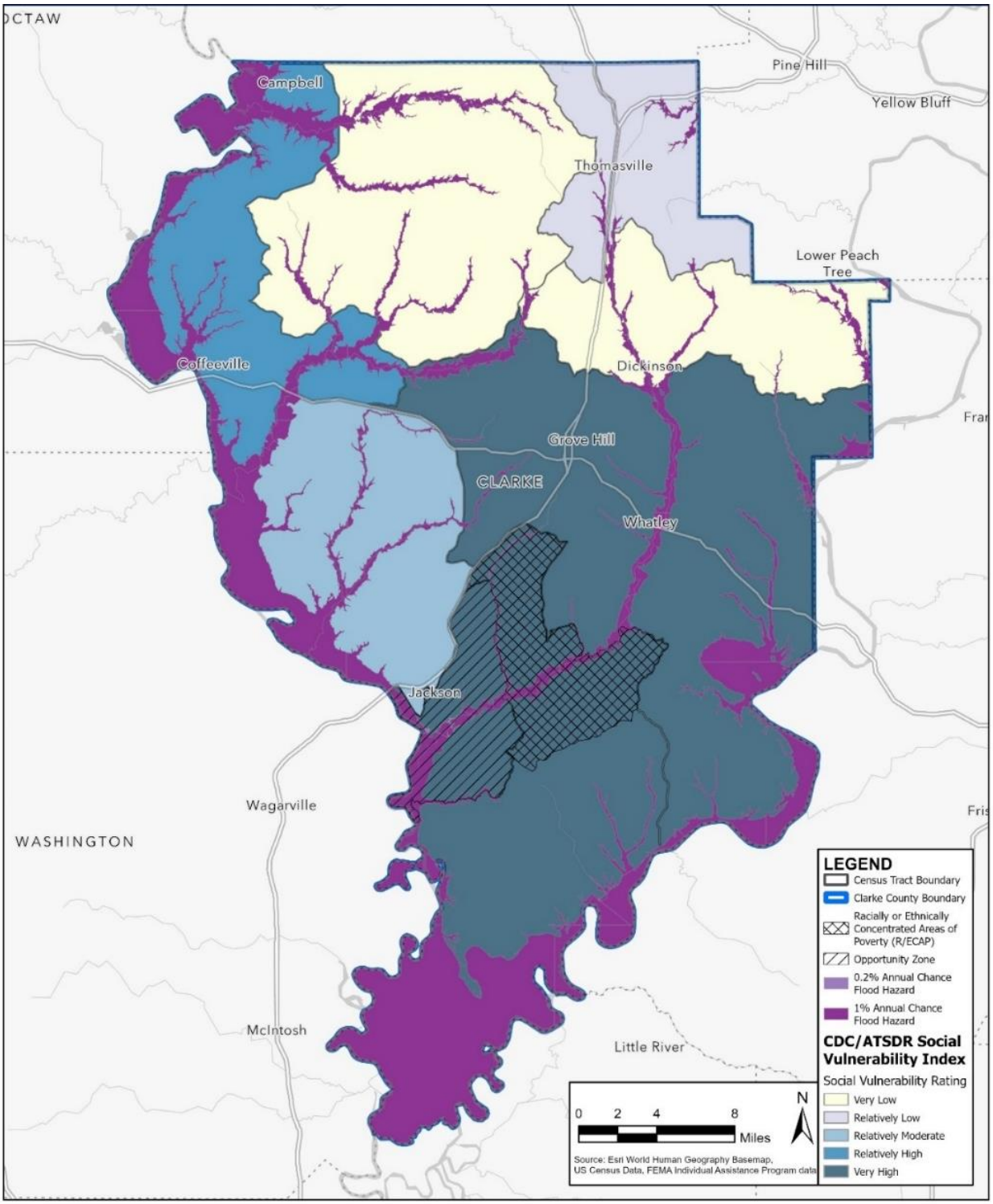
**Figure 18 Clarke County SVI Themes**




[21]CDC/ATSDR SVI 2020 County Map Series: https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html#more-pcm

Figure 19 provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the Very High SVI Ratings and where the Opportunity Zones and R/ECAP areas are located.

**Figure 19 Clarke County Vulnerability Map**



### LMI Populations

As highlighted in the table below, three of the nine census tracts within Clarke County have more than 50% of the population that is considered LMI which also have a relatively high or very high SVI Rating.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 2 Clarke County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[22] | SVI Rating |
|---|---|---|
| 9575 | 49.20% | Very Low |
| 9576.01 | 34.00% | Very Low |
| 9576.03 | 45.20% | Relatively Low |
| 9576.04 | 30.53% | Relatively Low |
| **9577** | **53.20%** | **Relatively High** |
| **9578** | **59.80%** | **Very High** |
| 9579.01 | 46.60% | Relatively Moderate |
| 9579.02 | 45.93% | Very High |
| **9580.03** | **53.00%** | **Very High** |

[22]LMISD, ACS-2016-200 All Block Groups, https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary-data-block-groups-places/.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

Per each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the following tables below, outline the total damaged properties population with documented damages. To account for properties that never had an inspection physically to take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 3 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 3 | 0.1% | 0 | 0.0% | 3 | 0.1% |
| **Major-High** | 1 | 0.0% | 1 | 0.0% | 2 | 0.1% |
| **Major-Low** | 76 | 3.5% | 20 | 0.9% | 96 | 4.4% |
| **Minor-High** | 475 | 21.9% | 125 | 5.8% | 600 | 27.7% |
| **Minor-Low** | 290 | 13.4% | 19 | 0.9% | 309 | 14.3% |
| **No FVL** | 960 | 44.3% | 198 | 9.1% | 1,158 | 53.4% |
| **Total** | **1,805** | **83.3%** | **363** | **16.7%** | **2,168** | **100.0%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan to determine the estimated total loss/support for these three damage categories. The below tables outline the total number of properties damaged for homeowners and renters.

Table 4 Minor-Low, Minor-High, and Major-Low Estimated Total Loss – Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 290 | $1,621 | $ 470,090 |
| **Minor-High** | 475 | $5,495 | $2,610,125 |
| **Major-Low** | 76 | $11,502 | $874,152 |
| **Total** | **841** | **N/A** | **$3,954,367** |

Table 5 Minor-Low, Minor-High, and Major-Low Estimated Total Loss – Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 19 | $1,621 | $30,799 |
| **Minor-High** | 125 | $5,495 | $686,875 |
| **Major-Low** | 20 | $11,502 | $230,040 |
| **Total** | **164** | **N/A** | **$947,714** |

Table 6 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 309 | $1,621 | $500,889 |
| **Minor-High** | 600 | $5,495 | $3,297,000 |
| **Major-Low** | 96 | $11,502 | $1,104,192 |
| **Total** | **1,005** | **N/A** | **$4,902,081** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and require reconstruction. To determine the replacement cost of the home, Clarke County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (non-adjusted)[23]. The Zillow home value includes the cost of the land; thus, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided in Table 7 below:

Table 7 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $124,736 | $82,326 | 2 | $164,652 |
| **Severe** | $124,736 | $82,326 | 3 | $246,978 |
| **Total** | | | **5** | **$411,630** |

Of the 5 Major-High and Severe damaged dwellings, 1 renter occupied dwelling is classified as Major-High with a total estimated loss of $82,326.

[23] Clarke County Home Values, https://www.zillow.com/home-values/73903/al-36515/

### FEMA IA Applications without FEMA Verified Loss

Clarke County also accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter occupied dwellings because due to the COVID-19 pandemic and other reasons, an inspection never physically took place or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Clarke County counted applications with no FEMA Verified Loss and multiplied it by the average value for minor-low damage per SBA verified property loss provided in the state of Alabama's 2020 Disaster Recovery Action Plan. Table 8 below provides the results of these calculations.

**Table 8 : Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 960 | $1,621 | $1,556,160 |
| **Renter** | 198 | $1,621 | $ 320,958 |
| **Total** | **1,158** | **$1,621** | **$1,877,118** |

## c. Impacts of Insurance (NFIP and HOI)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

**Table 9 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 0 | 6 | 11 | 5 | 0 | 0 | 22 |
| **Renter** | 2 | 2 | 12 | 6 | 0 | 0 | 22 |
| **Total** | **2** | **8** | **23** | **11** | **0** | **0** | **44** |

**Flood Damage and Insurance:** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the NFIP as shown in the table below. In total, **100 percent** of the flood-affected homeowner population are reported to not carry flood insurance per the FEMA IA data.

**Table 10 Homeowner Flood-Damaged Properties and NFIP Counts**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% |
| **Major-Low** | 0 | 0% | 5 | 23% |
| **Minor-High** | 0 | 0% | 11 | 50% |
| **Minor-Low** | 0 | 0% | 6 | 27% |
| **No FVL** | 0 | 0% | 0 | 0% |
| **Total** | **0** | **0%** | **22** | **100%** |

**Wind Damage and Insurance:** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of households reported not to carry a standard hazard homeowners insurance policy (HOI) that

would otherwise be expected to offset documented losses. In total, **73 percent** of the wind-impacted homeowner population is reported not to carry hazard insurance as shown in Table 11 below.

**Table 11 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 960 | 284 | 464 | 71 | 1 | 3 | 1,783 |
| **Renter** | 196 | 17 | 113 | 14 | 1 | 0 | 341 |
| **Total** | **1,156** | **301** | **577** | **85** | **2** | **3** | **2,124** |

**Table 12 Homeowner Wind-Damaged Properties and HOI Counts**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 3 | 0% |
| **Major-High** | 0 | 0% | 1 | 0% |
| **Major-Low** | 8 | 0% | 63 | 4% |
| **Minor-High** | 50 | 3% | 414 | 23% |
| **Minor-Low** | 28 | 2% | 256 | 14% |
| **No FVL** | 398 | 22% | 562 | 32% |
| **Total** | **484** | **27%** | **1,299** | **73%** |

## d. Impact based on Residence Type

Table 13 illustrates FEMA IA applicants by housing type. The highest number of applicants came from Mobile Home units (49%) and housing/duplex units (46%).

**Table 13 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 0 | 0% | 50 | 2% | 50 | 2% |
| **Condo** | 1 | 0% | 1 | 0% | 2 | 0% |
| **House/Duplex** | 804 | 37% | 197 | 9% | 1,001 | 46% |
| **Military Housing** | 0 | 0% | 1 | 0% | 1 | 0% |
| **Mobile Home** | 953 | 44% | 104 | 5% | 1,057 | 49% |
| **Other** | 33 | 2% | 8 | 0% | 41 | 2% |
| **Travel Trailer** | 14 | 1% | 2 | 0% | 16 | 1% |
| **Total** | **1,806** | **83%** | **363** | **17%** | **2,168** | **100%** |

Table 14 shows FEMA IA flood-damaged properties by housing type who had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, **zero** of the flood-affected homeowner applicants are reported to carry an NFIP policy per the FEMA IA data.

Table 14 Flood Damaged Properties by Residence Type and Count with NFIP

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **House/Duplex** | 11 | 0 | 0% |
| **Mobile Home** | 11 | 0 | 0% |
| **Total** | **22** | **0** | **0%** |

Table 15 shows FEMA IA wind-damaged properties by housing type who had Homeowner's Insurance. As indicated in the overview of wind damaged properties, **27%** of the affected owner-occupied population are reported to carry homeowner's insurance policy per the FEMA IA data.

Table 15 Wind Damaged Properties by Residence Type with HOI

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Condo** | 1 | 0 | 0% |
| **House/Duplex** | 793 | 358 | 45% |
| **Military Housing** | 0 | 0 | 0% |
| **Mobile Home** | 942 | 116 | 12% |
| **Other** | 33 | 9 | 27% |
| **Travel Trailer** | 14 | 1 | 7% |
| **Total** | **1,783** | **484** | **27%** |

Total estimated losses have been summarized by residence type in Table 16.

Table 16 Total Estimated Loss by Residence Type

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 50 | $189,522 |
| **Condo** | 2 | $3,242 |
| **House/Duplex** | 1,001 | $2,933,609 |
| **Military Housing** | 1 | $1,621 |
| **Mobile Home** | 1,057 | $3,962,690 |
| **Other** | 41 | $66,461 |
| **Travel Trailer** | 16 | $33,684 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a low-and moderate-income (LMI) calculation as income was categorized by general ranges. To summarize the impact of storms had on households based on income, four income groupings are provided in the tables below. Overall, based on the available data, households with lower incomes were disproportionately impacted by Hurricane Zeta, with 73% of the total impacted population making $30,000 or less.

**Table 17 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 1 | 0% | 2 | 0% | 0 | 0% | 0 | 0% | 3 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 1 | 0% | 0 | 0% | 1 | 0% |
| **Major-Low** | 60 | 3% | 12 | 1% | 3 | 0% | 1 | 0% | 76 | 4% |
| **Minor-High** | 396 | 22% | 55 | 3% | 21 | 1% | 3 | 0% | 475 | 26% |
| **Minor-Low** | 256 | 14% | 29 | 2% | 4 | 0% | 1 | 0% | 290 | 16% |
| **No FVL** | 570 | 32% | 250 | 14% | 136 | 8% | 4 | 0% | 960 | 53% |
| **Totals** | **1,283** | **71%** | **348** | **19%** | **165** | **9%** | **9** | **0%** | **1,805** | **100%** |

**Table 18 Gross Income by Damage Level for Renters Only**

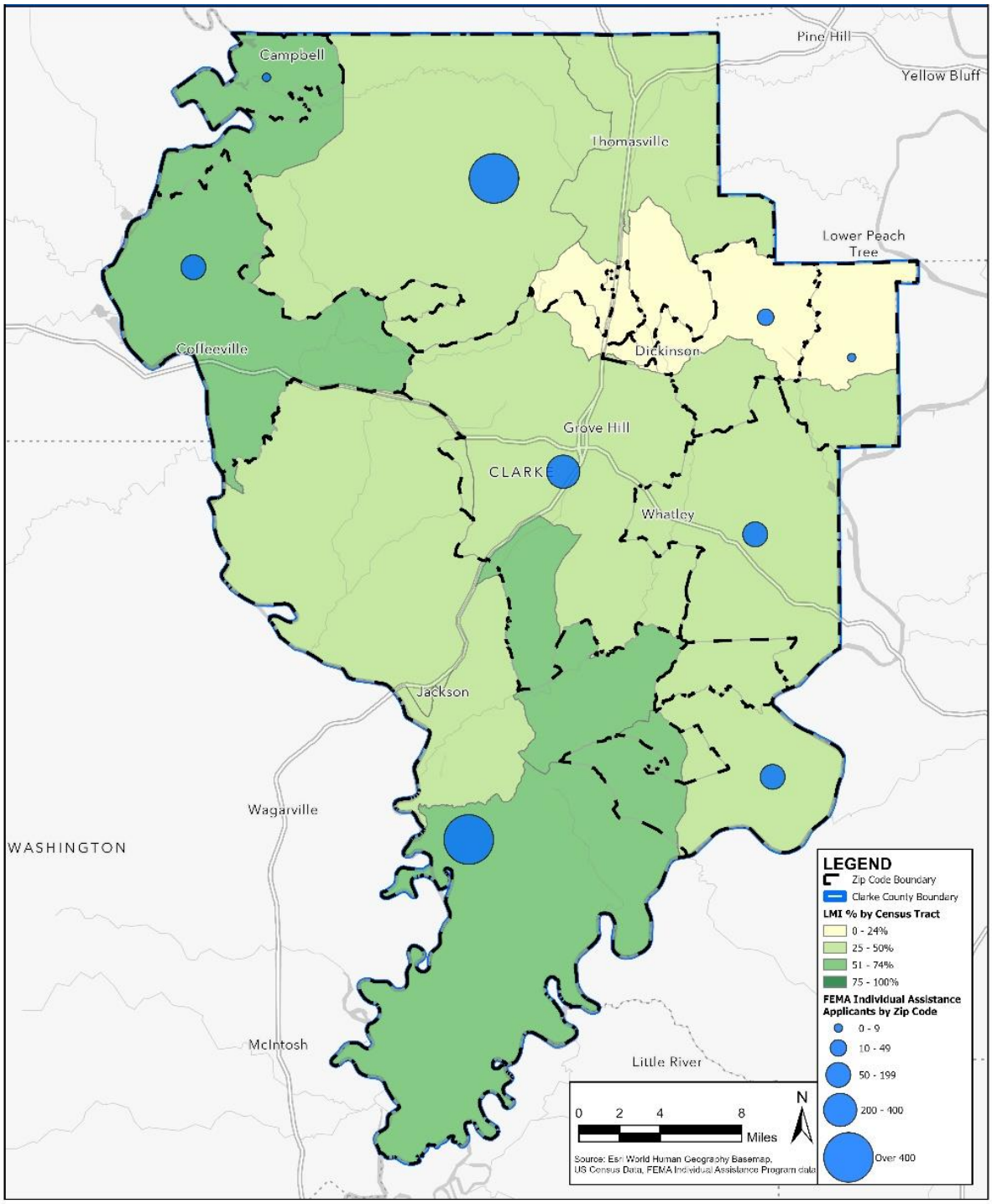
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 0 | 0% |
| **Major-High** | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0% | 1 | 0% |
| **Major-Low** | 18 | 5 | 0 | 0 | 2 | 1 | 0 | 0% | 20 | 6% |
| **Minor-High** | 111 | 31 | 13 | 4 | 1 | 0 | 0 | 0% | 125 | 34% |
| **Minor-Low** | 16 | 4 | 2 | 1 | 1 | 0 | 0 | 0% | 19 | 5% |
| **No FVL** | 153 | 42 | 31 | 9 | 13 | 4 | 1 | 0% | 198 | 55% |
| **Totals** | **299** | **82%** | **46** | **13%** | **17** | **5** | **1** | **0%** | **363** | **100%** |

**Table 19 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 1 | 0% | 2 | 0% | 0 | 0% | 0 | 0% | 3 | 0% |
| **Major-High** | 1 | 0% | 0 | 0% | 1 | 0% | 0 | 0% | 2 | 0% |
| **Major-Low** | 78 | 4% | 12 | 1% | 5 | 0% | 1 | 0% | 96 | 4% |
| **Minor-High** | 507 | 23% | 68 | 3% | 22 | 1% | 3 | 0% | 600 | 28% |
| **Minor-Low** | 272 | 13% | 31 | 1% | 5 | 0% | 1 | 0% | 309 | 14% |
| **No FVL** | 723 | 33% | 281 | 13% | 149 | 7% | 5 | 0% | 1,158 | 53% |
| **Totals** | **1,582** | **73%** | **394** | **18%** | **182** | **8%** | **10** | **0%** | **2,168** | **100%** |

The map below illustrates the Low-Moderate Income percentage by Census Tract, with heat bubbles of where the FEMA IA applications were located based on the zip code location.

**Figure 20 LMI Population and FEMA IA Applicants by Zip Code**




## f. Impact on Public Housing Authorities

A Public Housing Authority (PHA) for the county does not exist. Clarke County would like to have a PHA in order to access available housing funds through the federal government which restricts the county from assisting vulnerable populations.

## g. Unmet Housing Needs

FEMA IA was the primary data source that Clarke County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology as summarized in previous sections by damage category and for public housing authorities. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To calculate total unmet need, received assistance is summarized and subtracted from the estimated total loss including resilience costs.

**Table 20 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 3 | $246,978 |
| **Major-High** | 2 | $164,652 |
| **Major-Low** | 96 | $1,104,192 |
| **Minor-High** | 600 | $3,297,000 |
| **Minor-Low** | 309 | $500,889 |
| **No FEMA Verified Loss** | 1,158 | $1,877,118 |
| **Public Housing** | 0 | $0 |
| **Total** | **2,168** | **$7,190,829** |
| | **+15% Resilience Costs** | **$1,078,624** |
| **Total Estimated Loss with Resilience Costs** | | **$8,269,453** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA Repair and Replacement, SBA Real Estate and NFIP payment amounts were added together to get the total housing assistance received. See Table 21 for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received across the 7 MID counties.

**Table 21 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 530 | $2,357,595 |
| **NFIP Payments** | 0 | $0 |
| **SBA Loan Amounts** | Insufficient Data | $849,850 |
| **Total Housing Assistance** | **530** | **$3,207,445** |

Total housing assistance was subtracted from the total housing unmet needs with resilience included to get a total housing unmet need of approximately $5 million as result of Hurricane Zeta. See Table 22 for the calculation.

**Table 22 Total Housing Unmet Need for Clarke County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $8,269,453 |
| **Total Housing Assistance** | -$3,207,445 |
| **Total Housing Unmet Need** | **$5,062,008** |

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Clarke County suffered infrastructure losses from Hurricanes Sally and Zeta. In result of the large number of trees in the county due to the timber industry, the county experienced significant downed trees that isolated communities and cut off power to communities for weeks. Both hurricanes also produced flooding in Rockville, Carlton, Barlow Bend and Indian Ridge which caused culverts and roads to be washed out. Repairs to these culverts and stretches of road have been made multiple times over the years; however, the county lacks the funding needed to make improvements to prevent washouts from happening in the future.

Based on feedback received from the County Emergency Management Agency Director and County Engineer, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit and the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G, roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 23 Total Estimated Infrastructure Costs by PA Damage Category**

| Disaster Name | Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|---|
| **Hurricane Sally** | B - Protective Measures | $18,125 | $0 | $0 | $18,125 |
| | F - Public Utilities | $209,451 | $28,276 | $49,430 | $287,158 |
| | Z - State Management | $7,230 | $0 | $0 | $7,230 |
| | **Hurricane Sally Total** | **$234,806** | **$28,276** | **$49,430** | **$312,513** |
| **Hurricane Zeta** | A - Debris Removal | $3,665,116 | $0 | $0 | $3,665,116 |
| | B - Protective Measures | $403,943 | $0 | $0 | $403,943 |
| | C - Roads and Bridges | $270,104 | $36,464 | $63,745 | $370,313 |
| | E - Public Buildings | $85,149 | $11,495 | $20,095 | $116,739 |
| | F - Public Utilities | $7,714,338 | $1,041,436 | $1,820,584 | $10,576,357 |
| | G - Recreational/Other | $116,097 | $15,673 | $27,399 | $159,170 |
| | Z - State Management | $237,900 | $0 | $0 | $237,900 |
| | **Hurricane Zeta Total** | **$12,492,647** | **$1,105,068** | **$1,931,822** | **$15,529,537** |
| **Hurricane Sally and Zeta Total** | | **$12,727,453** | **$1,133,344** | **$1,981,253** | **$15,842,050** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 24 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Disaster Name | Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|---|
| **Hurricane Sally** | B - Protective Measures | $18,125 | $16,313 | $1,813 |
| | F - Public Utilities | $287,158 | $188,506 | $98,652 |
| | Z - State Management* | $7,230 | $7,230 | $0 |
| | **Hurricane Sally Total** | **$312,513** | **$212,049** | **$100,465** |
| **Hurricane Zeta** | A - Debris Removal | $3,665,116 | $3,298,605 | $366,512 |
| | B - Protective Measures | $403,943 | $362,779 | $41,164 |
| | C - Roads and Bridges | $370,313 | $243,094 | $127,219 |
| | E - Public Buildings | $116,739 | $76,634 | $40,105 |
| | F - Public Utilities | $10,576,357 | $6,942,904 | $3,633,453 |
| | G - Recreational/Other | $159,170 | $104,488 | $54,682 |
| | Z - State Management* | $237,900 | $237,900 | $0 |
| | **Hurricane Zeta Total** | **$15,529,537** | **$11,266,403** | **$4,263,135** |
| **Hurricane Sally and Zeta Total** | | **$15,842,050** | **$11,478,452** | **$4,363,600** |

Based on the analysis performed, there is a potential unmet need of $3,954,110 for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 25 Total Estimated Cost PA Unmet Need**

| Disaster Name | Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Needs Amount |
|---|---|---|---|---|---|
| **Hurricane Sally** | B - Protective Measures* | $18,125 | $16,313 | $1,813 | $0 |
| | F - Public Utilities | $287,158 | $188,506 | $98,652 | $98,652 |
| | Z - State Management* | $7,230 | $7,230 | $0 | $0 |
| | **Hurricane Sally Total** | **$312,513** | **$212,049** | **$100,464** | **$98,652** |
| **Hurricane Zeta** | A - Debris Removal* | $3,665,116 | $3,298,605 | $366,512 | $0 |
| | B - Protective Measures* | $403,943 | $362,779 | $41,164 | $0 |
| | C - Roads and Bridges | $370,313 | $243,094 | $127,219 | $127,219 |
| | E - Public Buildings | $116,739 | $76,634 | $40,105 | $40,105 |
| | F - Public Utilities | $10,576,357 | $6,942,904 | $3,633,453 | $3,633,453 |
| | G - Recreational/Other | $159,170 | $104,488 | $54,682 | $54,682 |
| | Z - State Management* | $237,900 | $237,900 | $0 | $0 |
| | **Hurricane Zeta Total** | **$15,529,537** | $11,266,403 | **$4,263,134** | **$3,855,459** |
| **Hurricane Sally and Zeta Total** | | **$15,842,050** | **$11,478,452** | **$4,363,598** | **$3,954,110** |

*CDBG-DR Funds are not used for PA costs in Categories A, B and Z.

# 4. Economic Revitalization Impact and Unmet Need

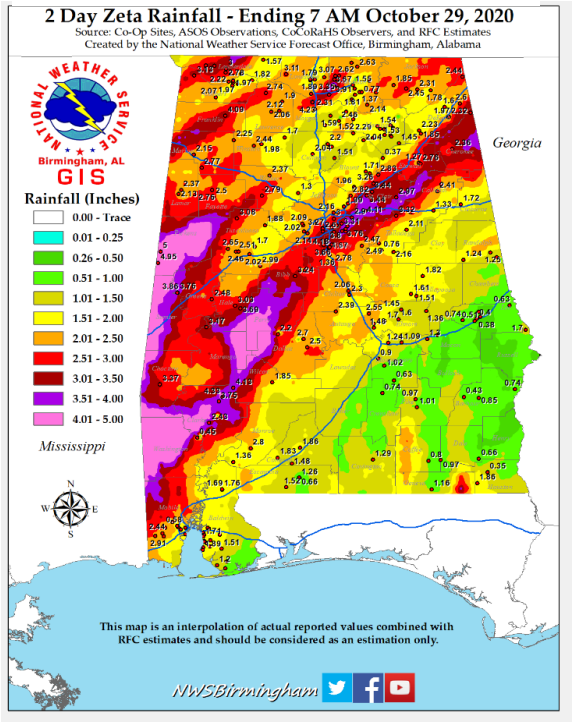
## a. Damage and Impacts

A summary of damage and impacts of Hurricanes Sally and Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricanes Sally and Zeta.

### Agriculture Impacts

Following Hurricane Zeta, USDA designated Clarke County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Zeta to apply for emergency loans with the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). This natural disaster designation allows FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation or the refinance of certain debts.[24] As reported in the November 2, 2020, Alabama Crop Progress and Condition Report[25], Hurricane Zeta delivered heavy rains and damaging winds. The high soil moisture prevented fieldwork in many areas of the state following the Hurricane. As shown in Figure 21, parts of Clarke County Received upwards of 5 inches of rain across a 48-hour period.

**Figure 21 Hurricane Zeta 2 Day Rainfall Total**




Following Hurricane Sally, USDA did not designate Clarke County as a primary disaster area; however, they did allow eligible producers in Clarke County to still apply for emergency loans due to losses or impacts from Hurricane Sally[26].

## b. Unmet Economic Needs

According to an analysis of the Small Business Administration (SBA) business loan data for applications with approved or denied loans that meet a HUD category of loss, the County realized a total verified loss for all businesses of $163,781. Accounting for an additional fifteen percent (15%) in resilience costs, the County's total estimated economic impact is approximately $188,348. According to the SBA business report, the SBA provided $39,700 for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $148,648.

**Table 26 Unmet Economic Needs**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| $163,781 | $24,567 | $188,348 | $39,700 | $148,648 |

[24] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas
[25] https://www.nass.usda.gov/Statistics_by_State/Alabama/Publications/Crop_Progress_&_Condition/2020/AL-CropProgress-11-02-20.pdf
[26] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2020/usda-designates-two-alabama-counties-as-primary-natural-disaster-areas

# D. Summary of Unmet Needs & MID Recovery Zones

## 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$9.1 Million** attributable to Hurricanes Sally and Zeta.

In summary, this analysis projects unmet needs as follows:

**Table 27 Summary of Total Unmet Needs**

| Category | Estimated Impact | Amount of Funds from Other Sources | Remaining Unmet Need |
|---|---|---|---|
| Housing | $8,269,453 | $3,207,445 | $5,062,008 |
| Infrastructure | $15,842,050 | $11,478,452 | $3,954,110 |
| Economy | $188,348 | $39,700 | $148,648 |
| **Total** | **$24,299,851** | **$14,725,597** | **$9,164,766** |

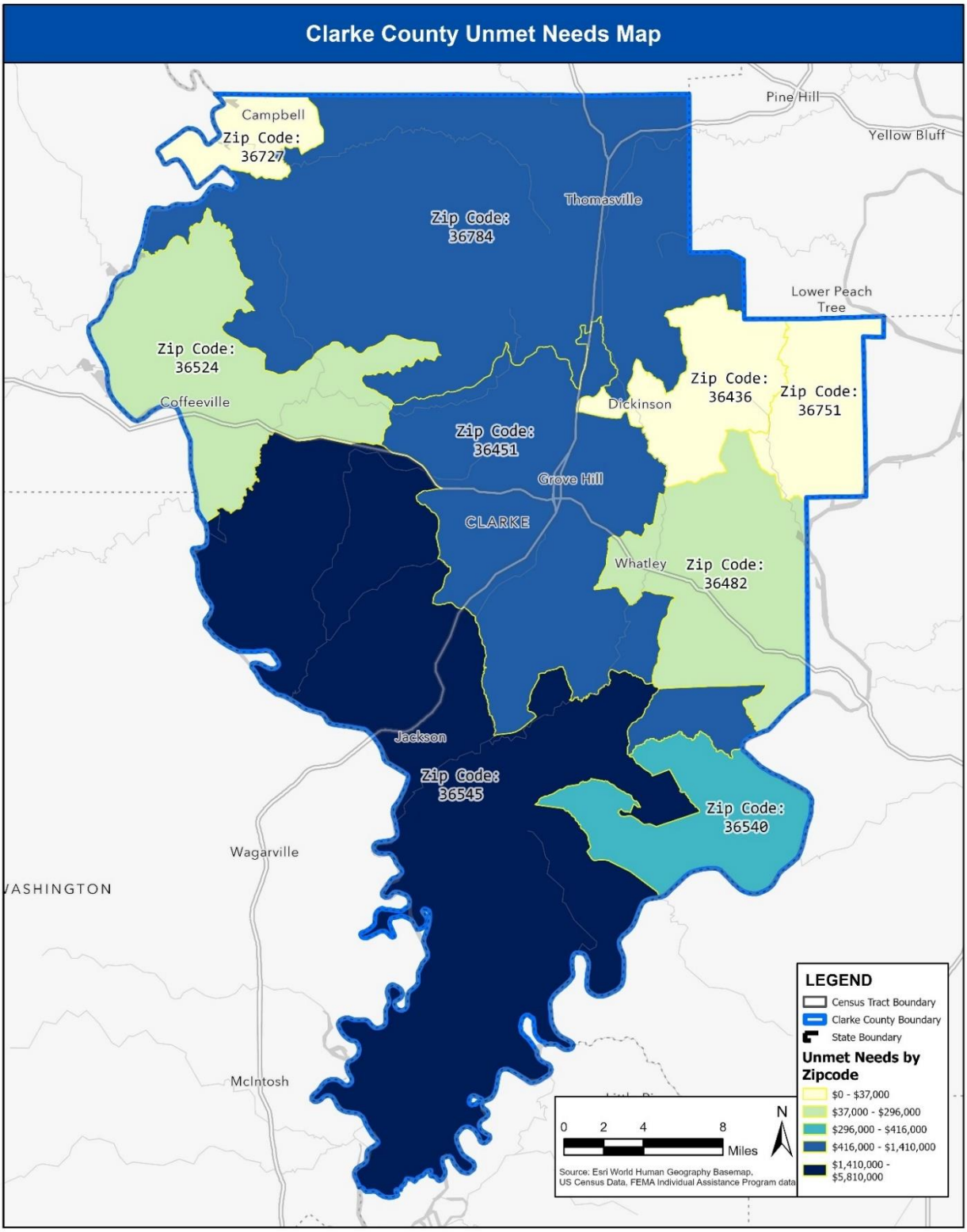
A detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code is shown below.

**Table 28 Unmet Need Summary by Zip Code**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36545** | $1,923,193 | $3,732,105 | $93,001 | $5,748,298 |
| **36784** | $1,329,761 | $0 | $42,235 | $1,371,996 |
| **36451** | $837,543 | $222,006 | $6,279 | $1,065,828 |
| **36540** | $408,620 | $0 | $7,133 | $415,753 |
| **36482** | $295,931 | $0 | $0 | $295,931 |
| **36524** | $204,089 | $0 | $0 | $204,089 |
| **36436** | $36,382 | $0 | $0 | $36,382 |
| **36727** | $13,660 | $0 | $0 | $13,660 |
| **36751** | $12,829 | $0 | $0 | $12,829 |
| **Total** | **$5,062,008** | **$3,954,111** | **$148,648** | **$9,164,766** |

A map view of the total unmet need by zip code is provided on the following page.

**Figure 22 Clarke County Unmet Needs Map by Zip Code**

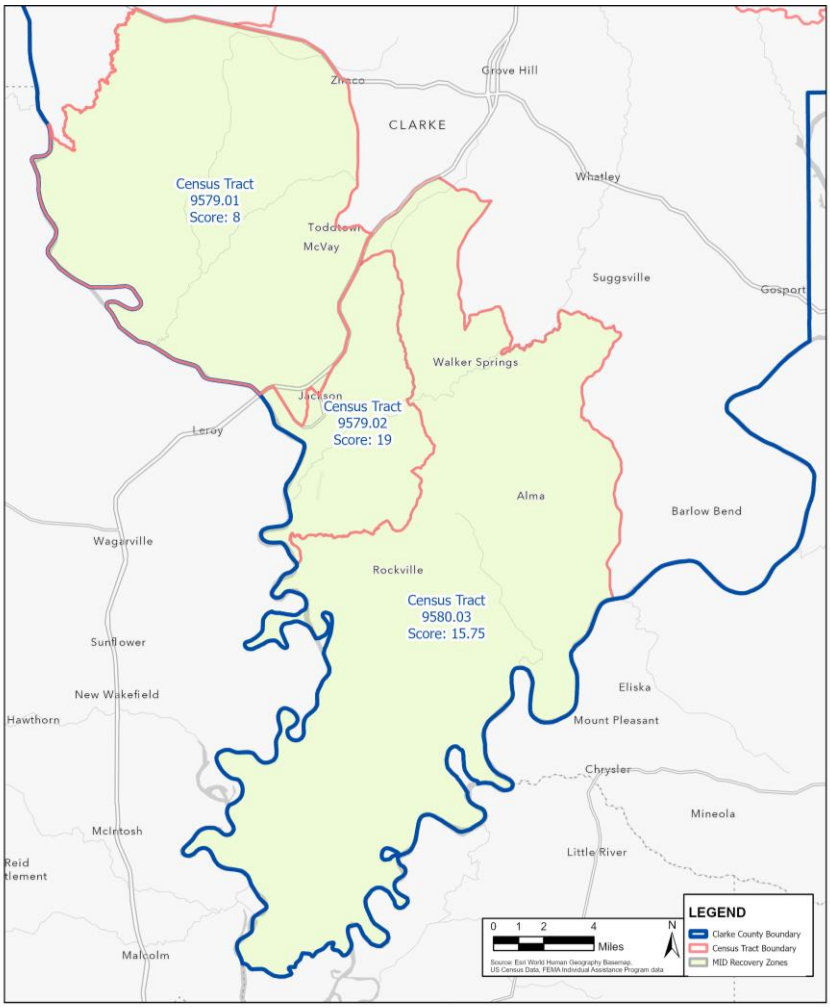


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Clarke County are shown in *Figure 23 Clarke County MID Recovery Zones.* See Appendix B for the scores for each census tract for determining the MRZ.

**Figure 23 Clarke County MID Recovery Zones**




**Identified MID Recovery Zones**: Census Tracts 9579.01, 9579.02 and 9580.03

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, Clarke County's 2014 Local Hazard Mitigation Plan, 2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan, and data from the National Oceanic Atmospheric Administration (NOAA) and FEMA were used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 16 disaster declarations for Clarke County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms/tornadoes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards are critical.

**Table 29 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $12,107,058 |
| **DR-4563-AL** | 2020 | Hurricane | Hurricane Sally | $212,049 |
| **DR-4503-AL** | 2020 | Biological | COVID-19 Pandemic | No Data |
| **DR-4349-AL** | 2018 | Hurricane | Hurricane Nate | $12,403 |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, & Flooding | $10,540 |
| **DR-1870-AL** | 2010 | Severe Storm | Severe Storms and Flooding | $134,889 |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes & Straight-Line | $216,978 |
| **DR-1605-AL** | 2005 | Hurricane | Hurricane Katrina | $374,130 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $246,587 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $1,512,164 |
| **DR-1466-AL** | 2003 | Severe Storm | Severe Storms, Tornadoes, & Flooding | No Data |
| **DR-1250-AL** | 1998 | Hurricane | Hurricane Georges - 18 Sep 98 | No Data |
| **DR-1070-AL** | 1996 | Hurricane | Hurricane Opal | No Data |
| **DR-861-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-598-AL** | 1979 | Hurricane | Hurricane Frederic | No Data |
| **DR-369-AL** | 1973 | Tornado | Tornadoes & Flooding | No Data |

Source: Open FEMA Data Sets, Disaster Declaration Summary[27] and Public Assistance Funded Project Details[28]

Historic weather patterns can be determined for Clarke County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 30 provides an outline of the

[27] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[28] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

number of recorded storm events from January 1953 to June 2023 for Clarke County. If the same event type occurred on the same date, only one event was recorded; however, the number of fatalities, injuries and damages were summed across the multiple events for a single day and event type.

**Table 30 NCEI Storm Events Summary (1953 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Drought** | 3 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 31 | 0 | 1 | $2,730,000 | $0 |
| **Flood** | 3 | 0 | 0 | $255,000 | $0 |
| **Funnel Cloud** | 5 | 0 | 0 | $0 | $0 |
| **Hail** | 79 | 0 | 0 | $115,000 | $0 |
| **Heat** | 3 | 1 | 0 | $0 | $0 |
| **Heavy Rain** | 4 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 2 | 0 | 0 | $0 | $0 |
| **Hurricane (Typhoon)** | 3 | 0 | 0 | $300,000 | $0 |
| **Ice Storm** | 3 | 0 | 0 | $15,000 | $0 |
| **Lightning** | 17 | 0 | 0 | $394,000 | $0 |
| **Sleet** | 2 | 0 | 0 | $0 | $0 |
| **Strong Wind** | 4 | 0 | 0 | $42,000 | $0 |
| **Thunderstorm Wind** | 178 | 0 | 3 | $1,896,000 | $5,000 |
| **Tornado** | 35 | 0 | 21 | $2,830,750 | $3,000,000 |
| **Tropical Storm** | 5 | 0 | 0 | $0 | $0 |
| **Winter Storm** | 5 | 0 | 0 | $0 | $0 |
| **Winter Weather** | 3 | 0 | 0 | $5,000 | $0 |
| **Cold/Wind Chill** | 1 | 1 | 0 | $0 | $0 |
| **Grand Total** | **386** | **2** | **25** | **$8,582,750** | **$3,005,000** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[29]

## 2. Greatest Risk Hazards

The *2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized in High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- High: Probable major damage in a 1-10 Year Period
- Medium: Probable major damage in a 10-50 Year Period
- Low: Probable major damage in a 100 Year Period
- Very Low: No probable major damage in a 100 Year Period

The *2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II and 2014 Clarke County Local Hazard Mitigation Plans* identified high winds from strong severe storms,

[29] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

hurricanes, and tornadoes, and flooding, wildfires and extreme temperatures were identified as the greatest risks.

**Table 31 Clarke County Identified High Hazards and Associated Risks**

| Hazard | Risk Rating | Area Identified | Associated risk |
|---|---|---|---|
| **Extreme Temperatures** | High | County-wide, the area is especially susceptible to these events during the summer months | Can cause crop loss, threat to health of people living and working in the area |
| **Flooding** | Moderate | Areas along creeks and rivers, areas with insufficient drainage. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged or non-existent drainage infrastructure. Reoccurring flooding issues in Brockville, Carlton Barlow, Bend, and Indian Ridge. | Can wash out roads, threat to health of people living and working in the area |
| **Hurricanes and Coastal Storms** | High | County-wide | Can cause flood and wind damage to residential property, transportation and utility infrastructure damage, and loss of life |
| **Severe Storms** | High | County-wide | Can cause crop, property damage, injury, and loss of life |
| **Tornadoes** | High | County-wide, particularly areas in Wind Zones III and IV | Can cause forestry, crop, property damage, injury, and loss of life |
| **Wildfires** | High | County-wide – Grove Hill is at critical risk; Thomasville, Jackson, and Fulton are classified at moderate risk, and Coffeeville is classified at low risk | Can cause forestry, crop, property damage, injury, and loss of life |

## a. Hurricanes and Coastal Storms

As shown in Tables 30 and 31, hurricanes have historically made landfall in the region and have impacted Clarke County. Due to the county's proximity to the Gulf of Mexico, hurricanes and coastal storms continue to be a high risk for Clarke County. *Figure 4 Hurricane Risk in MID Counties by Census Tract,* in section VII.D, indicates that the majority of Clarke County has a relatively high to very high Hurricane Risk. Additionally, analysis performed by Florida State University's Meteorology Department indicates that the probability of a hurricane of any intensity passing over Alabama is between 60% and 80%[30].

Any increased intensities in the future are likely to exacerbate the county's future vulnerability, given that intense hurricanes and coastal storms have enormous potential to devastate the physical, agricultural, economic, and sociocultural infrastructure of the county. According to the

[30] https://moe.met.fsu.edu/tcprob/al.php

2014 Clarke County Hazard Mitigation Plan, Hurricanes have a potential for creating losses of $293M for critical facilities in the county.

### b. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall and flooding. Since 1953, NCEI has recorded 282 hail, heavy rain, lightning, strong wind, and thunderstorm windstorm events, as shown in Table 30. As this event type has occurred regularly over the years that resulted in damage, and severe storms are expected to continue on a regular basis, Clarke County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the county is relatively low to relatively moderate, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract.* For strong winds, there is a varied risk across the county and ranges from relatively low in the northern part of the county to relatively high in the central region of the county, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

Severe storms can happen county-wide which can lead to property and crop damage, and at times injuries. According to the *Table 30: NCEI Storm Events Summary,* the combination of hail, strong winds, lightning, and thunderstorms have led to the estimated property damage costs of $2M and $5,000 in crop damages.

### c. Flooding

Flooding is a problem for many people across the United States. Enduring the consequences of repetitive flooding can put a strain on residents and on state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there is only 1 Repetitive Loss Property and 0 Severe Repetitive Loss Properties in Clarke County.

While repetitive loss flooding is not common in Clarke County, Clarke County does have flood events and is ranked 18th out of the 67 Alabama counties for the number of reported flood events between 2000 and 2022, according to the *2023 Alabama State Hazard Mitigation Plan*. The most common type of flooding event in Clarke County is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 40 | 3 | 0 | 43 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

Where the Alabama and Tombigbee Rivers meet at the southern tips of Clarke and Washington Counties, there is a very low risk for coastal flooding as shown in *Figure 5 Coastal Flood Risk in MID Counties by Census Tract.* According to the *Table 31: NCEI Storm Events Summary,* the combination of flash flood and flooding events have led to the estimated property damage of $2.98M.

### d. Extreme Temperatures

Extreme cold and heat is often associated with winter weather or droughts that can lead to greater impacts on communities. According to the 2023 State Hazard Mitigation Plan, the observed extreme temperature events in Alabama have ranged in magnitude from a high of 100 F to a low of 2 F.

Extreme heat is very common to Clarke County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across the majority of county is relatively high, as shown in Figure 3 Heat Wave Risk in MID Counties by Census Tract. Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crop losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. As a result, the past events and future probability of heat and droughts are classified as risks but are relatively low as supported by *Figure 2 Drought Risk in MID Counties by Census Tract.*

While extreme cold temperatures are uncommon due to Alabama's mild winter climate, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather and storms, and ice storms which can cause downed trees or result in vehicle accidents. Since 1953, 12 cold weather-related events have occurred in Clarke County.

In general, there is a lack of infrastructure in the county to offer dedicated cooling or warming stations for residents, especially populations that are the most vulnerable to extreme temperatures.

### e. Tornadoes

Tornadoes are Clarke County's most significant loss producing natural hazards according to the NCEI Storm Events Database. Between 1950 and 2022, Tornadoes caused 21 injuries and more than $5.8 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract*, the majority of Clarke County has a relatively high to very-high Tornado Risk rating. Due to Clarke County's amount of forestry land, Tornadoes could cause a lot of downed trees which can damage property, block roadways and result in power outages.

### f. Wildfires

According to the Alabama Forestry Commission Current Wildfire Totals summary[31], between 2000 and June 19, 2024, there were 418 total wildfires in Clarke County. Those fires burned 3,487.6 acres. That translates to a yearly average of 17 fires and 141 acres burned per year. The largest fire recorded in the county between these years was 226 acres and occurred in 2011. Based on past occurrences, every area of the county has a degree of risk based.

According to *Figure 10 Wildfire Risk in MID Counties by Census Tract*, Clarke County has a very low to relatively moderate wildfire risk compared to the rest of the country. However, according to the 2023 Alabama State Hazard Mitigation Plan, as the climate changes, Alabama is projected to become more prone to wildfire occurrences between now and 2050. It is projected that by 2050 the average number of days with high wildfire will double from 25 to 50 days a year.

[31] https://forestry.alabama.gov/pages/fire/totals.aspx

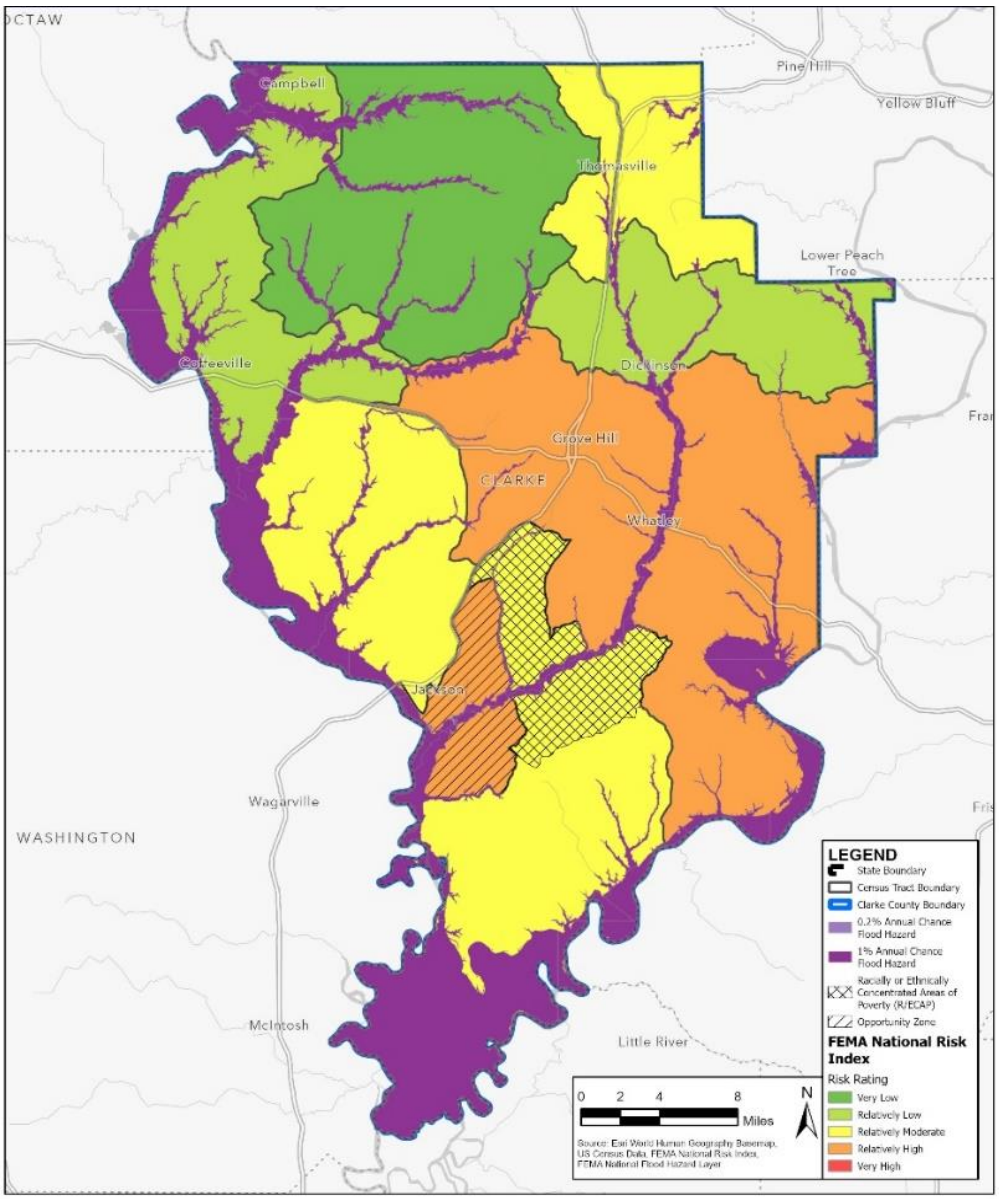
## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability, and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

As shown in the figure below, we can see that there are parts of the county that have a Relatively High Nation Risk Index rating. This area includes Grove Hill and areas south of Jackson. Hazard specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

**Figure 24 Clarke County FEMA National Risk Map**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Flooding** | High | Critical | Moderate | Less than one week |
| **Hurricanes & Coastal Storms** | Medium | Catastrophic | Large | Less than 24 hours |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | High | Minor | Moderate | Less than 6 hours |
| **Extreme Heat and Droughts** | Medium | Minor | Moderate | More than one week |
| **Wildfires** | High | Minor | Moderate | Less than One week |

#### Probability defined:

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

#### Impact defined:

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

#### Location Extent defined:

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact of the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed and exacerbated housing, infrastructure, economic, and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

To address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Rental Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 74 responses were received. Of those respondents the majority were homeowners of stick-built homes (34) and mobile homes (29). Respondents said that they experienced a moderate to significant amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and secondarily flooding. They stated that this resulted in electricity, damage to streets, and limited access to food and water. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 82% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, has already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, about 30% occupied mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds,

flooding, and other extreme weather conditions. Additionally, 82% for the renter population that applied for FEMA assistance reported making less than $30,000 a year.

From the Planning Charette, the stakeholders in attendance noted that the MID Recovery Zones identified have a higher concentration of mobile homes than other areas in the county and are often experiencing vulnerabilities to natural disasters including tornadoes and severe storms.

Clarke County does not have the appropriate department or agency to implement an affordable multifamily rental housing project. However, from the Planning Charette, it was identified as a goal to create a Public Housing Authority to better serve vulnerable populations by providing more secure and affordable housing options.

Surveys were distributed at Clarke County's public meetings. The top results of the surveys are as follows:

- 36 respondents stated interest in a First Time Homeownership Assistance Program, 6 of whom ranked it as their top priority.
- 33 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing multi-family Housing, 4 of whom ranked it as top priority.
- 29 respondents stated interest in development of Affordable Multi-family housing, 7 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as HIGH priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Type | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • Provide opportunities for vulnerable populations to purchase more secure housing, with an emphasis on supporting LMI homebuyers located within a MID Recovery Zone.<br>• Intended to pay a portion of the cost of purchasing an eligible new home for eligible applicants, which may be based on need, household size, and the cost of a home.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| | **Strategy** | Housing Recovery, or Mitigation | | |

| Project Type | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Rehabilitation to Multi-Family Properties** | **Eligible Activity** | Housing Rehabilitation, HCDA Section 105(a)(1), 105(a)(4), 105(a)(14), 105(a)(18) | • Provide repair and rehabilitation to existing multi-family properties damaged by Hurricanes Sally and Zeta or to make more sanitary, safe, and secure housing availability to those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | HIGH |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Not identified, however, O&M feasibility will be a requirement for application | | |
| **Development of Multi-Family Properties** | **Strategy** | Housing Recovery | • Development of multi-family properties to provide sanitary, safe, and secure housing for those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br>• Projects will either require working with a non-profit developer or a local housing authority. Clarke county does not currently have a local housing authority.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | HIGH |
| | **Eligible Activity** | Housing Construction, HCDA Section 105(a)(2), 105(a)(4), 105(a)(14), | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | Conceptual | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Not identified, however, O&M feasibility will be a requirement for application | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up, damaged public electric utilities which then in turn left communities without power for weeks. Flooding also occurred during the events leading to flooded and washed-out roadways that cut of communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities.

Surveys were distributed at Clarke County's public meetings. The top results of the surveys are as follows:

- 25 respondents stated interest in Drainage Improvements, 3 of whom ranked it as their top priority.
- 23 respondents stated interest in a program that addresses Repairs and improvements to communication infrastructure, such as broadband, 8 of whom ranked it as top priority.
- 24 respondents stated interest in Repairs and improvements to public utilities, such as energy and water infrastructure, repairs and improvements, 0 of whom ranked it as top priority.
- 18 respondents stated interest in Public Services, such as, but not limited to, public safety services, educational and recreational program, 0 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as HIGH priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Type | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Flood Mitigation** | **Strategy** | Recovery & Mitigation | • Implement flood mitigation projects in areas subject to re-occurring flooding to reduce roadway flooding and erosion during flooding events.<br>• Some needs identified include culvert repairs and raising roadways along roadway areas in Brockville, Carlton Barlow, Bend, and Indian Ridge. These roadways have been repaired multiple times and need significant improvements to be made to mitigate future flooding events along these roadways.<br>• If roadways are flooded or damaged, unsafe driving conditions may exist and could prevent roadways from being used which could disrupt several community lifelines. The county identified the need to repair culverts across the county.<br>• Addresses public desire for drainage improvements.<br>• Unmet/Mitigation needs – potentially addresses infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone or MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

| Project Type | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Storm Hardening - Tree Trimming** | **Strategy** | Mitigation | Clarke County has significant tree acreage which drives the timber and paper economy. Because of this, power outages are prevalent county-wide due to trees falling on power lines. To help combat this issue, storm hardening techniques in the form of establishing a tree trimming division and program would be established. By removing trees before storm events hit, Clarke County would be able to mitigate against risks of potential power outages. Needs identified by County include procuring equipment (bucket trucks, safety equipment, tree trimming equipment) and covering staff costs for the first several years of this new project.<br>• Addresses public desire for improvement to public utilities.<br>• Unmet/Mitigation needs – potentially addresses infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(8) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Develop a community resilience center that provides year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. During or following a disaster event, this center may serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2); Public Services, HCDA Section 105(a)(8); Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Type | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | Not identified | • Addresses public desire for public services and can address impacts to the population of damaged utility and communication infrastructure.<br>• Unmet/Mitigation needs – potentially addresses structural and infrastructure damage from Hurricanes reflected in PA; may also address mitigation needs | |

## 4. Economic Recovery Strategies

With nearly 50% of the County's residents to be considered LMI, providing job training and small business technical assistance programs helps LMI households by equipping them with the skills and resources needed to secure better-paying jobs or successfully launch and manage their own businesses, thereby improving their financial stability and economic mobility. Additionally, as mentioned in the housing recovery strategies section, needs an agency to oversee and manage affordable housing solutions to better support their LMI and vulnerable residents. By ensuring vulnerable populations have access to safe and affordable housing, a PHA reduces the burden of housing insecurity, allowing residents to allocate more of their income toward other needs and local spending. Stable housing also supports workforce participation, as people are more likely to maintain employment when they have a secure place to live. Additionally, a PHA can attract federal funding and investments that support local.

Surveys were distributed at Clarke County's public meetings. The top results of the surveys are as follows:

- 26 respondents stated interest in Job Creation, 2 of whom ranked it as their top priority.
- 24 respondents stated interest in a Small Business Loan and Grant Program 2 of whom ranked it as top priority.
- 18 respondents stated interest in Improvements to Commercial Areas, including streetscapes, lighting, sidewalks, and other improvements, 4 of whom ranked it as top priority.
- 13 respondents stated interest in Workforce Training and Development Programs, 3 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Establish and Staff Public Housing Authority** | **Strategy** | Recovery, Mitigation | • This project would be to establish a Public Housing Authority for the county by funding an office location and staff for the first several years of this new division. | HIGH |
| | **Eligible Activity** | Public Services, HCDA Section 105(a)(8), 105(a)(20) | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **SVI Score** | High | • This public service would help to build the capacity to implement recovery and other types of housing programs that will help residents in unsafe and housing insecure situations.<br>• Unmet Need – positions needed to assist in addressing the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Small Business Technical Assistance** | **Strategy** | Recovery | • Business owners recovering from disasters are often in need of specific technical assistance to respond to losses to their businesses whether it be a loss of employees or customers or a need for a new product that may present a growth opportunity for a business. The county will bolster the grant and loan resources and strengthen the small business community by creating a technical assistance program.<br>• Technical assistance may include the development of business plans; financial management guidance; long-term recovery and sustainability plans; and specialized training.<br>• Addresses public desire for small business loan and grant programs, as well as job creation.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more stable economy | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Workforce Training and Development** | **Strategy** | Recovery | • The county looks to bolster and strengthen the local timber and paper industries by providing grants focused on training | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Benefits vulnerable populations** | Yes | mechanical and maintenance technicians.<br>• Grants would be provided to the Coastal Alabama Community College Center for Forestry, Paper, and Chemical Technology to continue the specialized training for these industries. Grants would include providing financial assistance to LMI residents in the MID Recovery zones.<br>• Addresses public desire for workforce training and development.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, potentially Coastal Alabama CC | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | Conceptual | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Improvements to Commercial Areas** | **Strategy** | Recovery, Mitigation | • Rehabilitation and improvements to public infrastructure, businesses, and facades in commercial districts to stimulate economic growth and investment for areas that experienced an economic impact from Hurricanes Sally and Zeta<br>• Addresses public desire for investment in commercial areas.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) (14), 105(a)(15) | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, potentially Coastal Alabama CC | | |
| | **Project Amount Identified** | No | | |
| | **Other Funding Sources Identified** | No | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Not identified | | |

# IX. Dallas County

## A. Introduction

Dallas County is located in the west-central portion of the state where the Alabama and Cahaba River converge. The Cahaba River is the longest free-flowing reiver in Alabama and boasts one of the most biologically diverse rivers in the United States. After emancipation following the Civil War, many African Americans stayed in the area and worked as sharecroppers and tenant farmers. The county has been majority black since before the Civil War.

According to the American Community Survey (ACS) 2022 5-Year Estimates[32], Dallas County has a population of 38,326, a 2% decrease from 39,149 in 2019. The demographic breakdown shows a majority of the population, 69%, are Black or African American residents, followed by 28% identifying as White. Housing in Dallas County includes 18,992 occupied units, with 62% being single-family homes and 17% mobile homes. In total, 95% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is high, with 61% of residents owning their homes and 39% renting. In 2020, 52% of the county's residents were considered LMI compared to 50% in 2022[33].

Dallas County primarily experienced damage from Hurricane Zeta which resulted in downed trees that cut off power to communities for weeks and damaged homes which are still in need of repair. Downed trees remain at the Old Cahawba Archaeological Park due to the expensive specialized equipment needed to remove the trees. Additionally, flooding along the Alabama and Cahaba Rivers occurred and caused road washouts, flooding, and riverbank erosion at the Old Cahawba Archeological Park. Due to a lack of sheltering options in the county, many impacted households did not have a safe place to stay or gather after the storm.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Dallas County present unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data. Over time, ACCA and the county reserves the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 32 Total Estimated Unmet Need for Dallas County**

| | Estimated Impact | Amount of Funds from Other sources | Total Unmet Need |
|---|---|---|---|
| Housing | $7,417,635 | $2,529,038 | $4,888,597 |
| Infrastructure | $5,386,944 | $4,825,549 | $44,800 |
| Economy | $3,051,722 | $72,000 | $2,979,722 |
| **Total** | **$15,856,301** | **$7,426,587** | **$7,913,119** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[32] https://data.census.gov/ - Tables B02001, B25024, B25033

[33] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Dallas County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated because of impacts from the 2020 storms. The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, among other sources, to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. These unmet needs assessment focuses on Dallas County's impacts, with specific sections detailing particular needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

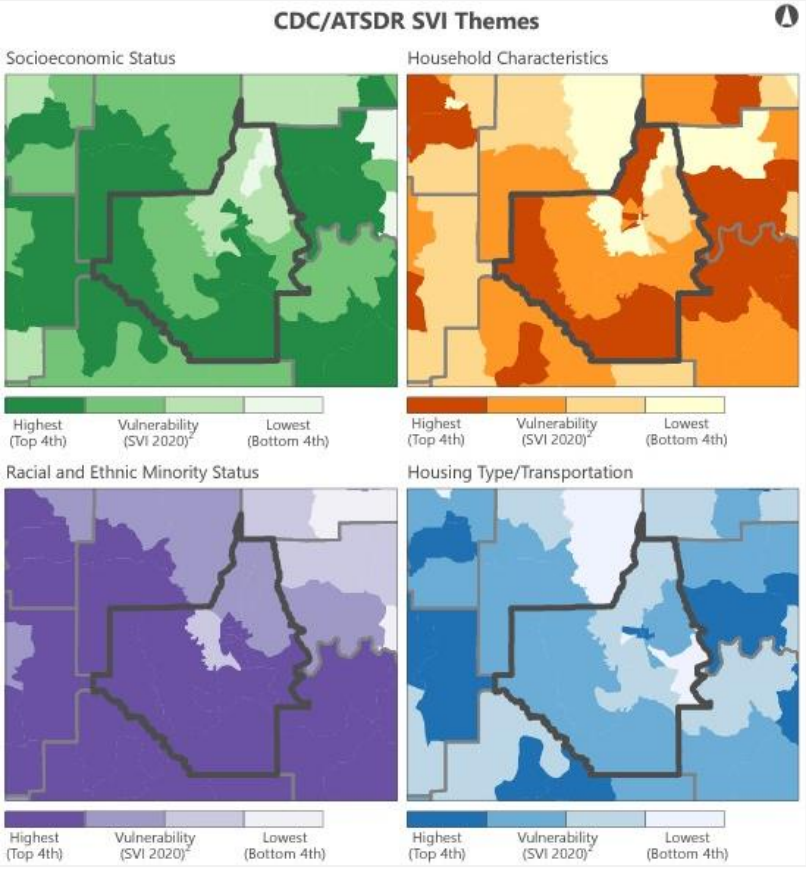
The demographic profile of Dallas County has not changed much since the state of Alabama's 2020 Disaster Recovery Action Plan was published and specific demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county. An overview of vulnerable and LMI populations is provided below.

**Vulnerable Populations**

Dallas County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Dallas County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Dallas County has two identified disadvantages areas: Opportunity Zones and R/ECAP. Dallas County does not have any Promise Zones, Neighborhood Revitalization Strategy Areas, or Tribal areas within the county.

Figure 25[34] show cases the vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

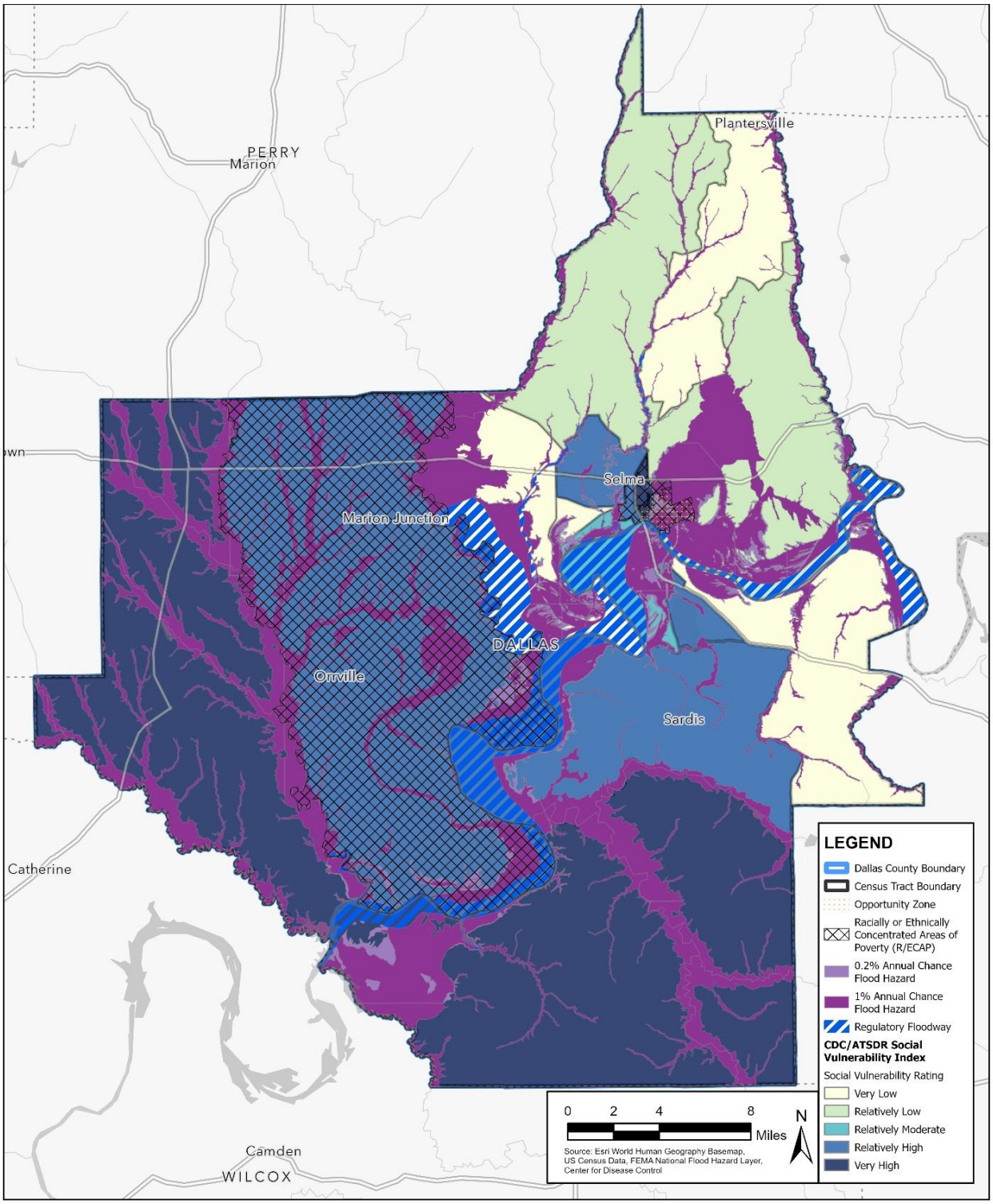
**Figure 25 Dallas County SVI Themes**




[34] Source: CDC/ATSDR SVI 2020 County Map Series: https://www.atsdr.cdc.gov/placeandhealth/svi/interactive_map.html#more-pcm

Figure 26 provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the Very High SVI Ratings and where the Opportunity Zones and R/ECAP areas are located.

**Figure 26 Dallas County Vulnerability Map**



## LMI Populations

As highlighted in table below, nine of the seventeen census tracts within Dallas County have more than 50% of the population that is considered LMI which also have a relatively moderate to very SVI Ratings.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 33 Dallas County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[35] | SVI Rating |
|---|---|---|
| 9561.01 | 21.40% | Relatively Low |
| 9561.02 | 32.70% | Very Low |
| 9562.01 | 33.00% | Very Low |
| 9562.02 | 42.90% | Relatively Low |
| **9563** | **56.45%** | **Relatively High** |
| **9564** | **86.60%** | **Very High** |
| **9565** | **73.65%** | **Very High** |
| **9566** | **53.00%** | **Relatively High** |
| 9567.01 | 23.40% | Very Low |
| **9567.02** | **57.50%** | **Relatively Moderate** |
| **9568** | **51.93%** | **Relatively High** |
| **9569** | **69.60%** | **Relatively High** |
| **9570** | **62.25%** | **Very High** |
| 9571 | 42.80% | Relatively High |
| 9572 | 43.15% | Relatively Moderate |
| **9573.01** | **62.20%** | **Relatively High** |
| 9573.02 | 42.10% | Very Low |

[35] LMISD, ACS-2016-200 All Block Groups, https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary-data-block-groups-places/.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

For each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the below tables outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 34 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 2 | 0.1% | 0 | 0.0% | 2 | 0.1% |
| **Major-High** | 3 | 0.1% | 0 | 0.0% | 3 | 0.1% |
| **Major-Low** | 37 | 1.7% | 23 | 1.1% | 60 | 2.8% |
| **Minor-High** | 352 | 16.5% | 205 | 9.6% | 557 | 26.2% |
| **Minor-Low** | 189 | 8.9% | 29 | 1.4% | 218 | 10.3% |
| **No FVL** | 883 | 41.5% | 406 | 19.1% | 1,289 | 60.5% |
| **Total** | **1,466** | **68.9%** | **663** | **31.1%** | **2,129** | **100.0%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan to determine the estimated total loss/support for these three damage categories. The below tables outline the total number of properties damaged for homeowners and renters.

Table 35 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 189 | $1,621 | $306,369 |
| **Minor-High** | 352 | $5,495 | $1,934,240 |
| **Major-Low** | 37 | $11,502 | $425,574 |
| **Total** | **578** | **N/A** | **$2,666,183** |

Table 36 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 29 | $1,621 | $47,009 |
| **Minor-High** | 205 | $5,495 | $1,126,475 |
| **Major-Low** | 23 | $11,502 | $264,546 |
| **Total** | **257** | **N/A** | **$1,438,030** |

Table 37 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 218 | $1,621 | $353,378 |
| **Minor-High** | 557 | $5,495 | $3,060,715 |
| **Major-Low** | 60 | $11,502 | $690,120 |
| **Total** | **835** | **N/A** | **$4,104,213** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and required reconstruction. To determine the replacement cost of the home, Dallas County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[36]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided in Table 38 below.

Table 38 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $77,707 | $51,287 | 3 | $153,861 |
| **Severe** | $77,707 | $51,287 | 2 | $102,574 |
| | **Total** | | **5** | **$256,435** |

Of the 5 major-high and severely damaged homes, no renter-occupied dwellings are classified as Major-High or Severe.

[36] Dallas County, AL Housing Market, https://www.zillow.com/home-values/974/dallas-county-al/

### FEMA IA Applications without FEMA Verified Loss

Dallas County also accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner-occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter-occupied dwellings because due to the COVID-19 pandemic and other reasons, an inspection never physically took place or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Dallas County counted applications with no FEMA Verified Loss and multiplied it by the average value for minor-low damage per SBA-verified property loss provided in the state of Alabama's 2020 Disaster Recovery Action Plan. The results of these calculations are provided in the table below:

**Table 39 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 883 | $1,621 | $1,431,343 |
| **Renter** | 406 | $1,621 | $658,126 |
| **Total** | **1,289** | **$1,621** | **$2,089,469** |

## c. Impacts of Insurance (HOI and NFIP)

For this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See below for flood-damaged properties by damage category and occupancy type.

**Table 40 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 0 | 10 | 5 | 11 | 1 | 0 | 27 |
| **Renter** | 1 | 2 | 21 | 7 | 0 | 0 | 31 |
| **Total** | **1** | **12** | **26** | **18** | **1** | **0** | **58** |

**Flood Damage and Insurance (NFIP):** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP) as shown in the table below. In total, approximately **100 percent** of the flood-affected homeowner population is reported to not carry an NFIP policy per the FEMA IA data.

**Table 41 Homeowner Flood-Damaged Properties and NFIP Counts**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 1 | 4% |
| **Major-Low** | 0 | 0% | 11 | 41% |
| **Minor-High** | 0 | 0% | 5 | 19% |
| **Minor-Low** | 0 | 0% | 10 | 37% |
| **No FVL** | 0 | 0% | 0 | 0% |
| **Totals** | **0** | **0%** | **27** | **100%** |

**Wind Damage and Insurance:** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of households reported not to carry a standard hazard homeowners insurance policy (HOI) that would otherwise be expected to offset documented losses. In total, 63 percent of the wind-impacted homeowner population is reported not to carry hazard insurance as shown in the table below.

**Table 42 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 883 | 179 | 347 | 26 | 2 | 2 | 1,439 |
| **Renter** | 405 | 27 | 184 | 16 | 0 | 0 | 632 |
| **Total** | **1,288** | **206** | **531** | **42** | **2** | **2** | **2,071** |

**Table 43 Homeowner Wind-Damaged Properties and HOI Counts**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 2 | 0% |
| **Major-High** | 0 | 0% | 2 | 0% |
| **Major-Low** | 2 | 0% | 24 | 2% |
| **Minor-High** | 74 | 5% | 273 | 19% |
| **Minor-Low** | 27 | 2% | 152 | 11% |
| **No FVL** | 426 | 30% | 457 | 32% |
| **Totals** | **529** | **37%** | **910** | **63%** |

## d. Impact based on Residence Type

The below table shows FEMA IA applicants by housing type. The highest number of applicants came from House/Duplex units (63%) and Mobile Home units (27%).

**Table 44 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 0 | 0 | 161 | 8% | 161 | **8%** |
| **Assisted Living Facility** | 0 | 0 | 1 | 0% | 1 | **0%** |
| **Correctional Facility** | 0 | 0 | 1 | 0% | 1 | **0%** |
| **House/Duplex** | 960 | 45% | 375 | 18% | 1,335 | **63%** |
| **Mobile Home** | 463 | 22% | 103 | 5% | 566 | **27%** |
| **Other** | 33 | 2% | 13 | 0% | 46 | **2%** |
| **Townhouse** | 4 | 0% | 7 | 0% | 11 | **0%** |
| **Travel Trailer** | 6 | 0% | 2 | 0% | 8 | **0%** |
| **Total** | **1,466** | **69%** | **663** | **31%** | **2,129** | **100%** |

The below table shows FEMA IA flood-damaged properties by housing type who had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, **zero** of the flood-affected homeowner applicants are reported to carry an NFIP policy per the FEMA IA data.

**Table 45 Homeowner Occupied Flood Damaged Properties by Residence Type with NFIP**

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **House/Duplex** | 20 | 0 | 0% |
| **Mobile Home** | 7 | 0 | 0% |
| **Total** | **27** | **0** | **0%** |

The below table shows FEMA IA wind-damaged properties by housing type who had Homeowner's insurance. As indicated in the overview of wind-damaged properties, **37%** of the affected homeowner applicants are reported to carry a homeowner's insurance policy per the FEMA IA data.

**Table 46 Homeowner Occupied Wind Damaged Properties by Residence Type with HOI**

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Apartment** | 0 | 0 | 0% |
| **Assisted Living Facility** | 0 | 0 | 0% |
| **Correctional Facility** | 0 | 0 | 0% |
| **House/Duplex** | 940 | 439 | 46% |
| **Mobile Home** | 456 | 83 | 18% |
| **Other** | 33 | 6 | 18% |
| **Townhouse** | 4 | 1 | 25% |
| **Travel Trailer** | 6 | 0 | 0% |
| **Total** | **1,439** | **529** | **37%** |

Total estimated losses have been summarized by residence type below.

**Table 47 Total Estimated Loss by Residence Type**

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 161 | $475,227 |
| **Assisted Living Facility** | 1 | $1,621 |
| **Correctional Facility** | 1 | $1,621 |
| **House/Duplex** | 1,335 | $4,130,031 |
| **Mobile Home** | 556 | $1,718,623 |
| **Other** | 46 | $74,566 |
| **Townhouse** | 11 | $31,586 |
| **Travel Trailer** | 8 | $16,842 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a LMI calculation as income was categorized by general ranges. To summarize the impact of storms on

households based on income, four income groupings are provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Zeta, with 78% of the total impacted population making $30,000 or less.

**Table 48 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 2 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 2 | 0% |
| **Major-High** | 1 | 0% | 1 | 0% | 1 | 0% | 0 | 0% | 3 | 0% |
| **Major-Low** | 32 | 2% | 4 | 0% | 1 | 0% | 0 | 0% | 37 | 3% |
| **Minor-High** | 276 | 19% | 61 | 4% | 15 | 1% | 0 | 0% | 352 | 24% |
| **Minor-Low** | 166 | 11% | 18 | 1% | 4 | 0% | 1 | 0% | 189 | 13% |
| **No FVL** | 597 | 41% | 208 | 14% | 74 | 5% | 4 | 0% | 883 | 60% |
| **Totals** | **1,074** | **73%** | **292** | **20%** | **95** | **6%** | **5** | **0%** | **1,466** | **100%** |

**Table 49 Gross Income by Damage Level for Renters Only**

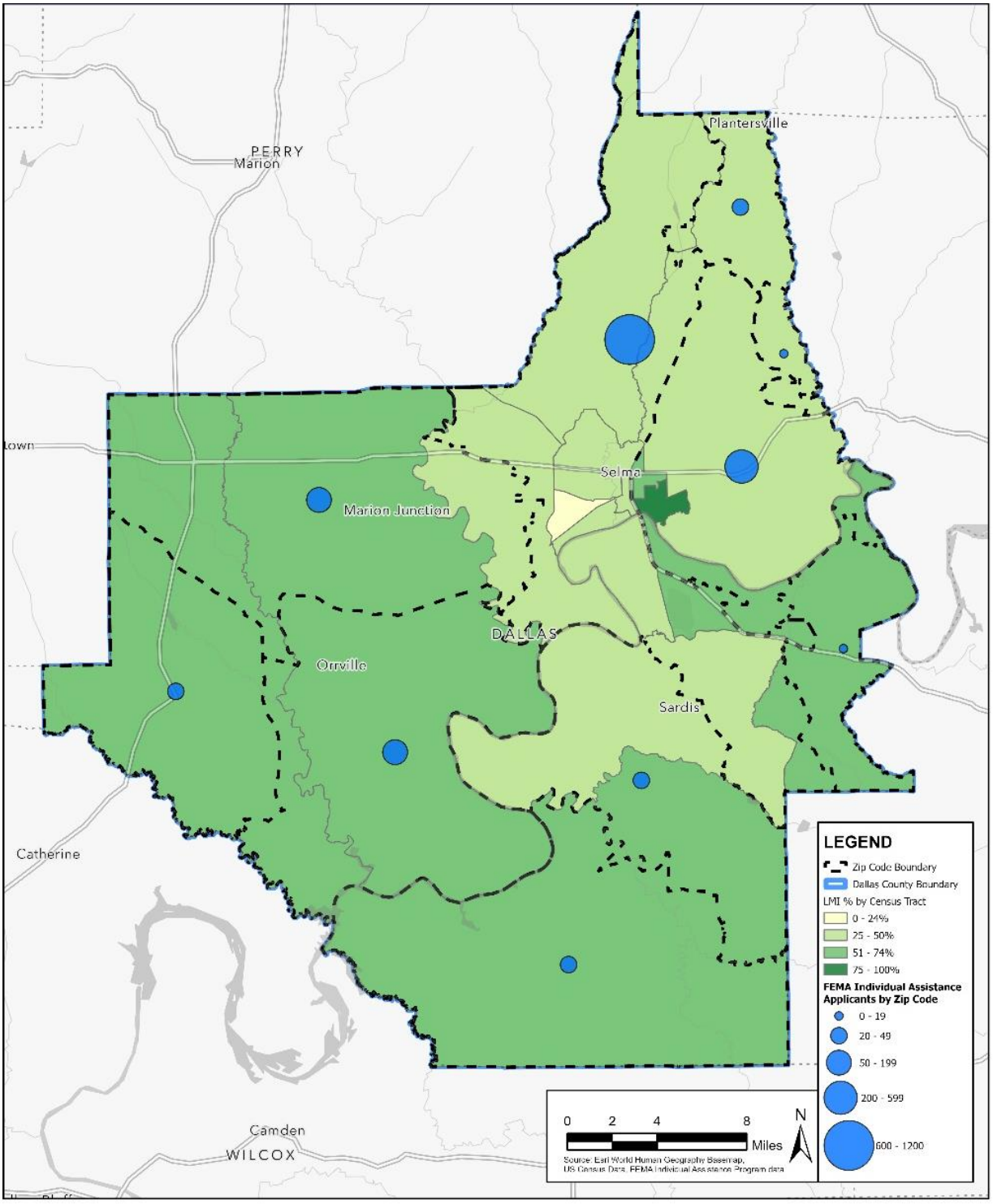
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 20 | 3% | 3 | 1% | 0 | 0% | 0 | 0% | 23 | 4% |
| **Minor-High** | 186 | 28% | 16 | 2% | 3 | 1% | 0 | 0% | 205 | 31% |
| **Minor-Low** | 27 | 4% | 1 | 0% | 0 | 0% | 1 | 0% | 29 | 4% |
| **No FVL** | 343 | 52% | 56 | 8% | 6 | 1% | 1 | 0% | 406 | 61% |
| **Totals** | **576** | **87%** | **76** | **11%** | **9** | **2%** | **2** | **0%** | **663** | **100%** |

**Table 50 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 2 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 2 | 0% |
| **Major-High** | 1 | 0% | 1 | 0% | 1 | 0% | 0 | 0% | 3 | 0% |
| **Major-Low** | 52 | 2% | 7 | 0% | 1 | 0% | 0 | 0% | 60 | 3% |
| **Minor-High** | 462 | 22% | 77 | 4% | 18 | 1% | 0 | 0% | 557 | 26% |
| **Minor-Low** | 193 | 9% | 19 | 1% | 4 | 0% | 2 | 0% | 218 | 10% |
| **No FVL** | 940 | 44% | 264 | 12% | 80 | 4% | 5 | 0% | 1,289 | 61% |
| **Totals** | **1,650** | **78%** | **368** | **17%** | **104** | **5%** | **7** | **0%** | **2,129** | **100%** |

The map below illustrates the Low-Moderate Income percentage by Census Tract, with heat bubbles of where the FEMA IA applications are located based on the zip code location.

**Figure 27 LMI Populations and FEMA IA Applications by Zip Code for Dallas County**



## f. Impact on Public Housing Authorities

There is no known unmet need for Public Housing Authorities in Dallas County.

## g. Impact on Homeless Populations

The impact of natural disasters on the housed population and people experiencing sheltered homelessness is very different from the impact on people experiencing unsheltered homelessness.

When a natural disaster damages a housing unit, its inhabitants can hypothetically be made whole by insurance or FEMA. When a natural disaster damages a shelter or broader infrastructure, beds can be rendered uninhabitable, but eventually, those beds can be regained via repair and recovery operations.

For people experiencing unsheltered homelessness (e.g. living on the streets), however, the impact is more difficult to see. A natural disaster cannot remove housing or shelter from a person without housing or shelter; instead, it destroys future housing opportunities. One of the primary barriers to permanent housing in any geography is a lack of affordable housing. When a natural disaster damages or destroys an area's affordable housing, it creates a housing cost and availability crisis that prevents people experiencing homelessness from achieving and stabilizing permanent housing.

**Alabama Balance of State CoC**

The Alabama Balance of State CoC serves 37 rural Alabama Counties, ensuring chronic under-counting of homeless populations in rural counties. According to the *2023 AHAR: Part 1 - PIT Estimates of Homelessness in the U.S.*[37], the Alabama Balance of State CoC counted 283 sheltered and unsheltered homeless persons in 2023 and 140 Emergency Sheltered persons. Dallas County is one of the counties that makes up this CoC and has one homeless shelter in the county that serves only 15 people and is at capacity, which leads to chronic under-serving of people in need of sheltering pre- and post-storm. The county struggled to shelter people who lost housing due to Hurricane Zeta, and the housing and shelter crisis will only increase as additional disasters hit the area.

To provide support for those experiencing homelessness, Dallas County will need to:

- create new shelter options which include surge capacity for emergency shelter beds required to shelter people displaced by disasters,
- create outreach and drop-in centers required to serve people experiencing unsheltered homelessness; and
- hire outreach workers and resource navigators to ensure people who are imminently at risk of homelessness are diverted back.

## h. Unmet Housing Needs

FEMA IA was the primary data source that Dallas County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology as summarized in previous sections by damage category and for public housing

[37] https://www.huduser.gov/portal/datasets/ahar/2023-ahar-part-1-pit-estimates-of-homelessness-in-the-us.html

authorities. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To calculate total unmet need, received assistance is summarized and subtracted from the estimated total loss including resilience costs.

**Table 51 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 2 | $102,574 |
| **Major-High** | 3 | $153,861 |
| **Major-Low** | 60 | $690,120 |
| **Minor-High** | 557 | $3,060,715 |
| **Minor-Low** | 218 | $353,378 |
| **No FEMA Verified Loss** | 1,289 | $2,089,469 |
| **Public Housing** | 0 | $0 |
| **Total** | **2,129** | **$6,450,117** |
| **+15% Resilience Costs** | | **$967,518** |
| **Total Estimated Loss with Resilience Costs** | | **$7,417,635** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA repair and replacement, SBA Real Estate and NFIP payment amounts were added together to get the total housing assistance received. See Table 52 for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received across the 7 MID counties.

**Table 52 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 374 | $1,616,237 |
| **NFIP Payments** | 0 | $0 |
| **SBA Loan Amounts** | Unknown | $912,800 |
| **Total Housing Assistance** | **374** | **$2,529,038** |

Total housing assistance was subtracted from the total housing unmet needs with resilience included to get a total housing unmet need of approximately $4.8 million as result of Hurricane Zeta. See Table 53 for the calculation.

**Table 53 Total Housing Unmet Need for Dallas County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $7,417,635 |
| **Total Housing Assistance** | **-$2,529,038** |
| **Total Housing Unmet Need** | **$4,888,597** |

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Dallas County suffered infrastructure losses from Hurricane Zeta only. Infrastructure damage included downed trees and associated debris, power and communication disruptions, road washouts, and flooding, with notable impacts on historical sites like Old Cahawba Archaeological Park. Numerous downed trees remain at the Cahawba Archeological Park due to the expensive specialized equipment needed to remove the trees.

Based on feedback received from the County Emergency Management Agency Director, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G, roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 54 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience | 23.6% Construction | Total Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $5,046,393 | $0 | $0 | $5,046,393 |
| **B - Protective Measures** | $119,558 | $0 | $0 | $119,558 |
| **C - Roads and Bridges** | $7,000 | $945 | $1,652 | $9,597 |
| **E - Public Buildings** | $59,862 | $8,081 | $14,128 | $82,071 |
| **G - Recreational/Other** | $28,254 | $3,814 | $6,668 | $38,737 |
| **Z - State Management** | $90,588 | $0 | $0 | $90,588 |
| **Total** | **$5,351,656** | **$12,841** | **$22,448** | **$5,386,944** |

## a. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 55 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share |
|---|---|---|---|
| **A - Debris Removal** | $5,046,393 | $4,541,753 | $504,639 |
| **B - Protective Measures** | $119,558 | $107,602 | $11,956 |
| **C - Roads and Bridges** | $9,597 | $6,300 | $3,297 |
| **E - Public Buildings** | $82,071 | $53,876 | $28,195 |
| **G - Recreational/Other** | $38,737 | $25,429 | $13,308 |
| **Z - State Management** | $90,588 | $90,588 | $0 |
| **Total** | **$5,386,944** | **$4,825,549** | **$561,395** |

Based on the analysis performed, there is a potential unmet need of $44,800 for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 56 Total Estimated Cost PA Unmet Need**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share | Unmet Need Amount |
|---|---|---|---|---|
| **A - Debris Removal*** | $5,046,393 | $4,541,753 | $504,639 | $0 |
| **B - Protective Measures*** | $119,558 | $107,602 | $11,956 | $0 |
| **C - Roads and Bridges** | $9,597 | $6,300 | $3,297 | $3,297 |
| **E - Public Buildings** | $82,071 | $53,876 | $28,195 | $28,195 |
| **G - Recreational/Other** | $38,737 | $25,429 | $13,308 | $13,308 |
| **Z - State Management*** | $90,588 | $90,588 | $0 | $0 |
| **Total** | **$5,386,944** | **$4,825,549** | **$561,395** | **$44,800** |

*CDBG-DR Funds are not used for PA costs in Categories A, B and Z.

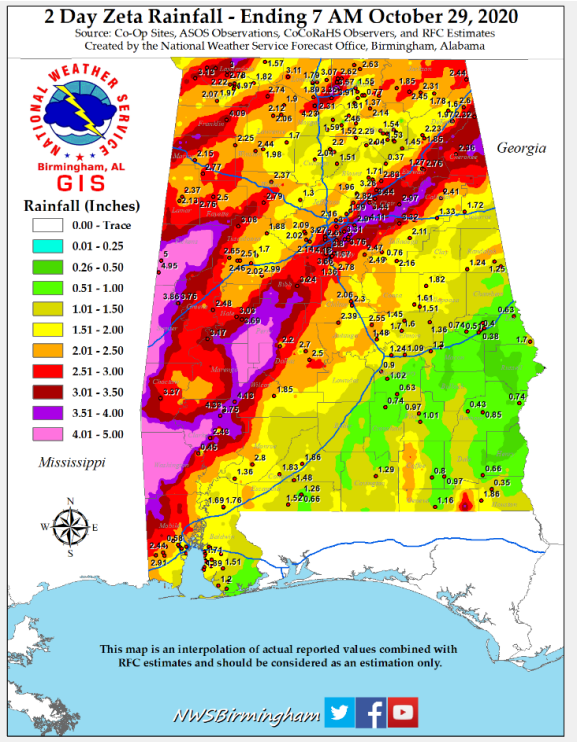
## 4. Economic Impact & Needs

A summary of damages and impact of Hurricane Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricane Zeta. Hurricane Zeta exacerbated existing economic challenges, particularly in tourism and ecotourism along the Cahaba River. The closure of Old Cahawba Archaeological Park had significant effects on staff and tourism, compounded by pre-existing distress due to COVID-19.

### Agriculture Impacts

Following Hurricane Zeta, USDA designated Dallas County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Zeta to apply for emergency loans USDA FSA. This natural disaster designation allows the FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation, or the refinance of certain debts.[38] As reported in the November 2, 2020, Alabama Crop Progress and Condition Report[39], Hurricane Zeta delivered heavy rains and damaging winds. The high soil moisture prevented fieldwork in many areas of the state following the Hurricane. As shown in Figure 29, parts of Dallas County Received upwards of 5 inches of rain across 48 hours.

**Figure 28 Hurricane Zeta 2 Day Rainfall Total**




### b. Unmet Economic Needs

According to an analysis SBA Business loan data for applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss for all businesses of approximately $2.6 million.

[38] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas

[39] https://www.nass.usda.gov/Statistics_by_State/Alabama/Publications/Crop_Progress_&_Condition/2020/AL-CropProgress-11-02-20.pdf

After accounting for an additional fifteen percent (15%) for resilience costs, the County's total estimated economic impact is approximately $3 million. According to the SBA business report, SBA provided $72,000 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $2.9 million with the majority of the remaining unmet needs in Selma, and the areas east of Selma.

**Table 57 Dallas County Economic Unmet Needs**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| **$2,653,671** | **$398,051** | **$3,051,722** | **$72,000** | **$2,979,722** |

## D. Summary of Unmet Needs & Additional Considerations

### 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$7.9 Million** attributable to Hurricane Zeta.

In summary, this analysis projects unmet needs as follows:

**Table 58 Summary of Total Unmet Needs for Dallas County**

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| **Housing** | $7,417,635 | $2,529,038 | $4,888,597 |
| **Infrastructure** | $5,386,944 | $4,825,549 | $44,800 |
| **Economy** | $3,051,722 | $72,000 | $2,979,722 |
| **Total** | **$15,856,301** | **$7,426,587** | **$7,913,119** |

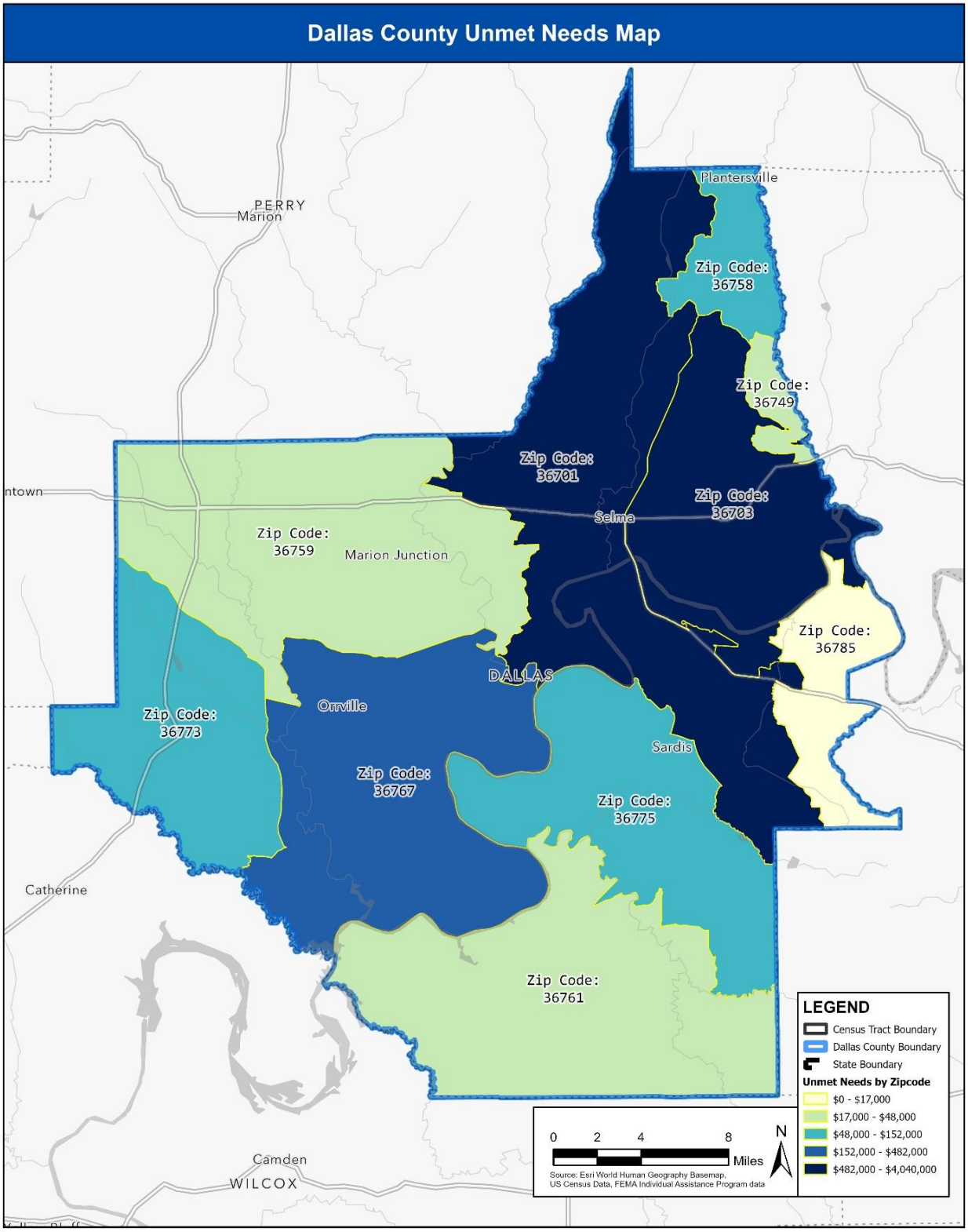
A detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code is shown below.

**Table 59 Unmet Need Summary by Zip Code**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36703** | $1,423,915 | $0 | $2,612,267 | $4,036,181 |
| **36701** | $2,445,940 | $44,800 | $367,455 | $2,858,195 |
| **36767** | $481,690 | $0 | $0 | $481,690 |
| **36773** | $151,806 | $0 | $0 | $151,806 |
| **36758** | $121,632 | $0 | $0 | $121,632 |
| **36775** | $112,362 | $0 | $0 | $112,362 |
| **36759** | $47,794 | $0 | $0 | $47,794 |
| **36761** | $43,728 | $0 | $0 | $43,728 |
| **36749** | $43,364 | $0 | $0 | $43,364 |
| **36785** | $16,367 | $0 | $0 | $16,367 |
| **Total** | **$4,888,597** | **$44,800** | **$2,979,722** | **$7,913,118** |

A map view of the total unmet need by zip code is on the following page.

**Figure 29 Dallas County Unmet Needs Map by Zip Code**

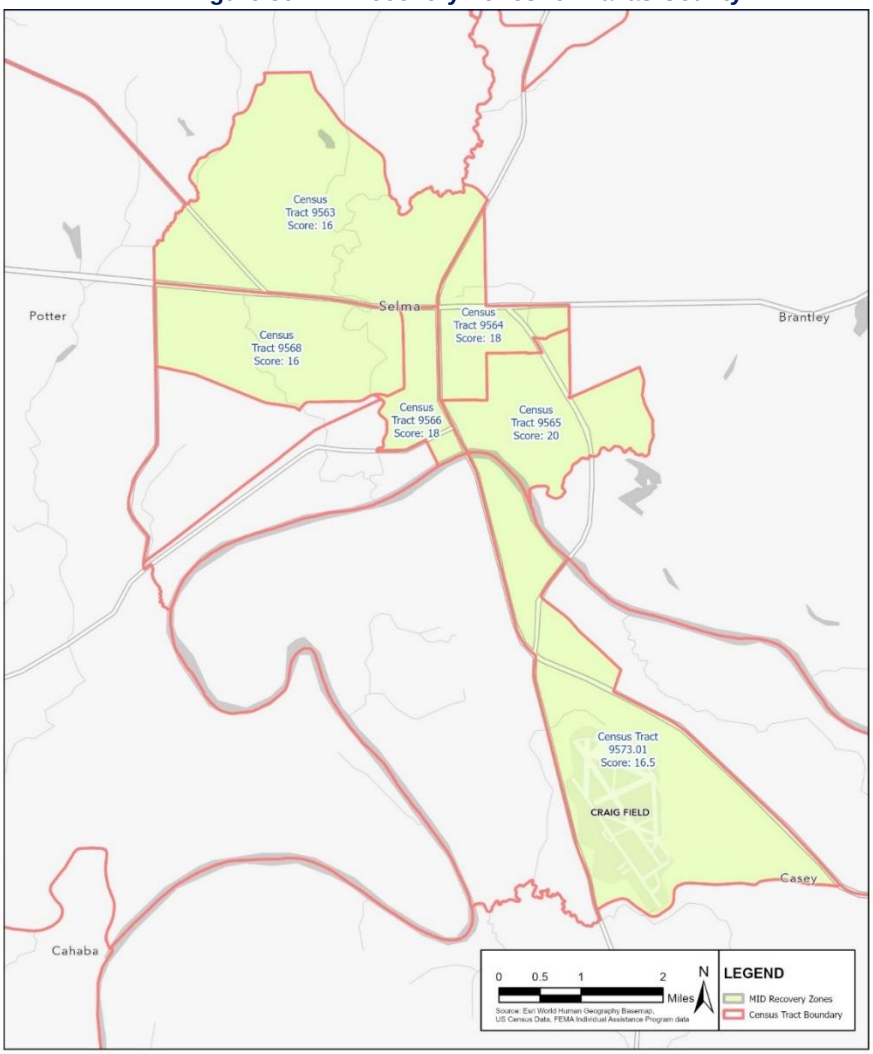


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Dallas County are shown in *Figure 30 MID Recovery Zones for Dallas County.* See Appendix B for the scores for each census tract in determining the MRZ.

**Figure 30 MID Recovery Zones for Dallas County**




**Identified MID Recovery Zones**: Census tracts 9573.01, 9565, 9566, 9568, 9563, and 9564.

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, Dallas County's 2014 Local Hazard Mitigation Plan, and data from NOAA and FEMA were used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this LRP, with a focus on addressing and analyzing all significant current and future hazards.

### 1. Historic Overview of Hazards

Since 1973 there have been 18 disaster declarations for Dallas County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms, tornadoes, and flooding. The historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of disasters are critical.

**Table 60 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4684-AL** | 2023 | Severe Storm | Severe Storms, Straight-Line Winds, And Tornadoes | $8,461,182 |
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $4,825,549 |
| **DR-4546-AL** | 2020 | Severe Storm | Severe Storms and Flooding | $492,849 |
| **DR-4503-AL** | 2020 | Biological | Covid-19 Pandemic | $93,208 |
| **DR-4349-AL** | 2018 | Hurricane | Hurricane Nate | $3,236 |
| **DR-4082-AL** | 2012 | Hurricane | Hurricane Isaac | $308,789 |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, And Flooding | $20,752 |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes & Straight-Line | $97,942 |
| **DR-1687-AL** | 2007 | Severe Storm | Severe Storms and Tornadoes | No Data |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $172,211 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $1,376,623 |
| **DR-1108-AL** | 1996 | Severe Storm | Severe Storms, Flooding and Tornadoes | No Data |
| **DR-861-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-856-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-695-AL** | 1984 | Severe Storm | Severe Storms, Flooding and Tornadoes | No Data |
| **DR-578-AL** | 1979 | Flood | Storms, Wind, Flooding | No Data |
| **DR-458-AL** | 1975 | Flood | Severe Storms & Flooding | No Data |

Source: Open FEMA Data Sets, Disaster Declaration Summary [40] and Public Assistance Funded Project Details [41]

[40] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[41] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

Historic weather patterns can be determined for Dallas County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 61 provides an outline of the number of recorded storm events from January 1950 to June 2023 for Dallas County. If the same event type occurred on the same date, only one event was recorded; however, the number of fatalities, injuries, and damages were summed across the multiple events for a single day and event type.

**Table 61 NCEI Storm Events Summary (1950 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Cold/Wind Chill** | 3 | 0 | 0 | $0 | $1,000,000 |
| **Drought** | 30 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 14 | 0 | 0 | $240,000 | $15,000 |
| **Flood** | 1 | 0 | 0 | $15,000 | $0 |
| **Funnel Cloud** | 2 | 0 | 0 | $0 | $0 |
| **Hail** | 75 | 0 | 0 | $297,000 | $22,000 |
| **Heat** | 6 | 0 | 9 | $0 | $0 |
| **Heavy Rain** | 1 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 3 | 0 | 0 | $0 | $0 |
| **Ice Storm** | 1 | 0 | 0 | $0 | $0 |
| **Lightning** | 2 | 0 | 0 | $100,000 | $0 |
| **Strong Wind** | 7 | 0 | 3 | $95,000 | $0 |
| **Thunderstorm Wind** | 144 | 0 | 16 | $831,500 | $6,000 |
| **Tornado** | 36 | 5 | 69 | $17,532,500 | $60,000 |
| **Tropical Storm** | 3 | 0 | 1 | $840,000 | $0 |
| **Winter Storm** | 3 | 0 | 0 | $15,000 | $20,000 |
| **Winter Weather** | 2 | 0 | 0 | $0 | $0 |
| **Extreme Cold/Wind Chill** | 1 | 0 | 0 | $0 | $0 |
| **High Wind** | 1 | 0 | 0 | $10,000,000 | $200,000 |
| **Tropical Depression** | 2 | 0 | 0 | $7,000 | $0 |
| **Excessive Heat** | 5 | 0 | 0 | $0 | $0 |
| **Grand Total** | **342** | **5** | **98** | **$29,973,000** | **$1,323,000** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[42]

## 2. Greatest Risk Hazards

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized as High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- **High**: Probable major damage in a 1-10 Year Period

[42] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

- **Medium**: Probable major damage in a 10-50 Year Period
- **Low**: Probable major damage in a 100 Year Period
- **Very Low:** No probable major damage in a 100 Year Period

The 2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan identified high winds from strong severe storms and tornadoes, and flooding as the most significant risks; however, extreme temperatures including drought, and wildfires were also identified as great risks.

**Table 62 Greatest Risk Hazards for Dallas County**

| Hazard | Risk Rating | Locations Impacted | Associated risk |
|---|---|---|---|
| **Dam Failure** | High | Dean Wilson Pond #3, Robert Free Pond #1 and #2, David Pearce Pond #77, Dean Wilson Pond #21 are all considered High risk dams. 31 Additional dams are considered significant risk. | Flooding of several feet, mainly agricultural areas, infrastructure, and isolated structures would be impacted, and loss of life along with economic, environmental, and lifeline losses could occur. |
| **Flooding** | High | Areas along creeks and rivers, and low-lying areas with poor drainage are most at risk. If enough rain falls every area is at risk of flash flooding. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged or non-existent drainage infrastructure. The eastern low-lying areas of Selma and populations along the Cahaba River were identified as most susceptible to flooding. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Tornadoes** | High | County-wide, Tornadoes can occur throughout the year but most likely to occur in the spring (March - May) and fall (November to December). months | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Severe Storms** | High | County-wide, Severe storms can occur throughout the year. | Can cause crop, property damage, injury, and loss of life |
| **Extreme Heat and Droughts** | Medium | County-wide, the area is especially susceptible to these events during the summer months | Can cause crop loss, water quality and quantity issues, threaten health (heat stroke, etc.) of people living and working in the area |
| **Wildfires** | Medium to High | Urban, more densely populated areas have a higher | Can cause crop and property and infrastructure damage, threated health due to poor air quality and result in injury and loss of life |

While extreme cold temperatures are uncommon due to Alabama's mild winter climate and therefore it is not classified as a Medium or High Risk in Dallas County, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater

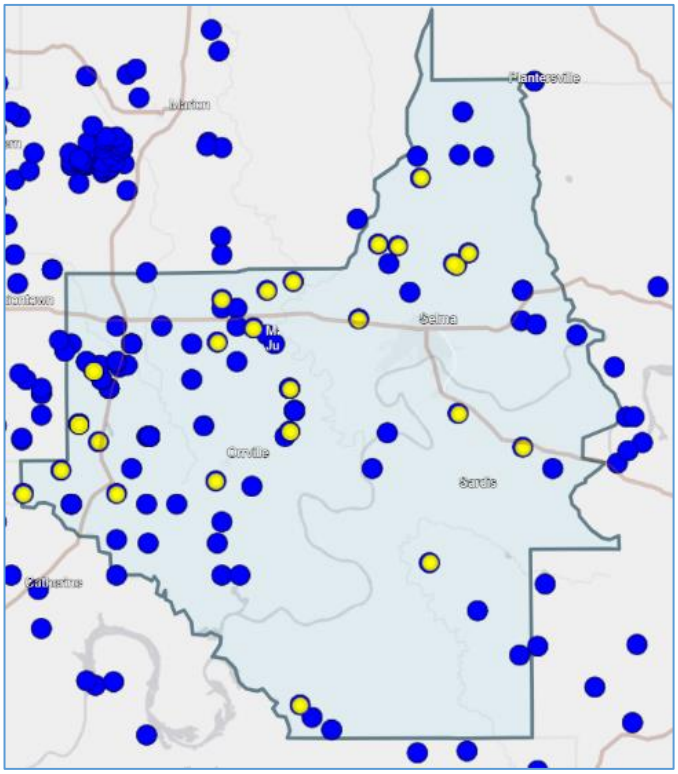
risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather, and ice storms which can cause downed trees or result in vehicle accidents. Since 1950, 13 cold weather-related events have occurred in Dallas County.

### a. Dam Failure

According to the National Inventory of Dams, Dallas County has 131 known dams. Thirty-one (31) of these dams are identified as having a significant hazard potential and 5 dams have a high hazard potential. The extent of a dam failure may vary based on the storage of the affected dam and its proximity to infrastructure and structures. For larger dams or dams classified with a high hazard potential, the extent of damage could be much greater and lead to loss of life along with economic, environmental, and community lifeline losses.

Historically (until June 7, 2023), Alabama did not have a dam safety program[43] which led to Alabama being disqualified from accessing federal infrastructure funds for dam-related inspections, training, and rehabilitation. Because of this, dams in the county may not have an accurate risk classification and they may not have received adequate funding to prevent and mitigate potential dam failures. This leads to a level of unknown risk associated with each dam. Due to the number of dams with high to significant potential hazards and the predicted damages, dam failure is classified as a high risk.

**Figure 31 Significant and High-Hazard Potential Dams**




Source: National Inventory of Dams, https://nid.sec.usace.army.mil/

[43] https://www.alabama-asce.org/alabama-establishes-first-state-dam-safety-program/

## b. Flooding

Flooding is a problem for many people across the United States. Enduring the consequences of repetitive flooding can put a strain on residents and state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there are 11 Repetitive Loss Properties and 0 Severe Repetitive Loss Properties in Dallas County.

While repetitive loss flooding is somewhat uncommon in Dallas County, Dallas County does have flood events. According to the *2023 Alabama State Hazard Mitigation Plan*. The most common type of flooding event in Dallas County is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| **12** | 1 | 0 | 13 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

## c. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Since 1953, NCEI has recorded 235 hail, heavy rain, lightning, strong wind, thunderstorm windstorms, and tropical depression storm events, as shown in Table 61. Since this event type has occurred regularly over the years resulting in damage, and severe storms are expected to continue regularly, Dallas County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the majority of the county is relatively low, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract.* For strong winds, the majority of the county has a relatively moderate risk, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. According to *Table 61 NCEI Storm Events Summary (1950 -* 2023), the combination of hail, strong winds, lightning, and thunderstorms has led to estimated property damage costs of $11.9M and $218K in crop damages.

## d. Tornadoes

Tornadoes are Dallas County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Between 1950 and 2022, Tornadoes caused 68 injuries, 5 deaths, and more than $17.3 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract,* the majority of Dallas County has a relatively moderate to relatively high Tornado Risk rating.

## e. Extreme Heat and Droughts

Extreme heat is often associated with droughts which can lead to greater impacts on communities. Extreme heat is very common to Dallas County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across the majority of county is Relatively Moderate, as shown in

Figure 3 Heat Wave Risk in MID Counties by Census Tract. There is a lack of infrastructure in the county to offer dedicated cooling stations for residents, especially populations that are the most vulnerable to extreme heat.

Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crops losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. As a result, the past events and future probability of heat and droughts are classified county-wide as medium risk according to the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan.*

### f. Wildfires

According to the Alabama Forestry Commission's Current Wildfire Totals summary[44], between 2000 and June 19, 2024, there were 528 total wildfires in Dallas County. Those fires burned 3,337 acres. That translates to a yearly average of 22 fires and 143 acres burned per year. The largest fire recorded in the county between these years was 135 acres and occurred in 2007. Based on past occurrences, every area of the county has a degree of risk.

According to *Figure 10 Wildfire Risk in MID Counties by Census Tract*, Dallas County has a relatively low risk for wildfire compared to the rest of the country. However, according to the 2023 Alabama State Hazard Mitigation Plan, as the climate changes, Alabama is projected to become more prone to wildfire occurrences between now and 2050. It is projected that by 2050 the average number of days with high wildfire will double from 25 to 50 days a year.

## 3. Hazard Risk Analysis

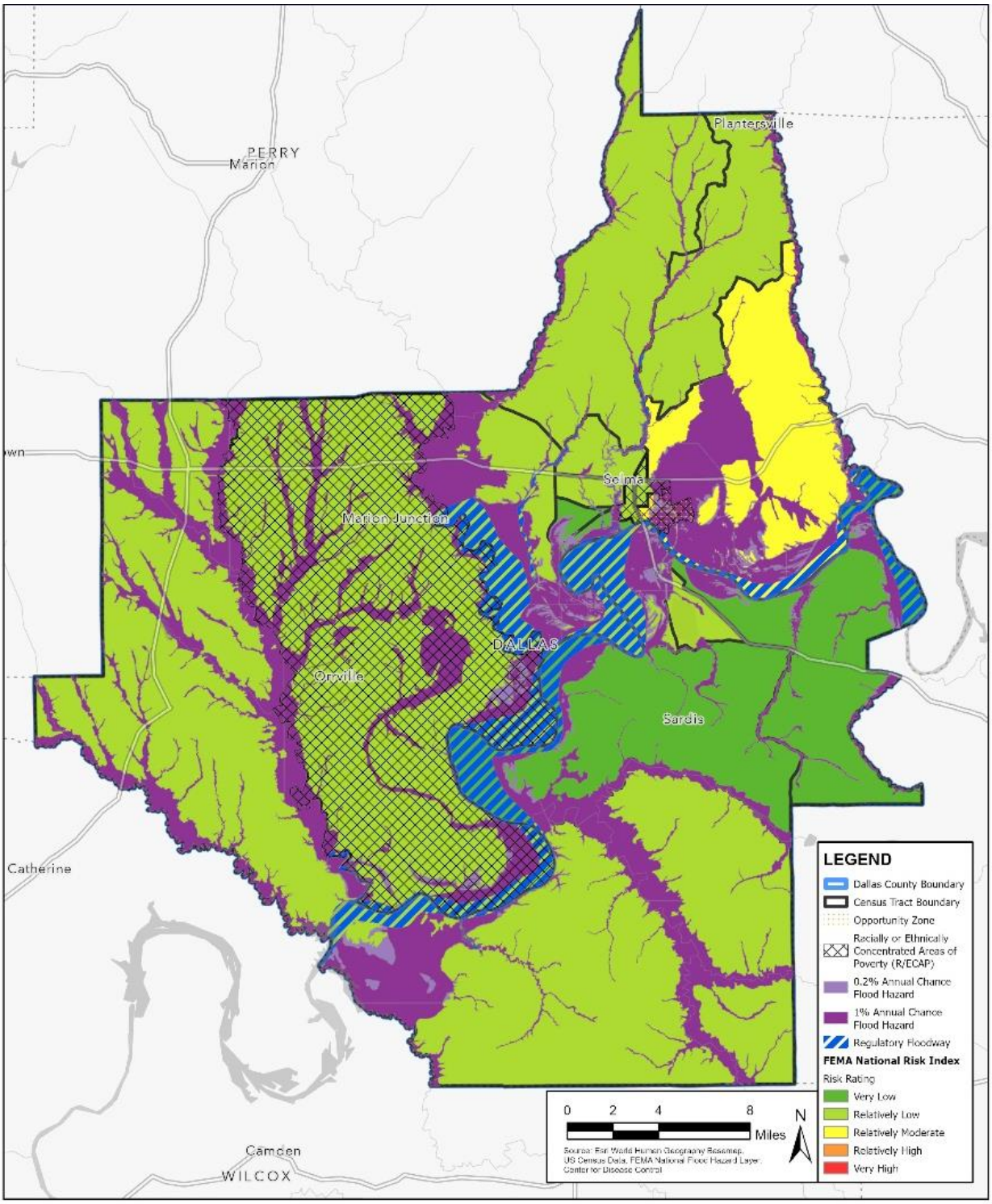
It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk Index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability, and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

We can see that there are parts of the county that have a Relatively Moderate National Risk Index Rating as shown in Figure 32. This area includes Selma and areas east of Selma. Hazard-specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

[44] https://forestry.alabama.gov/pages/fire/totals.aspx

**Figure 32 Dallas County FEMA National Risk Index**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Dam Failure** | Very Low | Critical | Small | Less than 24 hours |
| **Flooding** | High | Critical | Moderate | Less than one week |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | Medium | Minor | Moderate | Less than 6 hours |
| **Extreme Heat and Droughts** | Medium | Minor | Small | More than one week |
| **Wildfires** | High | Minor | Small | Less than one week |

#### Probability defined:

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

#### Impact defined:

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

#### Location Extent defined:

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact of the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic, and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

To address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Rental Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 20 responses were received. Of those respondents the majority were homeowners of stick-built homes (14), as well as 2 respondents who own or develop rental properties. Respondents said that they experienced a moderate amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and secondarily flooding. They stated that this resulted in electricity outages, and damage to streets. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 69% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, about 24% occupied apartments and 16% occupied mobile homes or travel trailers at the time of the disaster. For both homeowners and renters occupied dwellings, approximately 27% of those applying for FEMA IA lived in mobile homes. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds, flooding, and other extreme weather

conditions. Additionally, 87% for the renter households that applied for FEMA assistance reported making less than $30,000 a year, and 98% of the households making less than $60,000 a year.

From the Planning Charette, the stakeholders in attendance noted that there was the lack of sheltering options for residents that were impacted by the storm because only one homeless shelter currently exists in the county that is at capacity.

Surveys were distributed at Dallas County's public meetings. The top results of the surveys are as follows:

- 13 respondents stated interest in development of Affordable Multi-family housing, 8 of whom ranked it as top priority.
- 14 respondents stated interest in a First Time Homeownership Assistance Program, 2 of whom ranked it as their top priority.
- 11 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing multi-family Housing, 1 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as HIGH priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Affordable Multifamily Housing** | **Strategy** | Housing Recovery | • Dallas County identified the need to create and rehabilitate affordable multifamily housing.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • The county would like to provide opportunities for renters to purchase more secure housing, with an emphasis on supporting first-time homebuyers located within a MID Recovery Zone. | HIGH |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **SVI Score** | High | • Intended to pay a portion of the cost of purchasing an eligible new home for eligible applicants, which may be based on need, household size, and the cost of a home.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Rehabilitation to Multi-Family Housing** | **Strategy** | Housing Recovery | • Provide repair and rehabilitation to existing multi-family properties damaged by Hurricanes Sally and Zeta or to make more sanitary, safe, and secure housing availability to those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up, damaged electric utilities which then in turn left communities without power for extended periods of time. Flooding also occurred during the events leading to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities.

Based on the unmet needs analysis, feedback received from the County and the eligible type of projects under this funding, the county identified the following projects to support the county's infrastructure recovery efforts: Flood Management Improvement, Residential Solar Generator

Program to provide temporary power during times without power, the development of a Community Resilience Center, the development of a new Homeless Shelter to serve more community members facing homelessness pre and post disaster, and Infrastructure Improvements along Economic Thoroughfares. Below is an outline of the associated project descriptions and details.

Surveys were distributed at Dallas County's public meetings. The top results of the surveys are as follows:

- 12 respondents stated interest in Drainage Improvements, 3 of whom ranked it as their top priority.
- 8 respondents stated interest in a program that addresses Stormwater infrastructure and management, 0 of whom ranked it as top priority.
- 7 respondents stated interest in Repairs and improvements to communication infrastructure, such as broadband, 3 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Flood Management Improvements** | **Strategy** | Mitigation | • Implement flood control improvement projects in areas subject to re-occurring flooding, which leave communities cut off from the rest of the county. This was particularly problematic during and after Hurricanes Zeta.<br>• Addresses public desire for drainage and stormwater infrastructure improvements.<br>• Unmet/Mitigation needs – Addresses risk of and resulting damages from flooding. | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Residential Solar Generator Program** | **Strategy** | Mitigation | • The county has identified the need for backup power supply for vulnerable, rural residents in the form of solar panels or generators.<br>• Unmet/Mitigation needs – Addresses issues with electricity outages in disaster events, resulting from high winds, such as what was experienced during Hurricanes Sally and Zeta | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Develop a community resilience center that provides year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. During or following a disaster event, this center may serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services.<br>• Unmet/mitigation needs – addresses need for greater community resilience in the face of increased damage from wind, rain, tornado, and flooding events that impede access to critical lifelines | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Homeless Shelter** | **Strategy** | Recovery | • Dallas County does not have adequate homeless shelters to serve vulnerable populations pre- and post-disaster. The county would like to propose creating a new homeless shelter as a project as part of this LRP and may also be doubled to be used as a community resilience center if the right conditions are met.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Infrastructure Improvements along economic thoroughfares** | **Strategy** | Recovery & Mitigation | • The economic thoroughfare along Broad Street in Selma is prone to flooding issues. To help incentivize businesses to thrive in this area, improvements to help prevent flooding and improve the general area will be implemented.<br>• Unmet needs - there is evidence of an economic unmet need; this may also address a mitigation risk via minimizing risk by supporting the development of a more stable economic base | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone or MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 4. Economic Recovery Strategies

According to the economic unmet needs analysis, there is significant remaining unmet economic need, $2.9M, in Dallas County in comparison to the other counties looked at in this plan. Feedback from stakeholders indicated a concern of not having the local network or labor force to be able to repair and maintain the historical buildings within the county. By creating a job training to support the local network labor to maintain, preserve and rehabilitate historical buildings in areas like downtown Selma, the area will be able to more readily bounce back from disasters that may damage these buildings and prevent blight and vacant properties, including store fronts. By providing economic recovery strategies such as job training, the LMI households will be equipped with the skills and resources needed to secure better-paying jobs, thereby improving their financial stability and economic mobility. Approximately 50% of the County's residents to be considered LMI.

Surveys were distributed at Dallas County's public meetings. The top results of the surveys are as follows:

- 9 respondents stated interest in Job Creation, 3 of whom ranked it as their top priority.
- 8 respondents stated interest in rehabilitation, reconstruction, and improvements to areas of cultural and economic value such as parks and recreational facilities, 1 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Job Training** | **Strategy** | Recovery | • Many of the buildings throughout the County, particularly in downtown Selma are historically preserved. Because of this, specialized tradespeople are needed to properly maintain and rehabilitate the historical buildings that meet the architecture and design standards. In the event of damage to these buildings due to a disaster, it is especially important to have local resources to be able to quickly recover.<br>• The county looks to bolster and strengthen the local labor force that supports the historical preservation of buildings in Selma. Grants would include providing financial assistance to LMI residents in the MID Recovery zones looking to receive job training and apprenticeships in trades specializing in the historical preservation of buildings.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address a mitigation need to minimize risk with development of a more stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Debris Removal at Old Cahawba Archaeological Park** | **Strategy** | Recovery | • Situated along the Cahaba River, the Old Cahawba Archaeological Park is a historical park that offers a variety of outdoor activities and is at the center of the ecotourism and historical tourism industry in Dallas County. During Hurricane Zeta, numerous trees were downed which remain primarily in the burial grounds portion of the park. Due to the archaeological status of the burial grounds, expensive specialized equipment is needed to remove the trees to restore the area to pre-disaster condition.<br>• The county would like to propose a project to assist in the removal of the debris at this site to support the local tourism industry.<br>• Unmet/Mitigation needs – The Old Cahawba Archaeological Park team has | MID |
| | **Eligible Activity** | Economic Revitalization, Public Facilities | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone or MID County – Mitigation | | |
| | **Administering Entity Identified** | Old Cahawba Archaeological Park | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | stated that there is debris remaining from Hurricanes Sally and Zeta that needs to be removed; in addition, mitigation measures related to floodplain management are necessary in order to maintain this cultural asset. | |

# X. Escambia County

## A. Introduction

Escambia County is a county located within the southcentral portion of Alabama, neighboring the State of Florida. Escambia County is home to portions of the Conecuh National Forest and the Poarch Creek Indian Reservation, the only federally recognized Native American group in the state of Alabama. Due to Escambia county's proximity to the Gulf Mexico, many rivers, creeks and their tributaries flow through Escambia County including the Conecuh River and Sapulpa Rivers.

According to the American Community Survey (ACS) 2022 5-Year Estimates[45], Escambia County has a population of 36,755, a 1% decrease from 37,057 in 2019. The demographic breakdown shows most residents (62%) are White, followed by 30% identifying as Black or African American. Housing in Escambia County includes 16,715 occupied units, with 70% being single-family homes and 20% mobile homes. In total, 95% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is high, with 67% of residents owning their homes and 33% renting. In 2020, 50% of the county's residents were considered LMI compared to 43% in 2022[46].

Escambia County primarily experienced damage from Hurricane Sally which resulted in downed trees and flooding. Debris pileups occurred in rivers that pushed up against bridges which in turn weakened the structure integrity of the bridges. Many homes were damaged by high winds and falling trees and remain in need of repair. Many roads were significantly flooded, cutting off access to community lifelines across the county. In Brewton, public buildings including the county jail were damaged and may still need repair. Water and sewage systems were affected in Flomaton causing service interruptions and water quality concerns.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Escambia County presents unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see table below). Over time, ACCA and the county reserves the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 63 Total Estimated Unmet Need for Escambia County**

| | Estimated Impact | Amount of Funds from other sources | Total Unmet Need |
|---|---|---|---|
| Housing | $12,711,012 | $3,476,515 | $9,234,497 |
| Infrastructure | $5,119,439 | $3,839,293 | $1,098,936 |
| Economy | $628,115 | $87,600 | $540,515 |
| **Total** | **$18,458,566** | **$7,403,408** | **$10,873,948** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[45] https://data.census.gov/ - Tables B02001, B25024, B25033

[46] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Escambia County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated as a result of impacts from the 2020 storms. The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, among other sources, to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. These unmet needs assessment focuses on Escambia County's impacts, with specific sections detailing needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

The demographic profile of Escambia County has not changed much since the state of Alabama's 2020 Disaster Recovery Action Plan was published and specific demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county. An overview of vulnerable and LMI populations is provided below.

**Vulnerable Populations**

Escambia County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Escambia County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Escambia County has two identified disadvantages areas: Opportunity Zones and Tribal Areas. Escambia County does not have any Promise Zones, Neighborhood Revitalization Strategy Areas, or R/ECAP areas within the county.

Figure 33 show cases the 2020 vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

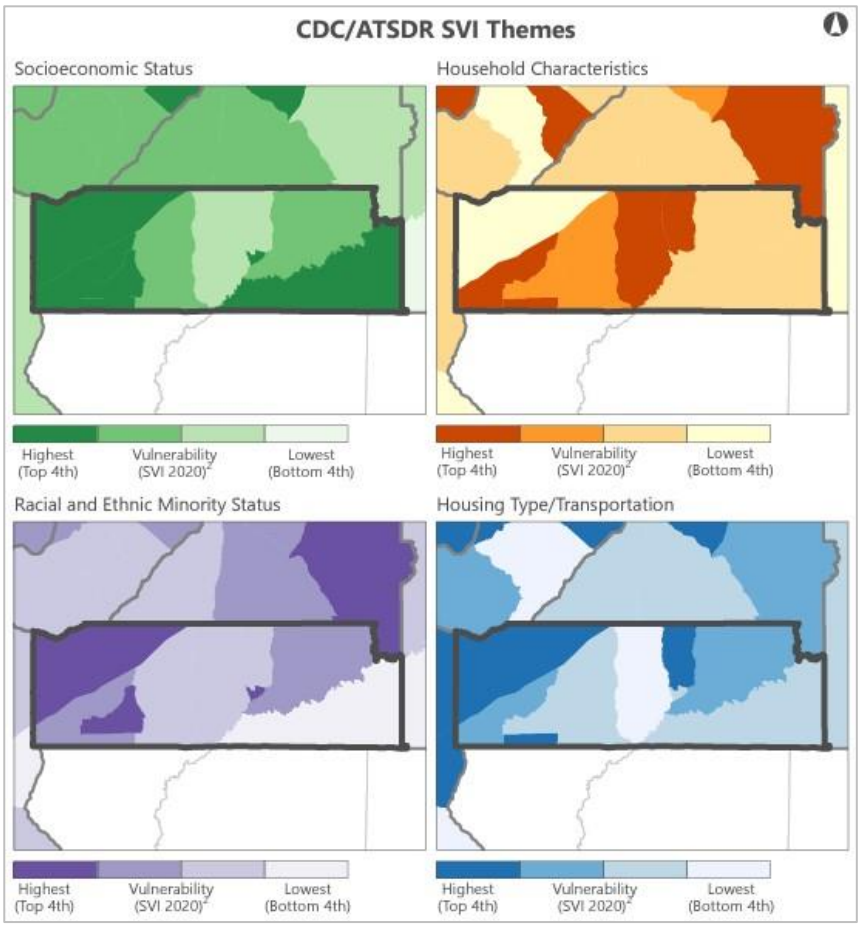
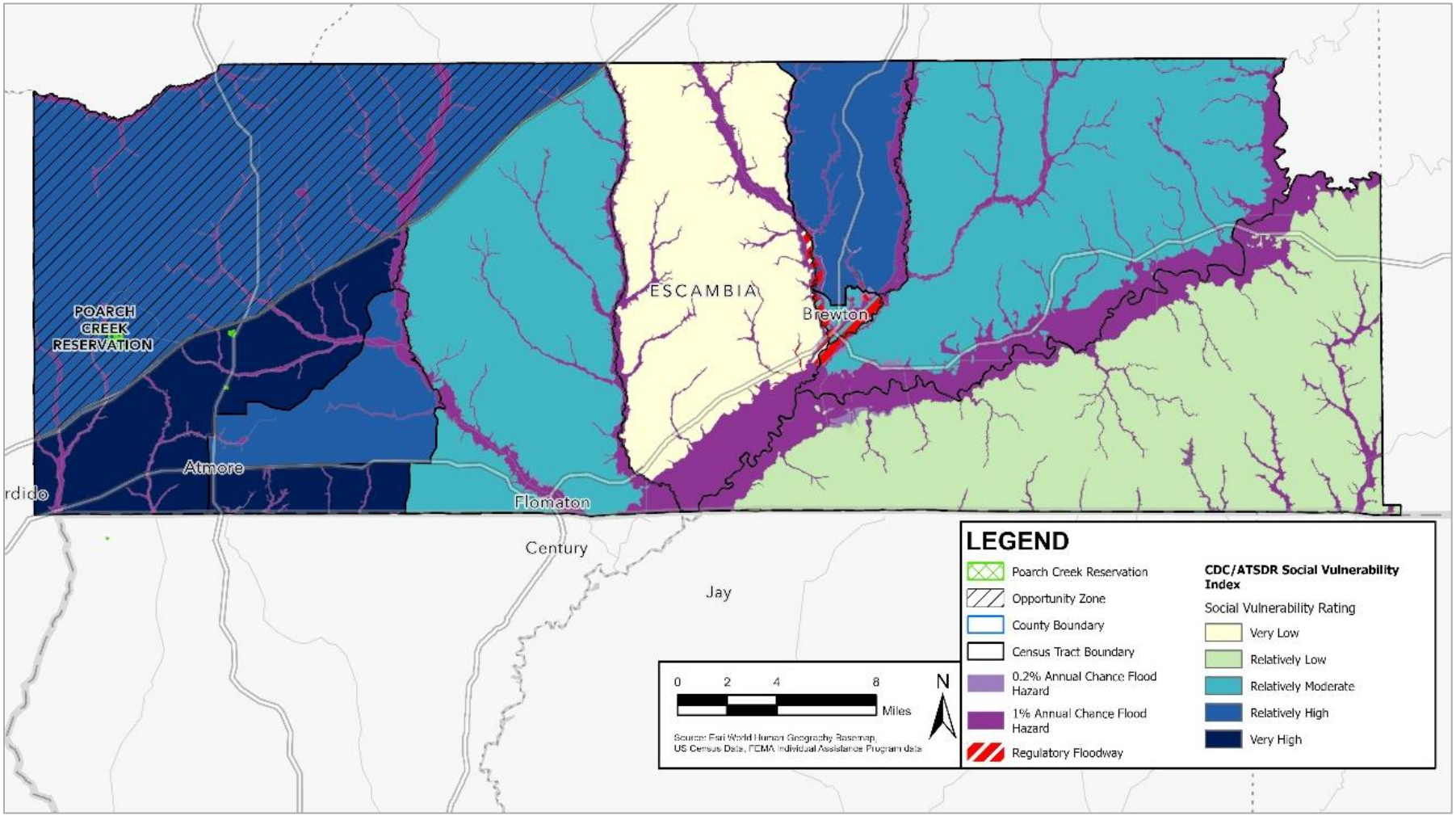



**Figure 33 Escambia County SVI Themes**

The map below provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the Very High SVI Ratings and where the Opportunity Zones and Tribal areas (Poach Creek Reservation) are located.

## Figure 34 Escambia County Vulnerability Map



### LMI Populations

As highlighted in the table below, four of the ten census tracts within Escambia County have more than 50% of the population that is considered LMI which also have a relatively moderate to very high SVI Rating.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 64 Escambia County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[47] | SVI Rating |
|---|---|---|
| 9698.01 | 49.70% | Relatively Low |
| 9698.02 | 44.18% | Relatively Moderate |
| 9699 | 43.87% | Very Low |
| 9701 | 30.83% | Relatively High |
| 9702 | 45.20% | Relatively Moderate |
| **9703** | **56.23%** | **Relatively Moderate** |
| 9704 | 45.93% | Relatively High |
| **9705** | **54.10%** | **Very High** |
| **9706** | **82.00%** | **Relatively High** |
| **9707** | **58.20%** | **Very High** |

[47] HUD GIS Helpdesk, Low to Moderate Income Population by Tract Open dataset. Published July 31, 2023; updated August 14, 2024.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Sally only.

For each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the below tables outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 65 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 9 | 0.3% | 0 | 0% | 9 | 0.3% |
| **Major-High** | 23 | 0.9% | 0 | 0% | 23 | 0.9% |
| **Major-Low** | 89 | 3.3% | 63 | 2.3% | 152 | 5.6% |
| **Minor-High** | 407 | 15.1% | 308 | 11.4% | 715 | 26.4% |
| **Minor-Low** | 230 | 8.5% | 30 | 1.1% | 260 | 9.6% |
| **No FVL** | 995 | 36.8% | 550 | 20.3% | 1545 | 57.1% |
| **Total** | **1753** | **64.8%** | **951** | **35.2%** | **2704** | **100%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan to determine the estimated total loss/support for these three damage categories. The below tables outline the total number of properties damaged for homeowners and renters.

Table 66 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 230 | $1,621 | $372,830 |
| **Minor-High** | 407 | $5,495 | $2,236,465 |
| **Major-Low** | 89 | $11,502 | $1,023,678 |
| **Total** | **726** | **N/A** | **$3,632,973** |

Table 67 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 30 | $1,621 | $48,630 |
| **Minor-High** | 308 | $5,495 | $1,692,460 |
| **Major-Low** | 63 | $11,502 | $724,626 |
| **Total** | **401** | **N/A** | **$2,465,716** |

Table 68 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 260 | $1,621 | $421,460 |
| **Minor-High** | 715 | $5,495 | $3,928,925 |
| **Major-Low** | 152 | $11,502 | $1,748,304 |
| **Total** | **1,127** | **N/A** | **$6,098,689** |

### FEMA Damage Category Applications - Major-High to Severe

The FEMA IA Applications with major-high to severe damage, are assumed to include structures substantially damaged and to require reconstruction. To determine the replacement cost of the home, Escambia County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[48]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided below.

Table 69 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $116,000 | $76,560 | 23 | $1,760,880 |
| **Severe** | $116,000 | $76,560 | 9 | $689,040 |
| | **Total** | | **32** | **$2,449,920** |

Of the 32 major-high and severely damaged homes, no renter occupied dwellings are classified as Major-High or Severe.

[48] Escambia County Home Values, https://www.zillow.com/home-values/2258/al/

### FEMA IA Applications without FEMA Verified Loss

Escambia County, accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner-occupied dwellings and without Personal Property FEMA Verified Loss for renter-occupied dwellings because due to the COVID-19 pandemic and other reasons, an inspection never physically took place or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Escambia County accounted for applications by county with no FEMA Verified Loss and multiplied it by the average value for minor-low damage per SBA. The results of these calculations are provided below.

**Table 70 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 995 | $1,621 | $1,612,895 |
| **Renter** | 550 | $1,621 | $891,550 |
| **Total** | **1,545** | **$1,621** | **$2,504,445** |

## c. Impacts of Insurance (HOI and NFIP)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See the below table flood flood-damaged properties by damage category and occupancy type.

**Table 71 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 3 | 35 | 41 | 54 | 23 | 9 | 165 |
| **Renter** | 3 | 1 | 70 | 37 | 0 | 0 | 111 |
| **Total** | **6** | **36** | **111** | **91** | **23** | **9** | **276** |

**Flood Damage and Insurance:** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP) as shown in the table below. In total, **96 percent** of the flood-affected population is reported to not carry an NFIP policy per the FEMA IA data.

**Table 72 Homeowner Flood-Damaged Properties and NFIP Counts**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 9 | 5% |
| **Major-High** | 0 | 0% | 23 | 14% |
| **Major-Low** | 2 | 1% | 52 | 32% |
| **Minor-High** | 3 | 2% | 38 | 23% |
| **Minor-Low** | 1 | 1% | 34 | 21% |
| **No FVL** | 0 | 0% | 3 | 2% |
| **Total** | **6** | **4%** | **159** | **96%** |

**Wind Damage and Insurance (HOI):** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of households reported not to carry a standard hazard homeowners insurance policy (HOI) that would otherwise be expected to offset documented losses. In total, 66 percent of the wind-impacted homeowner population is reported not to carry hazard insurance as shown below.

**Table 73 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 992 | 195 | 366 | 35 | 0 | 0 | 1,588 |
| **Renter** | 547 | 29 | 238 | 26 | 0 | 0 | 840 |
| **Total** | **1,539** | **224** | **604** | **61** | **0** | **0** | **2,428** |

**Table 74 Homeowner Wind-Damaged Properties and HOI Counts**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% |
| **Major-Low** | 2 | 0% | 33 | 2% |
| **Minor-High** | 65 | 4% | 301 | 19% |
| **Minor-Low** | 22 | 1% | 173 | 11% |
| **No FVL** | 458 | 29% | 534 | 34% |
| **Total** | **547** | **34%** | **1,041** | **66%** |

## d. Impact based on Residence Type

The table below shows FEMA IA applicants by housing type. The highest number of applicants came from House/Duplex units (56%) and Mobile Home units (30%).

**Table 75 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 1 | 0% | 215 | 8% | 216 | 8% |
| **Assisted Living Facility** | 0 | 0% | 1 | 0% | 1 | 0% |
| **Condo** | 3 | 0% | 1 | 0% | 4 | 0% |
| **House/Duplex** | 1,083 | 40% | 442 | 16% | 1,525 | 56% |
| **Military Housing** | 0 | 0% | 1 | 0% | 1 | 0% |
| **Mobile Home** | 579 | 21% | 244 | 9% | 823 | 30% |
| **Other** | 48 | 2% | 32 | 1% | 80 | 3% |
| **Townhouse** | 6 | 0% | 5 | 0% | 11 | 0% |
| **Travel Trailer** | 33 | 1% | 10 | 1% | 43 | 2% |
| **Total** | **1,753** | **65%** | **951** | **35%** | **2,704** | **100%** |

The below table shows FEMA IA flood-damaged properties by housing type that had flood insurance. As indicated in the overview of flood-damaged properties, **98%** of the flood-affected homeowner applicants are reported to not carry an NFIP policy per the FEMA IA data.

**Table 76 Homeowner Occupied Flood Damaged Properties by Residence Type with NFIP**

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **Apartment** | 0 | 0 | 0% |
| **House/Duplex** | 121 | 6 | 5% |
| **Mobile Home** | 41 | 0 | 0% |
| **Townhouse** | 0 | 0 | 0% |
| **Travel Trailer** | 3 | 0 | 0% |
| **Total** | **165** | **6** | **4%** |

The below table shows FEMA IA wind-damaged properties by housing type who had Homeowner's insurance. As indicated in the overview of wind-damaged properties, **34%** of the affected population is reported to not carry homeowner's insurance policy per the FEMA IA data.

**Table 77 Homeowner Occupied Wind Damaged Properties by Residence Type with HOI**

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Apartment** | 1 | 0 | 0% |
| **Assisted Living Facility** | 0 | 0 | 0% |
| **Condo** | 3 | 2 | 67% |
| **House/Duplex** | 962 | 446 | 46% |
| **Military Housing** | 0 | 0 | 0% |
| **Mobile Home** | 538 | 83 | 15% |
| **Other** | 48 | 13 | 27% |
| **Townhouse** | 6 | 1 | 17% |
| **Travel Trailer** | 30 | 2 | 7% |
| **Total** | **1,588** | **547** | **34%** |

Total estimated losses have been summarized by residence type below.

**Table 78 Total Estimated Loss by Residence Type**

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 216 | $662,016 |
| **Assisted Living Facility** | 1 | $1,621 |
| **Condo** | 4 | $6,484 |
| **House/Duplex** | 1,525 | $6,805,485 |
| **Military Housing** | 1 | $1,621 |
| **Mobile Home** | 823 | $3,278,216 |
| **Other** | 80 | $137,428 |
| **Townhouse** | 11 | $35,460 |
| **Travel Trailer** | 43 | $124,723 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a low-and moderate-income (LMI) calculation, as income was categorized by general ranges. To summarize the impact of storms had on households based on income, four income groupings are provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Sally, with 77% of the total impacted population making $30,000 or less.

**Table 79 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 5 | 0% | | 0% | 4 | 0% | | 0% | 9 | 1% |
| **Major-High** | 18 | 1% | 4 | 0% | | 0% | 1 | 0% | 23 | 1% |
| **Major-Low** | 74 | 4% | 12 | 1% | 3 | 0% | | 0% | 89 | 5% |
| **Minor-High** | 332 | 19% | 57 | 3% | 17 | 1% | 1 | 0% | 407 | 23% |
| **Minor-Low** | 194 | 11% | 30 | 2% | 6 | 0% | | 0% | 230 | 13% |
| **No FVL** | 650 | 37% | 233 | 13% | 109 | 6% | 3 | 0% | 995 | 57% |
| **Totals** | **1,273** | **73%** | **336** | **19%** | **139** | **8%** | **5** | **0%** | **1,753** | **100%** |

**Table 80 Gross Income by Damage Level for Renters Only**

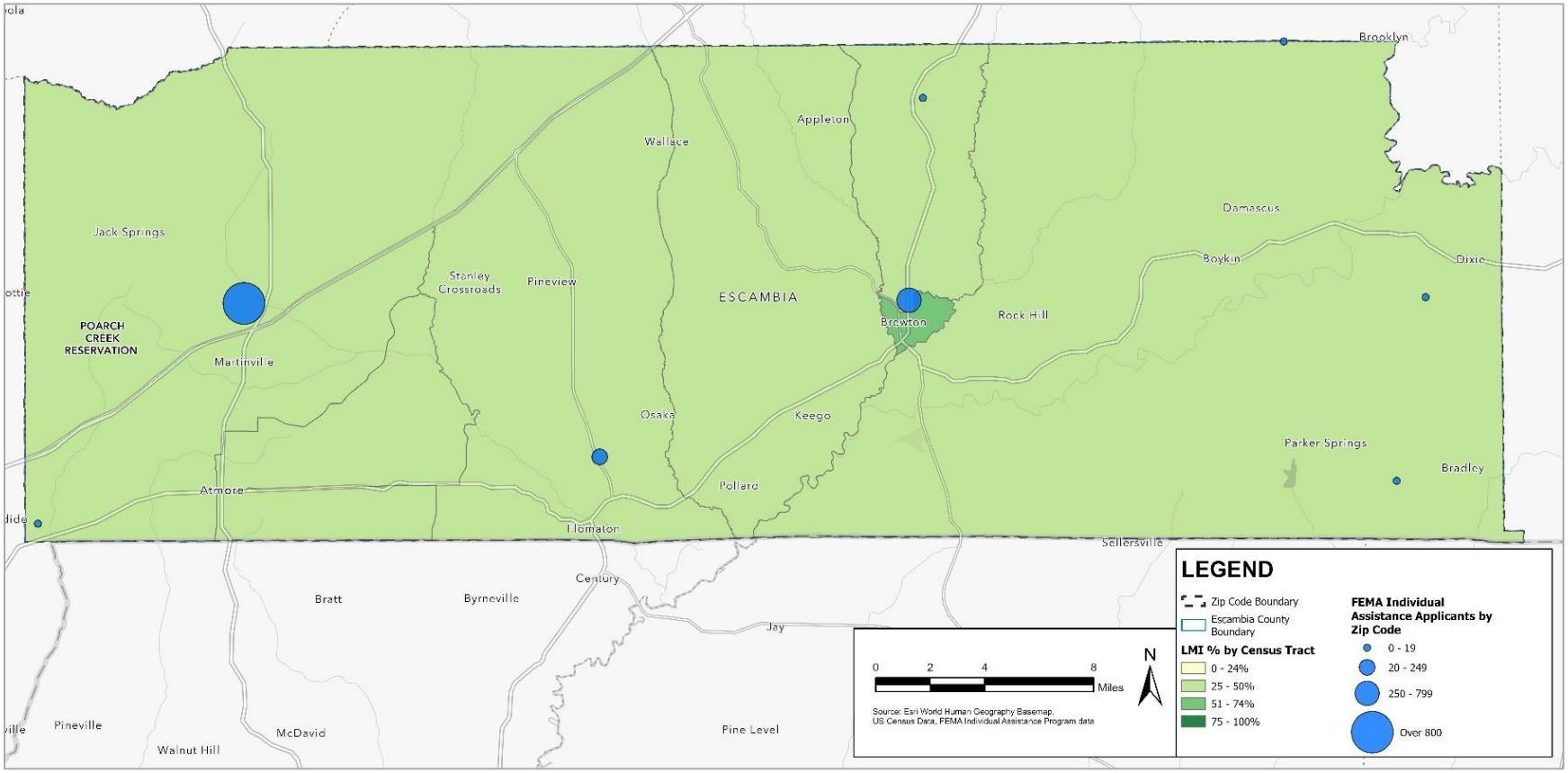
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 58 | 6% | 3 | 0% | 2 | 0% | 0 | 0% | 63 | 7% |
| **Minor-High** | 277 | 29% | 26 | 3% | 5 | 1% | 0 | 0% | 308 | 32% |
| **Minor-Low** | 26 | 3% | 4 | 0% | | 0% | 0 | 0% | 30 | 3% |
| **No FVL** | 446 | 47% | 83 | 9% | 16 | 2% | 5 | 1% | 550 | 58% |
| **Totals** | **807** | **85%** | **116** | **12%** | **23** | **2%** | **5** | **1%** | **951** | **100%** |

**Table 81 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 5 | 0% | 0 | 0% | 4 | 0% | 0 | 0% | 9 | 0% |
| **Major-High** | 18 | 1% | 4 | 0% | 0 | 0% | 1 | 0% | 23 | 1% |
| **Major-Low** | 132 | 5% | 15 | 1% | 5 | 0% | 0 | 0% | 152 | 6% |
| **Minor-High** | 609 | 23% | 83 | 3% | 22 | 1% | 1 | 0% | 715 | 26% |
| **Minor-Low** | 220 | 8% | 34 | 1% | 6 | 0% | 0 | 0% | 260 | 10% |
| **No FVL** | 1,096 | 41% | 316 | 12% | 125 | 5% | 8 | 0% | 1,545 | 57% |
| **Totals** | **2,080** | **77%** | **452** | **17%** | **162** | **6%** | **10** | **0%** | **2,704** | **100%** |

The map below illustrates the Low-Moderate Income percentage by Census Tract, with heat bubbles of where the FEMA IA applications are located based on the zip code location.

**Figure 35 LMI Populations and FEMA IA Applications by Zip Code for Escambia County**




## f. Impact on Public Housing Authorities

A Public Housing Authority (PHA) for the county does not exist. There is no known unmet need for PHAs that are operated by the cities.

## g. Unmet Housing Needs

FEMA IA was the primary data source that Escambia County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology, as summarized in previous sections. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To calculate total unmet need, received assistance is also summarized and subtracted from the estimated total loss, including resilience costs.

**Table 82 Total Estimated Loss by Damage Category**

| Data Source/ Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 9 | $689,040 |
| **Major-High** | 23 | $1760,880 |
| **Major-Low** | 152 | $1748,304 |
| **Minor-High** | 715 | $3,928,925 |
| **Minor-Low** | 260 | $421,460 |
| **No FEMA Verified Loss** | 1,545 | $2,504,445 |
| **Public Housing** | 0 | $0 |
| **Total** | **2,704** | **$11,053,054** |
| **+15% Resilience Costs** | | **$1,657,958** |
| **Total Estimated Loss with Resilience Costs** | | **$12,711,012** |

To ensure the housing repair assistance is factored into the housing unmet needs calculation, the following amounts were added together: FEMA IA repair and replacement, SBA Real Estate, and NFIP payment to determine the total housing assistance received. See below for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received.

**Table 83 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 350 | $1,885,233 |
| **NFIP Payments** | 2 | $29,383 |
| **SBA Loan Amounts** | Unknown | $1,561,900 |
| **Total Housing Assistance** | **352** | **$3,476,516** |

The total housing assistance was subtracted from the total housing unmet needs with resilience included to find a total housing unmet need of approximately $9.2 million as a result of Hurricane Sally. See below for the calculation.

**Table 84 Total Housing Unmet Need for Escambia County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $12,711,012 |
| **Total Housing Assistance** | -$3,476,516 |
| **Total Housing Unmet Need** | **$9,234,496** |

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Escambia County suffered infrastructure damage from Hurricane Sally only. Hurricane Sally damaged many roads and bridges specifically along Chavers Road, Damascus Road, Smith Creek Road, Wallace Road, Grissett Bridge Road, as well as in the northeastern part of the county that are still in need of repair. Damage at these locations were not initially reported in the FEMA PA request, as it was not evident immediately following the disaster and was later discovered during later inspections that debris pile ups lead to the degradation of the bridges. Additionally, the county jail was damaged and is still not fully repaired. Localized flooding in Brewton, East Brewton and Flomaton also occurred.

Based on feedback received from the County Engineer, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G, roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 85 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $1,487,336 | $0 | $0 | $1,487,336 |
| **B - Protective Measures** | $324,769 | $0 | $0 | $324,769 |
| **C - Roads and Bridges** | $1,235,971 | $166,856 | $291,689 | $1,694,517 |
| **E - Public Buildings** | $1,009,170 | $136,238 | $238,164 | $1,383,573 |
| **F – Public Utilities** | $17,927 | $2,420 | $4,231 | $24,579 |
| **G - Recreational/Other** | $70,127 | $9,467 | $16,550 | $96,145 |
| **Z - State Management** | $108,522 | $0 | $0 | $108,522 |
| **Total** | **$4,253,823** | **$314,982** | **$550,634** | **$5,119,439** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 86 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **A - Debris Removal** | $1,487,336 | $1,338,603 | $148,734 |
| **B - Protective Measures** | $324,769 | $292,292 | $32,477 |
| **C - Roads and Bridges** | $1,694,517 | $1,112,374 | $582,143 |
| **E - Public Buildings** | $1,383,573 | $908,253 | $475,319 |

| | | | |
|---|---|---|---|
| **F – Public Utilities** | $24,579 | $16,135 | $8,444 |
| **G - Recreational/Other** | $96,145 | $63,115 | $33,030 |
| **Z - State Management** | $108,522 | $108,522 | $0 |
| **Total** | **$5,119,439** | **$3,839,293** | **$1,280,146** |

Based on the analysis performed, there is a potential unmet need of approximately **$1.1 million** for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 87 Total Estimated Unmet Need Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Need Amount |
|---|---|---|---|---|
| **A - Debris Removal*** | $1,487,336 | $1,338,603 | $148,734 | $0 |
| **B - Protective Measures*** | $324,769 | $292,292 | $32,477 | $0 |
| **C - Roads and Bridges** | $1,694,517 | $1,112,374 | $582,143 | $582,143 |
| **E - Public Buildings** | $1,383,573 | $908,253 | $475,319 | $475,319 |
| **F – Public Utilities** | $24,579 | $16,135 | $8,444 | $8,444 |
| **G - Recreational/Other** | $96,145 | $63,115 | $33,030 | $33,030 |
| **Z - State Management*** | $108,522 | $108,522 | $0 | $0 |
| **Total** | **$5,119,439** | **$3,839,293** | **$1,280,146** | **$1,098,936** |

*CDBG-DR Funds are not used for PA costs in Categories A, B and Z.

## 4. Economic Impact & Needs

A summary of damage and impacts of Hurricane Sally is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricane Sally.

### Agricultural Impacts

The Escambia Farm Service Agency identified via survey, that because of Hurricane Sally at least 85% of row crops were lost. Specifically, 560 farms were affected, due to high winds, flash flooding and anywhere from 9-18" of rain over a short period. Over 80 farms had physical damage such as fence damage, cropland eroding, trees down, trees and debris in fields, timberland damage.

This is supported by USDA designating Escambia County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Sally to apply for emergency loans with the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). This natural disaster designation allows FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation or the refinance of certain debts.[49]

### a. Unmet Economic Needs

According to an analysis of the SBA Business loan data, applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss for all businesses of approximately $546,000, after accounting for an additional fifteen percent (15%) resilience

[49] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2020/usda-designates-two-alabama-counties-as-primary-natural-disaster-areas

costs, the County's total estimated economic impact is approximately $628,000. According to the SBA business report, the SBA provided $87,600 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $540,515 million.

**Table 88 Economic Unmet Need Summary**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| **$546,187** | **$81,928** | **$628,115** | **$87,600** | **$540,515** |

## D. Summary of Unmet Needs & Additional Considerations

### 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$10.8 Million** attributable to Hurricane Sally.

In summary, this analysis projects unmet needs as follows:

**Table 89 Summary of Total Unmet Needs**

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| Housing | $12,711,012 | $3,476,515 | $9,234,497 |
| Infrastructure | $5,119,439 | $3,839,293 | $1,098,936 |
| Economy | $628,115 | $87,600 | $540,515 |
| **Total** | **$18,458,566** | **$7,403,408** | **$10,873,948** |

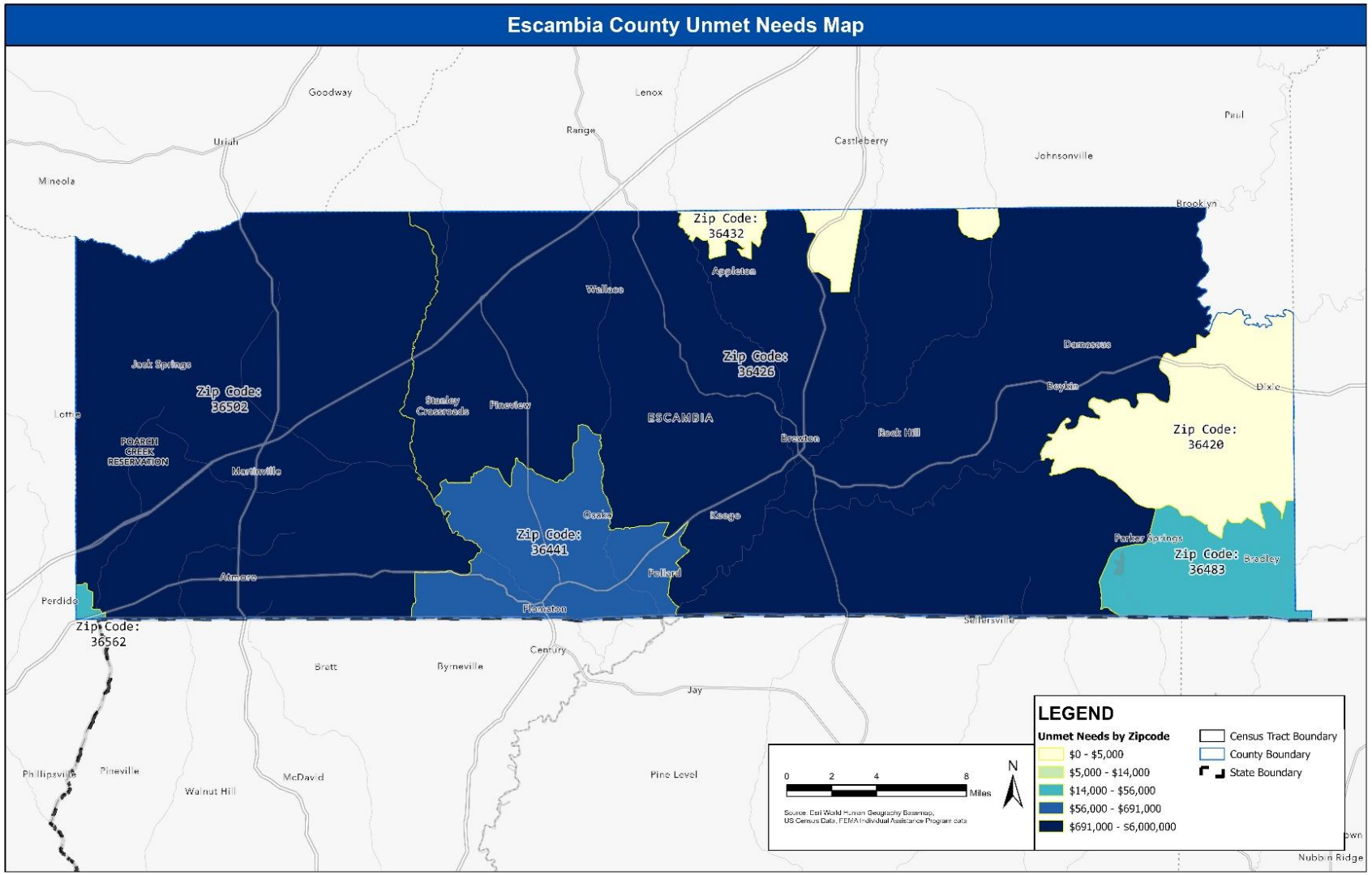
See below for a more detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code.

**Table 90 Summary of Total Unmet Needs**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36502** | $5,716,488 | $27,912 | $129,290 | $5,873,689 |
| **36426** | $2,878,496 | $1,020,703 | $327,436 | $4,226,634 |
| **36441** | $550,410 | $50,321 | $83,789 | $684,521 |
| **36562** | $55,825 | $0 | $0 | $55,825 |
| **36483** | $14,165 | $0 | $0 | $14,165 |
| **36401** | $12,639 | $0 | $0 | $12,639 |
| **36432** | $4,611 | $0 | $0 | $4,611 |
| **36420** | $1,864 | $0 | $0 | $1,864 |
| **Total** | **$9,234,497** | **$1,098,936** | **$540,515** | **$10,873,947** |

A map view of the total unmet need by zip code is on the following page.

**Figure 36 Escambia County Unmet Needs by Zip Code**

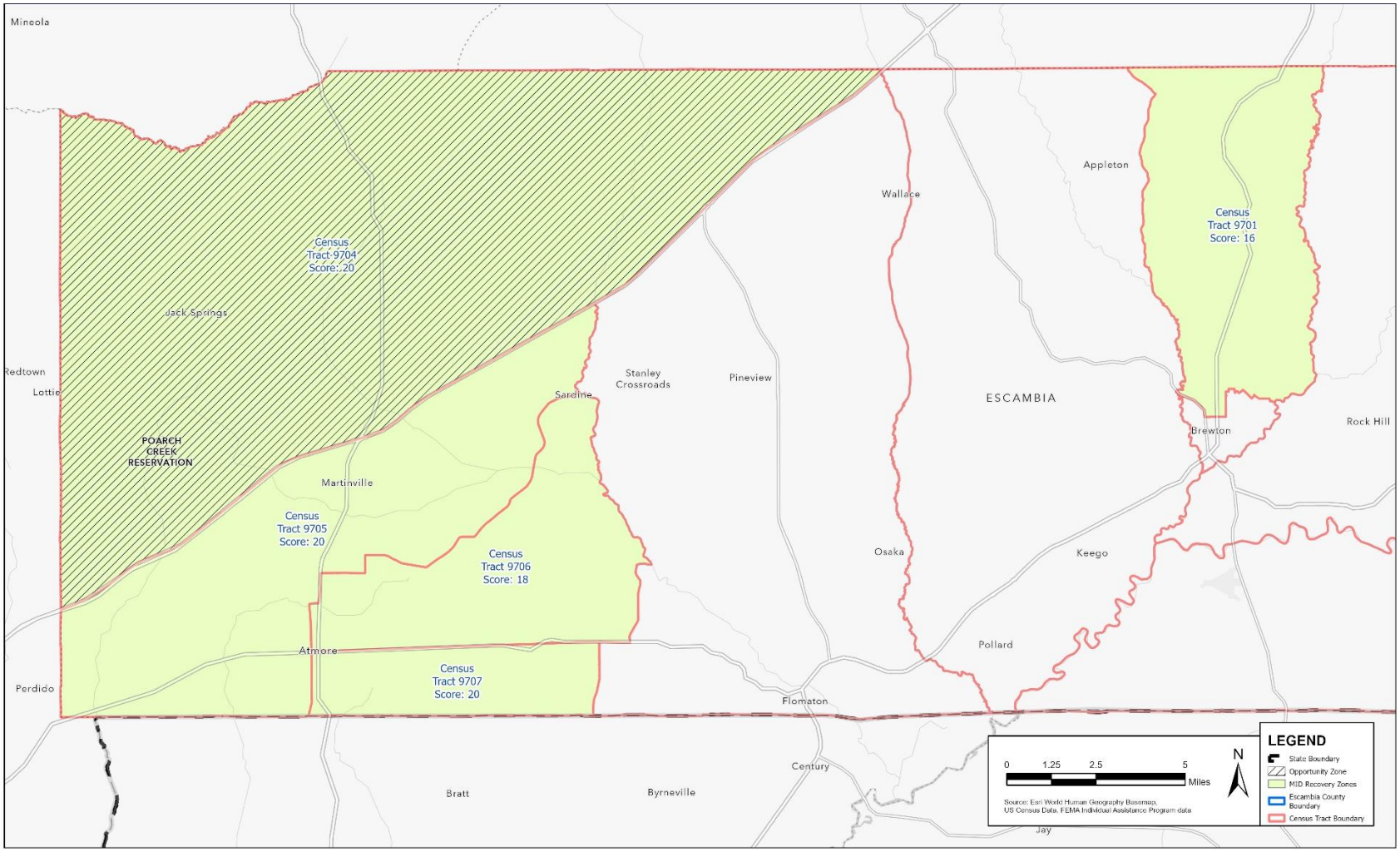


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Escambia County are shown in *Figure 37 MID Recovery Zones for Escambia County.* See Appendix B for the scores for each census tract in determining the MRZ.

**Figure 37 MID Recovery Zones for Escambia County.**




**Identified MID Recovery Zones:** Census Tracts: 9704, 9705, 9706, 9707 and 9701

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, 2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Plan, data from the National Oceanic Atmospheric Administration (NOAA) and FEMA, and stakeholder input was used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 15 disaster declarations for Escambia County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms/tornadoes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards is critical.

**Table 91 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date for Escambia County**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4563-AL** | 2020 | Hurricane | Hurricane Sally | $3,839,293 |
| **DR-4503-AL** | 2020 | Biological | Covid-19 Pandemic | No Data |
| **DR-4251-AL** | 2016 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, and Flooding | $508,237 |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, and Flooding | No Data |
| **DR-1870-AL** | 2010 | Severe Storm | Severe Storms and Flooding | $7,058,099 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $2,175,952 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $2,396,592 |
| **DR-1466-AL** | 2003 | Severe Storm | Severe Storms, Tornadoes, and Flooding | No Data |
| **DR-1250-AL** | 1998 | Hurricane | Hurricane Georges - 18 Sep 98 | No Data |
| **DR-1208-AL** | 1998 | Severe Storm | Severe Storms and Flooding | No Data |
| **DR-1070-AL** | 1996 | Hurricane | Hurricane Opal | No Data |
| **DR-861-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-598-AL** | 1979 | Hurricane | Hurricane Frederic | No Data |
| **DR-464-AL** | 1975 | Flood | Severe Storms & Flooding | No Data |
| **DR-369-AL** | 1973 | Tornado | Tornadoes & Flooding | No Data |

Source: OpenFEMA Data Sets, Disaster Declaration Summary[50] and Public Assistance Funded Project Details[51]

Historic weather patterns can be determined for Escambia County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 30 provides an outline of the number of recorded storm events from January 1950 to December 2023 for Escambia County.

[50] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[51] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

If the same event type occurred on the same date, only one event was recorded; however, the number of fatalities, injuries and damages were summed across the multiple events for a single day and event type. It must be noted that the information provided by NCEI may not paint the full picture of storm events in Escambia County, as the event is a partial record of other significant meteorological events and storm events may be recorded in the neighboring counties.

**Table 92 NCEI Storm Events Summary (1950 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Drought** | 2 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 30 | 0 | 0 | $3,148,000 | $0 |
| **Flood** | 2 | 0 | 0 | $767,000 | $0 |
| **Funnel Cloud** | 1 | 0 | 0 | $0 | $0 |
| **Hail** | 50 | 0 | 0 | $57,000 | $0 |
| **Heat** | 4 | 2 | 1 | $0 | $0 |
| **Hurricane (Typhoon)** | 4 | 0 | 0 | $400,000 | $0 |
| **Lightning** | 5 | 2 | 0 | $23,000 | $0 |
| **Thunderstorm Wind** | 131 | 0 | 13 | $3,018,000 | $0 |
| **Tornado** | 27 | 0 | 25 | $8,376,000 | $0 |
| **Tropical Storm** | 3 | 0 | 0 | $0 | $0 |
| **Winter Storm** | 2 | 0 | 0 | $0 | $0 |
| **Winter Weather** | 1 | 0 | 0 | $0 | $0 |
| **Grand Total** | **262** | **4** | **39** | **$15,789,000** | **$0** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[52]

## 2. Greatest Risk Hazards

The *2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized in High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- High: Probable major damage in a 1-10 Year Period
- Medium: Probable major damage in a 10-50 Year Period
- Low: Probable major damage in a 100 Year Period
- Very Low: No probable major damage in a 100 Year Period

The *2021-2026 Division S Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan* identified high winds from strong severe storms, hurricanes, and tornadoes, and flooding as the most significant risks; however, wildfires and dam failures were also identified as great risks.

[52] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

Table 93 Greatest Hazards for Escambia County

| Hazard | Risk Rating | Locations Identified | Associated risk |
|---|---|---|---|
| **Dam Failure** | Medium | WJ Ellis/Bill's Lake Dam is classified as high risk; Marshall Patterson, Randolph Jernigan #1 and #2, Odie Sherrer, and Little River State Park are classified as significant risk | Flooding of several feet, mainly agricultural areas, infrastructure, and isolated structures would be impacted, and loss of life along with economic, environmental, and lifeline losses could occur. |
| **Flooding** | High | Areas along creeks and rivers, and low-lying areas. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged or non-existent drainage infrastructure. Brewton is especially susceptible due to the convergence of Murder Creek and Burnt Corn Creek. The Conecuh River is a major river that bisects the County | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Hurricanes and Coastal Storms** | High | County-wide with the greatest risk in the central and western portions of the county | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Severe Storms** | High | County-wide with the greatest risk in the central and western portions of the county | Can cause crop, property damage, injury, and loss of life |
| **Tornado** | High | County-wide with the greatest risk in the central and western portions of the county | Can cause crop, property damage, injury, and loss of life |
| **Wildfires** | Medium | County-wide | Can cause crop and property and infrastructure damage, threated health due to poor air quality and result in injury and loss of life |

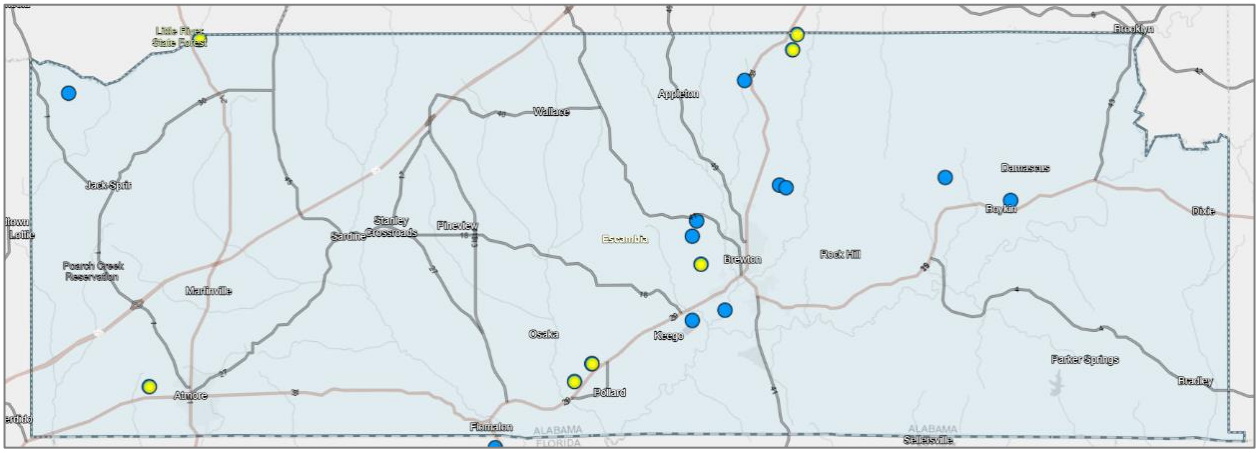
While extreme cold temperatures are uncommon due to Alabama's mild winter climate, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather and storms, and ice storms which can cause downed trees or result in vehicle accidents. Since 1950, 3 cold weather-related events have occurred in Escambia County

## b. Dam Failure

According to the National Inventory of Dams, Escambia County has 18 known dams. Six of these dams are identified as having a significant hazard potential and 1 (WJ Ellis Dam) has having a high hazard potential. The extent of a dam failure may vary based on the storage of the affected dam and its proximity to infrastructure and structures. For larger dams or dams classified with a high hazard potential, the extent of damage could be much greater and lead to loss of life along with economic, environmental, and community lifeline losses.

Historically (until June 7, 2023), Alabama did not have a dam safety program[53] which led to Alabama being disqualified from accessing federal infrastructure funds for dam-related inspections, training, and rehabilitation. Because of this, dams in the county may not have an accurate risk classification and they may not have received adequate funding to prevent and mitigate potential dam failures. This leads to a level of unknown risk associated with each dam. Due to the number dams with high to significant potential hazard and the predicted damages, dam failure is classified as a high risk.

**Figure 37 Significant and High Hazard Potential Dams**




Source: National Inventory of Dams, https://nid.sec.usace.army.mil/

## c. Flooding

The county has experienced past flash and riverine flooding events. As development increases in the county and the drainage infrastructure ages, flash flooding events are predicted to be more frequent and intense. Historically, flood events have led to property and crop damage.

Enduring the consequences of repetitive flooding can put a strain on residents and on state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there are **42 Repetitive Loss Properties** and **6 Severe Repetitive Loss Properties** in Escambia County.

According to the *2023 Alabama State Hazard Mitigation Plan*. The most common type of flooding event in Escambia County is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 36 | 3 | 0 | 39 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

Brewton has the greatest risk of flooding events as it is situated in a regulatory floodway between Murder Creek and Burnt Corn Creek as shown in *Figure 39 Escambia County FEMA National Risk Index*. Of the 7 counties included in this LRP, the Brewton area is the only area with a relatively high riverine flooding risk as shown in *Figure 6 Riverine Flooding Risk in MID Counties by Census Tract.*

[53] https://www.alabama-asce.org/alabama-establishes-first-state-dam-safety-program/

### d. Hurricanes and Coastal Storms

As shown in Tables 92 and 93, hurricanes have historically made landfall in the region and have impacted Escambia County. Due to the county's proximity to the Gulf of Mexico, hurricanes and coastal storms continue to be a high risk for Escambia County. *Figure 4 Hurricane Risk in MID Counties by Census Tract,* in section VII.D, indicates that the majority of Escambia County has a Very High Hurricane Risk. Additionally, analysis performed by Florida State University's Meteorology Department, indicates that the probability of a hurricane of any intensity passing over Alabama is between 60% and 80%[54].

Any increased intensities in the future are likely to exacerbate the county's future vulnerability, given that intense hurricanes and coastal storms have enormous potential to devastate the physical, agricultural, economic, and sociocultural infrastructure of the county.

### e. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. Since 1950, NCEI has recorded 189 hail, heavy rain, lightning, strong wind, thunderstorm windstorms, and tropical depression and storm events resulting in $2.6 million in damage, as shown in Table 93. Since this event type has occurred regularly over the years resulting in damage, and severe storms are expected to continue regularly, Escambia County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the majority of the county is relatively low, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract.* For strong winds, the majority of the county has a relatively moderate to relatively high risk with the highest risk generally in the western portion on the county, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

### f. Tornadoes

Tornadoes are Escambia County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Between 1950 and 2022, tornadoes caused 25 injuries, and more than $8.3 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract,* the majority of Escambia County has a relatively high to very high tornado risk rating.

### g. Wildfires

According to the Alabama Forestry Commission's Current Wildfire Totals summary[55], between 2000 and June 19, 2024, there were 856 total wildfires in Escambia County. Those fires burned 12,954 acres. That translates to a yearly average of 36 fires and 551 acres burned per year. The largest fire recorded in the county between these years was 428 acres and occurred in 2011. Over 100 wildfires occurred in 2011, burning 3,800 acres that year. According to *Figure 10 Wildfire Risk in MID Counties by Census Tract*, Escambia County has a relatively moderate risk for wildfire compared to the rest of the country.

[54] https://moe.met.fsu.edu/tcprob/al.php
[55] https://forestry.alabama.gov/pages/fire/totals.aspx

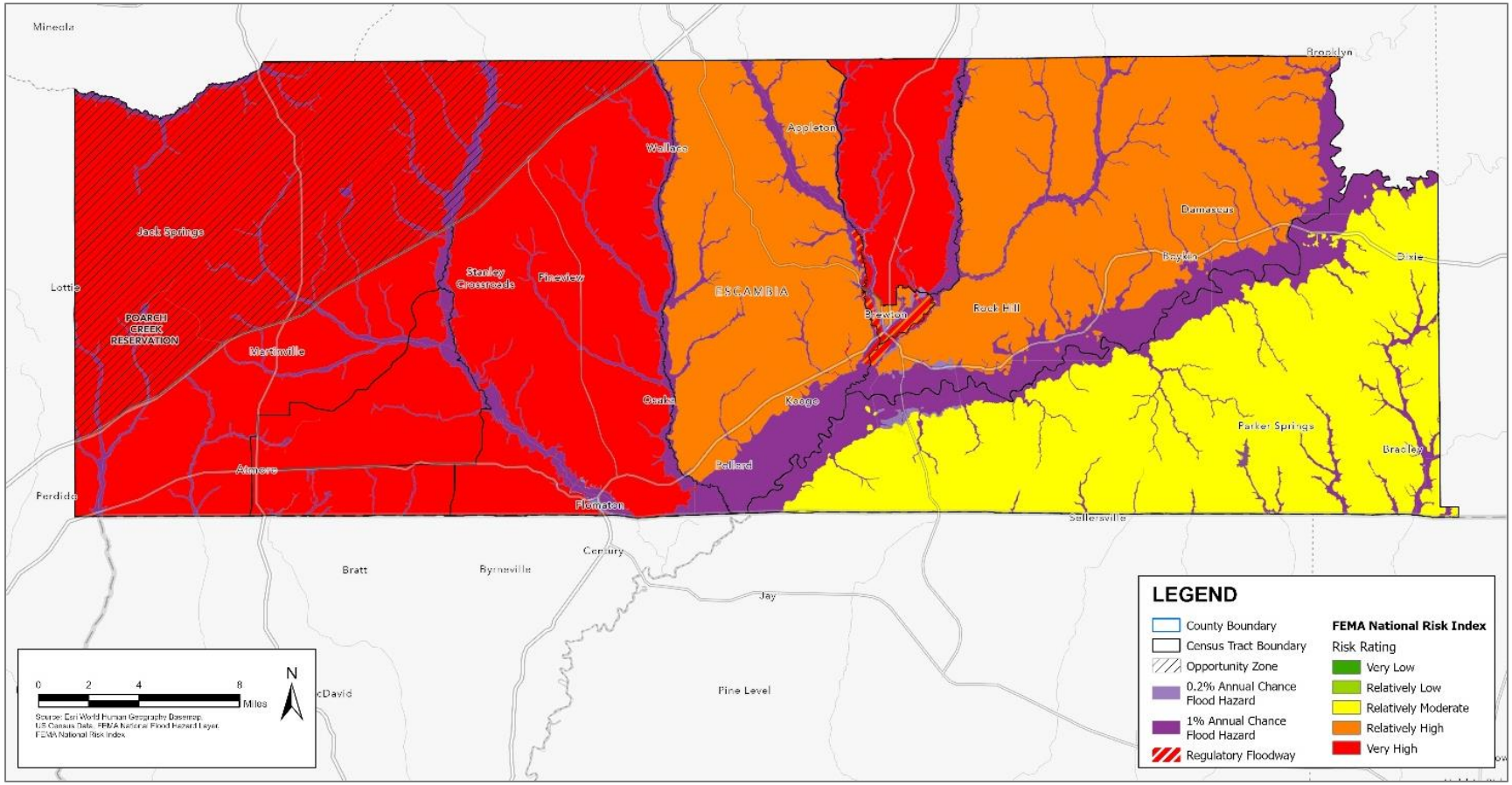
## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

We can see that there are parts of the county with a Relatively High or Very High-risk National Risk Index score as shown in Figure 39. Hazard specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

**Figure 38 Escambia County FEMA National Risk Index**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| Dam Failure | Very Low | Critical | Small | Less than 4 hours |
| Flooding | High | Critical | Moderate | Less than one week |
| Hurricanes (High Winds) | Medium | Catastrophic | Large | Less than34 hours |
| Tornadoes (High Winds) | High | Critical | Small | Less than 6 hours |
| Severe Storms (High Winds) | High | Minor | Moderate | Less than 6 hours |
| Wildfires | High | Minor | Moderate | Less than one week |

#### Probability defined:

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

#### Impact defined:

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

#### Location Extent defined:

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact from the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

In order to address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Rental Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 7 responses were received. Of those respondents the majority were homeowners of stick-built homes (5). Respondents said that they experienced a moderate amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and flooding. They stated that this resulted in electricity outages, and damage to bridges. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 65% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, about 50% occupied apartments, mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds, flooding, and other extreme weather conditions. Additionally, 85% for the renter population that applied for FEMA assistance reported making less than $30,000 a year.

During the Planning Charette and the Public Meetings, Escambia County did not identify for housing recovery projects. In both meetings, attendees expressed that they did not see significant

housing impact from the storm, and an overwhelming desire to use all of their funds for infrastructure purposes. However, the survey asks people to identify housing projects that they would like to see completed, if available. Of the survey responses received they stated the following:

- 4 respondents stated interest in development of Affordable Multi-family housing, 0 of whom ranked it as top priority.
- 3 respondents stated interest in a First Time Homeownership Assistance Program, 2 of whom ranked it as their top priority.
- 2 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing multi-family Housing, 1 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Affordable Multifamily Housing** | **Strategy** | Housing Recovery | • Dallas County identified the need to create and rehabilitate affordable multifamily housing.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | LOW |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • The county would like to provide opportunities for renters to purchase more secure housing, with an emphasis on supporting first-time homebuyers located within a MID Recovery Zone.<br>• Intended to pay a portion of the cost of purchasing an eligible new home for eligible applicants, which may be based on need, household size, and the cost of a home. | LOW |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Other Funding Sources Identified** | No, Conceptual Phase | • Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Rehabilitation to Multi-Family Housing** | **Strategy** | Housing Recovery | • Provide repair and rehabilitation to existing multi-family properties damaged by Hurricanes Sally and Zeta or to make more sanitary, safe, and secure housing availability to those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | LOW |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up, damage to roads and bridges due to flooding, and damage to public buildings. Flooding events led to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities.

Surveys were distributed at Dallas County's public meetings. The top results of the surveys are as follows:

- 4 respondents stated interest in improvements to bridges and transportation infrastructure, 3 of whom ranked it as their top priority.
- 3 respondents stated interest in a program that addresses Stormwater infrastructure and management, 1 of whom ranked it as top priority.

- 3 respondents stated interest in Community Center rehabilitation or construction, 0 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Flood Control Improvements** | **Strategy** | Mitigation | • The county has identified the need to implement flood control improvement projects in areas subject to re-occurring flooding.<br>• During Sally, many roads were heavily flooded which caused disruptions to many community lifelines throughout the county.<br>• Addresses desire of public participants to address stormwater infrastructure<br>• Unmet/Mitigation needs - Addresses risk of and resulting damages from flooding. | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |
| | **Administering Entity Identified** | County Engineer | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Bridge/Road Repairs & improvements** | **Strategy** | Recovery & Mitigation | • The county has identified the need for bridge and road repair and improvement projects. Several bridges were damaged as result of debris pile ups during and following Hurricane Sally.<br>• Unmet/Mitigation needs - mitigate against future flooding, roadways also need to be improved (raised or additional culverts added). | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zones or MID County - Mitigation | | |
| | **Administering Entity Identified** | County Engineer | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| Rehabilitation of Public Buildings | **Strategy** | Recovery | • An initial need identified for rehabilitation of the public buildings is with the county jail in Brewton. This building was damaged by Hurricane Sally and the roof is still in need of repair. Ideally, the roof will be repaired and hardened to better withstand future storms and will be built with energy efficiency in mind.<br>• Unmet need – address direct damage caused by the storms that has not yet been repaired. | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | Yes, existing O&M budget | | |

## 4. Economic Recovery Strategies

From the economic unmet needs analysis, it was determined that there was not a significant economic impact or remaining unmet need in Escambia County. Furthermore, during the Planning Charette and the Public Meetings, Escambia County did not identify a need for economic recovery assistance projects. In both meetings, attendees expressed that they did not experience significant economic impact from the storm, and an overwhelming desire to use all of their funds for infrastructure purposes. However, the survey asks people to identify economic projects that they would like to see completed, if available. Of the survey responses received they stated the following:

- 3 respondents stated interest in Job Creation, 2 of whom ranked it as their top priority.
- 3 respondents stated interest in workforce training and development, 1 of whom ranked it as top priority.
- 3 respondents stated interest in small business grants and loans, 0 of whom ranked it as top priority.
- 3 respondents stated interest in mitigation improvements to commercial areas, including streetscapes, lighting, sidewalks, and other physical improvements, 0 of whom ranked it as their top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Workforce training and development** | **Strategy** | Recovery, Mitigation | • Addresses public desire for workforce training and development.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more economically stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Small Business Grants and Loans program** | **Strategy** | Recovery or Mitigation | • Business owners recovering from disasters are often in need of capital, via grants or loans, to be able to bounce back or expand their businesses. The county will bolster the grant and loan resources and strengthen the small business community by creating via said program.<br>• Addresses public desire for small business loan and grant programs, as well as job creation.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Improvements to Commercial Areas** | **Strategy** | Recovery, Mitigation | • Rehabilitation and improvements to public infrastructure, businesses, and facades in commercial districts to stimulate economic growth and investment for areas that experienced an economic impact from Hurricanes Sally and Zeta<br>• Addresses public desire for investment in commercial areas. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)(14), 105(a)(15) | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, potentially Coastal Alabama CC | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Project Amount Identified** | No | • Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | |
| | **Other Funding Sources Identified** | No | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Not identified | | |

# XI. Marengo County

## A. Introduction

Marengo County is located within the west-central portion of Alabama and is at the center of the West Alabama Corridor Highway project. This project's goal is to connect Tuscaloosa to Mobile which will drive traffic and people through Marengo, which will hopefully lead to new economic opportunities within the county. Demopolis will be home to the Alabama School of Health Sciences, a residential high school focused on developing the state's healthcare workforce. The school is slated to open in 2026 and bring an economic boost to the area.

According to the American Community Survey (ACS) 2022 5-Year Estimates[56], Marengo County has a population of 19,180, a 0.7% decrease from 19,321 in 2019. The demographic breakdown shows most residents (51%) are Black or African American, followed by 45% identifying as White. Housing in Marengo County includes 9,834 occupied units, with 59% being single-family homes and 29% mobile homes. In total, 95% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is high, with 68% of residents owning their homes and 32% renting. In 2020, 45% of the county's residents were considered LMI compared to 40% in 2022[57].

Marengo County experienced damage Hurricane Zeta which mainly resulted in downed trees that cut off power to communities and damaged homes and damaged homes which are still in need of repair. Additionally, due to lack of sheltering options in the County, many impacted households did not have a safe place to stay or gather after the storm.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Marengo County presents unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see table below). Over time, ACCA and the county reserve the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 94 Total Estimated Unmet Need for Marengo County**

| | Estimated Impact | Amount of Funds from other sources | Total Unmet Need |
|---|---|---|---|
| Housing | $3,075,657 | $888,091 | $2,187,566 |
| Infrastructure | $2,014,370 | $1,813,047 | $0 |
| Economy | $82,23 | $0 | $82,236 |
| **Total** | **$5,090,027** | **$2,701,138** | **$2,269,802** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[56] https://data.census.gov/ - Tables B02001, B25024, B25033

[57] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Marengo County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated because of impacts from the 2020 storms. The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, among other sources, to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. The unmet needs assessment focuses on Marengo County's impacts, with specific sections detailing the needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

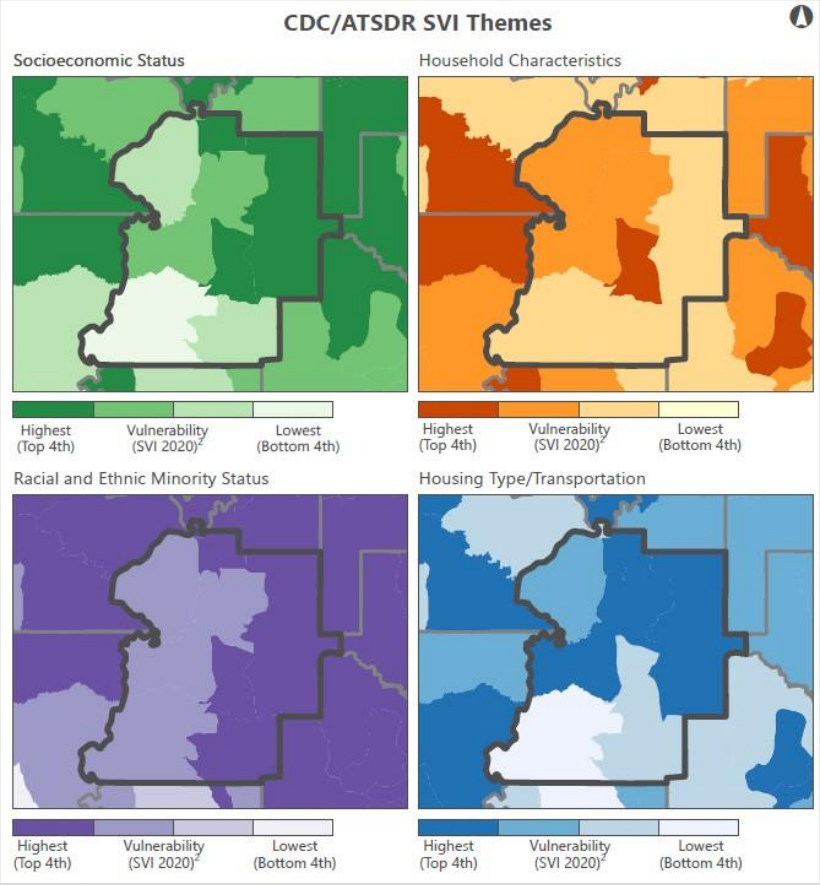
The demographic profile of Marengo County has not changed much since the state of Alabama's 2020 Disaster Recovery Action Plan was published and specific demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county. An overview of vulnerable and LMI populations is provided below.

**Vulnerable Populations**

Marengo County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Marengo County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Marengo County has one identified disadvantages area: Opportunity Zones. Marengo County does not have any Promise Zones, R/ECAP, Neighborhood Revitalization Strategy Areas, or Tribal areas within the county.

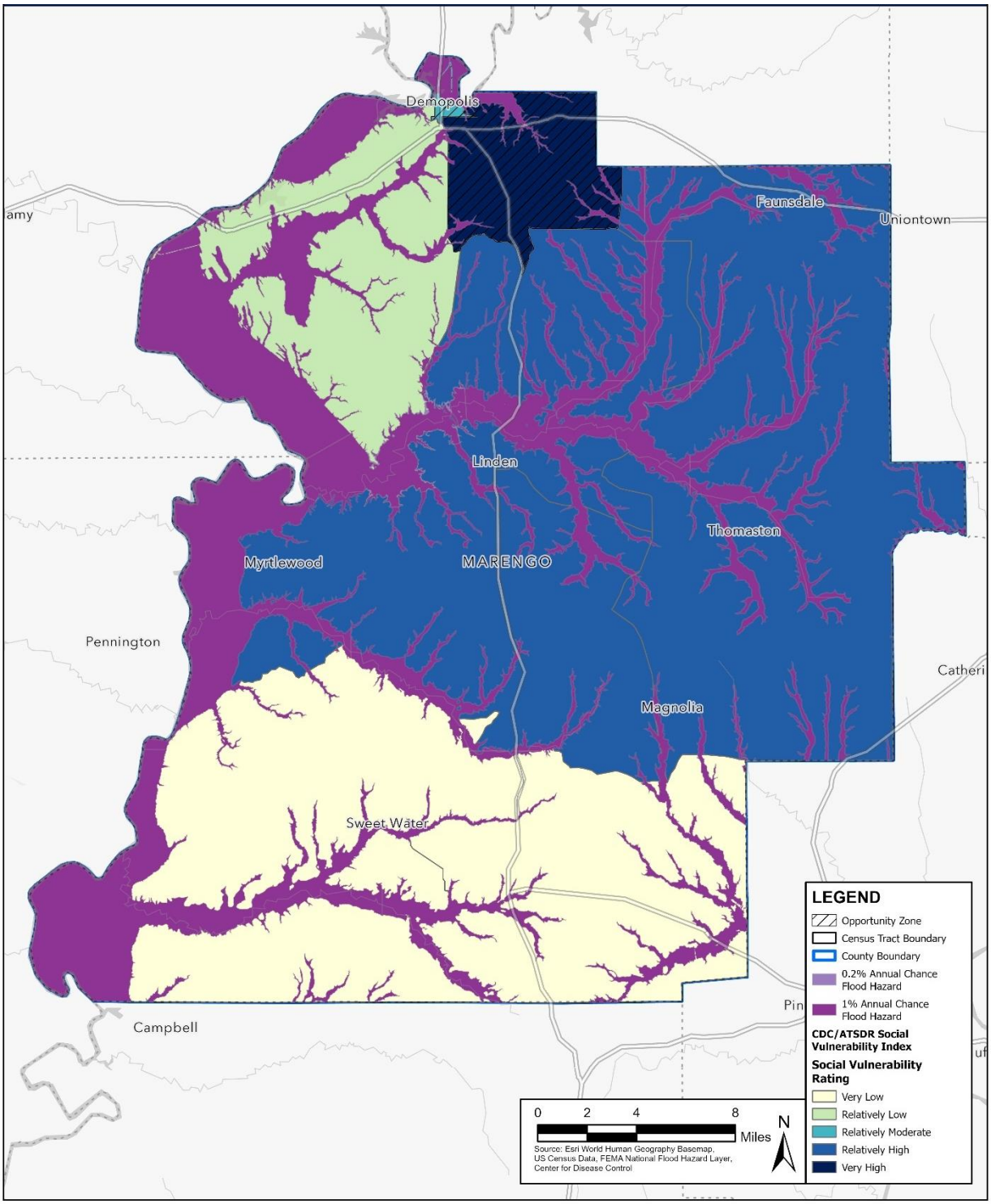
Figure 40 show cases the 2020 vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

**Figure 39 Marengo County SVI Themes**




The map below provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the Very High SVI ratings and where the Opportunity Zones is located.

**Figure 40 Marengo County Vulnerability Map**



### LMI Populations

As highlighted in the table below, four of the eight census tracts within Marengo County have more than 50% of the population that is considered LMI which also have a relatively low to very high SVI Rating.

Generally, as is the case with Marengo County with the except of census tract 972, high social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 95 Marengo County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[58] | SVI Rating |
|---|---|---|
| **9729.01** | **50.31%** | **Relatively Moderate** |
| **9729.02** | **57.59%** | **Very High** |
| 9730.01 | 43.50% | Relatively High |
| 9730.02 | 47.63% | Relatively High |
| **9731** | **57.86%** | **Relatively High** |
| **9732** | **50.10%** | **Very Low** |
| 9733 | 37.11% | Very Low |
| 9734 | 26.29% | Relatively Low |

[58]HUD GIS Helpdesk, Low to Moderate Income Population by Tract Open dataset. Published July 31, 2023; updated August 14, 2024.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

For each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the below tables outlines the total number of damaged properties population with documented damages. The information in the below tables outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 96 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| **Major-High** | 2 | 0.2% | 0 | 0.0% | 2 | 0.2% |
| **Major-Low** | 15 | 1.8% | 5 | 0.6% | 20 | 2.4% |
| **Minor-High** | 203 | 24.5% | 46 | 5.5% | 249 | 30.0% |
| **Minor-Low** | 123 | 14.8% | 3 | 0.4% | 126 | 15.2% |
| **No FVL** | 370 | 44.6% | 63 | 7.6% | 433 | 52.2% |
| **Total** | **713** | **85.9%** | **117** | **14.1%** | **830** | **100.0%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan. This calculation was used to determine the estimated total loss or support for these three damage categories. The tables below outline the total number of properties damaged for homeowners and renters.

Table 97 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 123 | $1,621 | $199,383 |
| **Minor-High** | 203 | $5,495 | $1,115,485 |
| **Major-Low** | 15 | $11,502 | $172,530 |
| **Total** | **341** | **N/A** | **$1,487,398** |

Table 98 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 3 | $1,621 | $4,863 |
| **Minor-High** | 46 | $5,495 | $252,770 |
| **Major-Low** | 5 | $11,502 | $57,510 |
| **Total** | **54** | **N/A** | **$315,143** |

Table 99 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 126 | $1,621 | $204,246 |
| **Minor-High** | 249 | $5,495 | $1,368,255 |
| **Major-Low** | 20 | $11,502 | $230,040 |
| **Total** | **395** | **N/A** | **$1,802,541** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and require reconstruction. To determine the replacement cost of the home, Marengo County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[59]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided in below.

Table 100 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $128,826 | $85,025 | 2 | $170,050 |
| **Severe** | $128,826 | $85,025 | 0 | $0 |
| | **Total** | | **2** | **$170,050** |

Of the 2 major-high and severely damaged homes, no renter occupied dwellings are classified as Major-High or Severe.

[59] Marengo County Home Values, https://www.zillow.com/home-values/1917/marengo-county-al/

### FEMA IA Applications without FEMA Verified Loss

Marengo County also accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner-occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter-occupied dwellings. Due to the COVID-19 pandemic and other reasons, inspections never physically took place, or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Marengo counted applications with no FEMA Verified Loss and multiplied them by the average value for minor-low damage per SBA verified property loss provided in the state of Alabama's 2020 Disaster Recovery Action Plan. The results of these calculations are provided in the table below:

**Table 101 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 370 | $1,621 | $599,770 |
| **Renter** | 63 | $1,621 | $102,123 |
| **Total** | **433** | **$1,621** | **$701,893** |

## c. Impacts of Insurance (HOI and NFIP)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See the table below for flood-damaged properties by damage category and occupancy type.

**Table 102 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 0 | 2 | 8 | 5 | 2 | 0 | 17 |
| **Renter** | 0 | 0 | 6 | 2 | 0 | 0 | 8 |
| **Total** | **0** | **2** | **14** | **7** | **2** | **0** | **25** |

**Flood Damage and Insurance:** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP) as shown in the table below. In total, **100 percent** of the flood-affected homeowner population is reported to not carry flood insurance per the FEMA IA data.

**Table 103 Homeowner Flood-Damaged Properties and NFIP Counts**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 2 | 12% |
| **Major-Low** | 0 | 0% | 5 | 29% |
| **Minor-High** | 0 | 0% | 8 | 47% |
| **Minor-Low** | 0 | 0% | 2 | 12% |
| **No FVL** | 0 | 0% | 0 | 0% |
| **Totals** | **0** | **0%** | **17** | **100%** |

**Wind Damage and Insurance (HOI):** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of households reported not to carry a standard hazard homeowners insurance policy (HOI) that would otherwise be expected to offset documented losses. In total, 78 percent of the wind-impacted homeowner population is reported not to carry hazard insurance as shown below.

**Table 104 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 370 | 121 | 195 | 10 | 0 | 0 | 696 |
| **Renter** | 63 | 3 | 40 | 3 | 0 | 0 | 109 |
| **Total** | **433** | **124** | **235** | **13** | **0** | **0** | **805** |

**Table 105 Homeowner Wind-Damaged Properties and HOI Counts**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% |
| **Major-Low** | 0 | 0% | 10 | 1% |
| **Minor-High** | 16 | 2% | 179 | 26% |
| **Minor-Low** | 13 | 2% | 108 | 16% |
| **No FVL** | 126 | 18% | 244 | 35% |
| **Totals** | **155** | **22%** | **541** | **78%** |

## d. Impact based on Residence Type

Below are FEMA IA applicants by housing type. The highest number of applicants came from Mobile Home units (64%) and housing/duplex units (33%).

**Table 106 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 0 | 0% | 9 | 1% | 9 | 1% |
| **Assisted Living Facility** | 0 | 0% | 1 | 0% | 1 | 0% |
| **House/Duplex** | 216 | 26% | 60 | 7% | 276 | 33% |
| **Mobile Home** | 485 | 59% | 42 | 5% | 527 | 64% |
| **Other** | 9 | 1% | 4 | 1% | 13 | 2% |
| **Townhouse** | 1 | 0% | 0 | 0% | 1 | 0% |
| **Travel Trailer** | 2 | 0% | 1 | 0% | 3 | 0% |
| **Total** | **713** | **86%** | **117** | **14%** | **830** | **100%** |

The below table shows FEMA IA flood-damaged properties by housing type who had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, 0**%** of the flood-affected population are reported to carry an NFIP policy per the FEMA IA data.

**Table 107 Flood Damaged Properties by Residence Type with NFIP**

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **Apartment** | 0 | 0 | 0% |
| **House/Duplex** | 7 | 0 | 0% |
| **Mobile Home** | 10 | 0 | 0% |
| **Total** | **17** | **0** | **0%** |

The below table shows FEMA IA wind-damaged properties by housing type who had Homeowner's insurance. As indicated in the overview of wind-damaged properties, 22**%** of the affected population are reported to carry homeowner's insurance policy per the FEMA IA data.

**Table 108 Wind Damaged Properties by Residence Type with HOI**

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Apartment** | 0 | 0 | 0% |
| **Assisted Living Facility** | 0 | 0 | 0% |
| **House/Duplex** | 209 | 76 | 29% |
| **Mobile Home** | 475 | 74 | 15% |
| **Other** | 9 | 5 | 39% |
| **Townhouse** | 1 | 0 | 0% |
| **Travel Trailer** | 2 | 0 | 0% |
| **Total** | **696** | **155** | **22%** |

Total estimated losses have been summarized by residence type.

**Table 109 Total Estimated Loss by Residence Type**

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 9 | $22,337 |
| **Assisted Living Facility** | 1 | $1,621 |
| **House/Duplex** | 276 | $956,292 |
| **Mobile Home** | 527 | $1,666,677 |
| **Other** | 13 | $21,073 |
| **Townhouse** | 1 | $1,621 |
| **Travel Trailer** | 3 | $4,863 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a LMI calculation, as income was categorized by general ranges. To summarize the impact of storms on households based on income, four income groupings are provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Zeta, with 81% of the total impacted population making $30,000 or less.

**Table 110 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 2 | 0% | 0 | 0% | 0 | 0% | 2 | 0% |
| **Major-Low** | 14 | 2% | 0 | 0% | 1 | 0% | 0 | 0% | 15 | 2% |
| **Minor-High** | 174 | 24% | 25 | 4% | 4 | 1% | 0 | 0% | 203 | 28% |
| **Minor-Low** | 114 | 16% | 7 | 1% | 2 | 0% | 0 | 0% | 123 | 17% |
| **No FVL** | 269 | 38% | 77 | 11% | 23 | 3% | 1 | 0% | 370 | 52% |
| **Totals** | **571** | **80%** | **111** | **16%** | **30** | **4%** | **1** | **0%** | **713** | **100%** |

**Table 111 Gross Income by Damage Level for Renters Only**

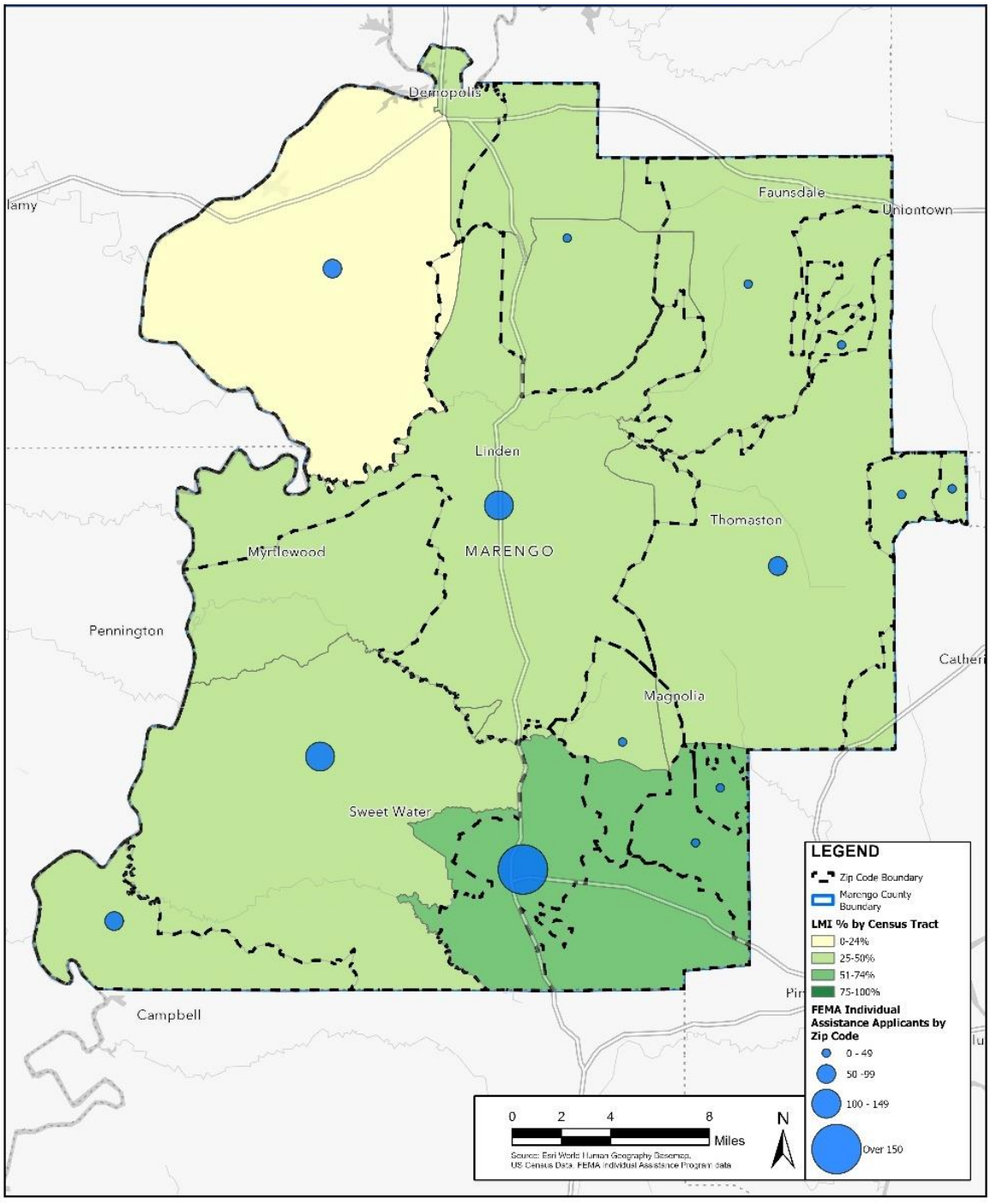
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 3 | 3% | 2 | 2% | 0 | 0% | 0 | 0% | 5 | 4% |
| **Minor-High** | 39 | 33% | 6 | 5% | 1 | 1% | 0 | 0% | 46 | 39% |
| **Minor-Low** | 3 | 3% | 0 | 0% | 0 | 0% | 0 | 0% | 3 | 3% |
| **No FVL** | 53 | 45% | 9 | 8% | 1 | 1% | 0 | 0% | 63 | 54% |
| **Totals** | **98** | **84%** | **17** | **15%** | **2** | **2%** | **0** | **0%** | **117** | **100%** |

**Table 112 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 2 | 0% | 0 | 0% | 0 | 0% | 2 | 0% |
| **Major-Low** | 17 | 2% | 2 | 0% | 1 | 0% | 0 | 0% | 20 | 2% |
| **Minor-High** | 213 | 26% | 31 | 4% | 5 | 1% | 0 | 0% | 249 | 30% |
| **Minor-Low** | 117 | 14% | 7 | 1% | 2 | 0% | 0 | 0% | 126 | 15% |
| **No FVL** | 322 | 39% | 86 | 10% | 24 | 3% | 1 | 0% | 433 | 52% |
| **Totals** | **669** | **81%** | **128** | **15%** | **32** | **4%** | **1** | **0%** | **830** | **100%** |

The map below illustrates the Low-Moderate Income percentage by Census Tract, with heat bubbles of where the FEMA IA applications are located based on the zip codes.

**Figure 41 LMI Populations and FEMA IA Applications by Zip Code for Marengo County**




## f. Impact on Public Housing Authorities

A Public Housing Authority for the county does not exist. There are PHAs in Linden and Demopolis; there is no known unmet need for these PHAs.

## g. Impact on Homeless Populations

The impact of natural disasters on the housing population and people experiencing sheltered homelessness is very different from the impact on people experiencing unsheltered homelessness.

When a natural disaster damages a housing unit, its inhabitants can hypothetically be made whole by insurance or FEMA. When a natural disaster damages a shelter or broader infrastructure, beds can be rendered uninhabitable, but eventually, those beds can be regained via repair and recovery operations.

For people experiencing unsheltered homelessness (e.g. living on the streets), however, the impact is more difficult to see. A natural disaster cannot remove housing or shelter from a person without housing or shelter; instead, it destroys future housing opportunities. One of the primary barriers to permanent housing in any geography is a lack of affordable housing. When a natural disaster damages or destroys an area's affordable housing, it creates a housing cost and availability crisis that prevents people experiencing homelessness from achieving and stabilizing permanent housing.

**Alabama Balance of State CoC**

The Alabama Balance of State CoC serves 37 rural Alabama Counties, ensuring chronic under-counting of homeless populations in rural counties. According to the *2023 AHAR: Part 1 - PIT Estimates of Homelessness in the U.S.*[60], the Alabama Balance of State CoC counted 283 sheltered and unsheltered homeless persons in 2023 and 140 Emergency Sheltered persons. Marengo County is one of the counties that makes up this CoC and does not have a homeless shelter located within the county, which leads to chronic under-serving of people in need of sheltering pre and post storms. The county struggled to shelter people who lost housing due to Hurricane Zeta, and the housing and shelter crisis will only increase as additional disasters hit the area.

To provide support for those experiencing homelessness, Marengo County will need to:

- create new shelter options which include surge capacity for emergency shelter beds required to shelter people displaced disasters,
- create outreach and drop-in centers required to serve people experiencing unsheltered homelessness; and
- hire outreach workers and resource navigators to ensure people who are imminently at risk of homelessness are diverted back to permanent housing, including via homelessness prevention direct assistance.

## h. Summary of Housing Impacts

FEMA IA was the primary data source that Marengo County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology, as summarized in previous sections. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To

[60] https://www.huduser.gov/portal/datasets/ahar/2023-ahar-part-1-pit-estimates-of-homelessness-in-the-us.html

calculate the total unmet need, received assistance is also summarized and subtracted from the estimated total loss, including resilience costs.

**Table 113 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 0 | $0 |
| **Major-High** | 2 | $170,050 |
| **Major-Low** | 20 | $230,040 |
| **Minor-High** | 249 | $1,368,255 |
| **Minor-Low** | 126 | $204,246 |
| **No FEMA Verified Loss** | 433 | $701,893 |
| **Public Housing** | 0 | $0 |
| **Total** | **830** | $**2,674,484** |
| **+15% Resilience Costs** | | **$401,173** |
| **Total Estimated Loss with Resilience Costs** | | **$3,075,657** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA repair and replacement, SBA Real Estate[61] and NFIP payment amounts were added together to get the total housing assistance received. See below for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received.

**Table 114 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 195 | $765,091 |
| **NFIP Payments** | 0 | $0 |
| **SBA Loan Amounts** | Unknown | $123,000 |
| **Total Housing Assistance** | **195** | **$888,091** |

The total housing assistance was subtracted from the total housing unmet needs with resilience included to determine the total housing unmet need of approximately $2.1 million as a result of Hurricane Zeta. See Table 116 for the calculation.

**Table 115 Total Housing Unmet Need for Marengo County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $3,075,657 |
| **Total Housing Assistance** | -$888,091 |
| **Total Housing Unmet Need** | **$2,187,566** |

[61] SBA Disaster Loan Data, Public Access: https://www.sba.gov/document/report-sba-disaster-loan-data

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

The southwest part of the county experienced significant tree damage which resulted in power outages lasting three to seven days, as well as localized flooding which caused some damage to the roads and bridge. The most significant flooding in the southern part of the county occurred in the area near the Marengo High School. Parts of Demopolis which are prone to flooding due to its proximity to the Black Warrior River, particularly in the Brickyard area along Ash Avenue, flooded due to Hurricane Zeta.

Based on feedback received from the County Emergency Management Agency Director and a County Commissioner, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

Marengo County was impacted by Hurricane Zeta only. The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to accurately estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G, including roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 116 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $1,998,591 | $0 | $0 | $1,998,591 |
| **B - Protective Measures** | $14,645 | $0 | $0 | $14,645 |
| **Z - State Management** | $1,135 | $0 | $0 | $1,135 |
| **Total** | **$2,014,370** | **$0** | **$0** | **$2,014,370** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 117 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **A - Debris Removal** | $1,998,591 | $1,798,731 | $199,859 |
| **B - Protective Measures** | $14,645 | $13,181 | $1,465 |
| **Z - State Management** | $1,135 | $1,135 | $0 |
| **Total** | **$2,014,370** | **$1,813,047** | **$201,324** |

Based on the analysis performed, there is a potential unmet need of **$0** for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 118 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Need |
|---|---|---|---|---|
| **A - Debris Removal*** | $1,998,591 | $1,798,731 | $199,859 | $0 |
| **B - Protective Measures*** | $14,645 | $13,181 | $1,465 | $0 |
| **Z - State Management*** | $1,135 | $1,135 | $0 | $0 |
| **Total** | **$2,014,370** | **$1,813,047** | **$201,324** | **$0** |

*CDBG-DR Funds are not used for PA costs in Categories A, B, and Z.

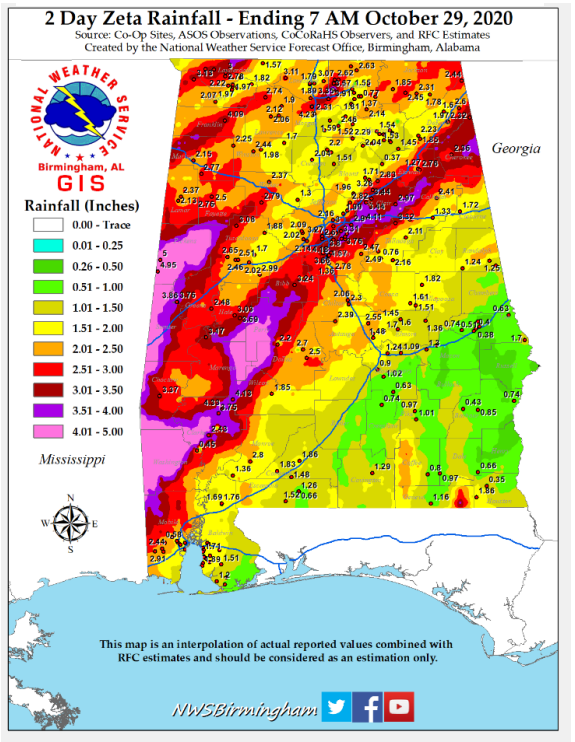
## 4. Economic Impact & Needs

A summary of the damage and impacts of Hurricane Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricanes Sally and Zeta. While difficult to quantify, Hurricane Zeta likely exacerbated existing economic challenges compounded by pre-existing distress due to COVID-19.

### Agricultural Impact

Following Hurricane Zeta, USDA designated Marengo County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Zeta to apply for emergency loans with USDA FSA. This natural disaster designation allows the FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation, or the refinance of certain debts.[62] As reported in the November 2nd, 2020, Alabama Crop Progress and Condition Report[63], Hurricane Zeta delivered heavy rains and damaging winds. The high soil moisture prevented fieldwork in many areas of the state following the Hurricane. As shown in Figure 21, parts of Marengo County Received upwards of 5 inches of rain across a 48-hour period.

**Figure 42 Hurricane Zeta 2 Day Rainfall Total**




### a. Unmet Economic Needs

According to an analysis of the Small Business Administration (SBA) Business loan data for applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss for all businesses of $71,510. After accounting for an additional fifteen percent (15%) for resilience costs, the County's total estimated economic impact is $82,236. According to

62 https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas

63 https://www.nass.usda.gov/Statistics_by_State/Alabama/Publications/Crop_Progress_&_Condition/2020/AL-CropProgress-11-02-20.pdf

the SBA business report, the SBA provided $0 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $82,236.

**Table 119 Unmet Economic Needs Summary**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| **$71,510** | **$10,726** | **$82,236** | **$0** | **$82,236** |

## D. Summary of Unmet Needs & MID Recovery Zones

### 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$2.26 Million** attributable to Hurricane Zeta.

In summary, this analysis projects unmet needs as follows:

**Table 120 Summary of Total Unmet Needs**

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| **Housing** | $3,075,657 | $888,091 | $2,187,566 |
| **Infrastructure** | $2,014,370 | $1,813,047 | $0 |
| **Economy** | $82,23 | $0 | $82,236 |
| **Total Unmet Needs** | **$5,090,027** | **$2,701,138** | **$2,269,802** |

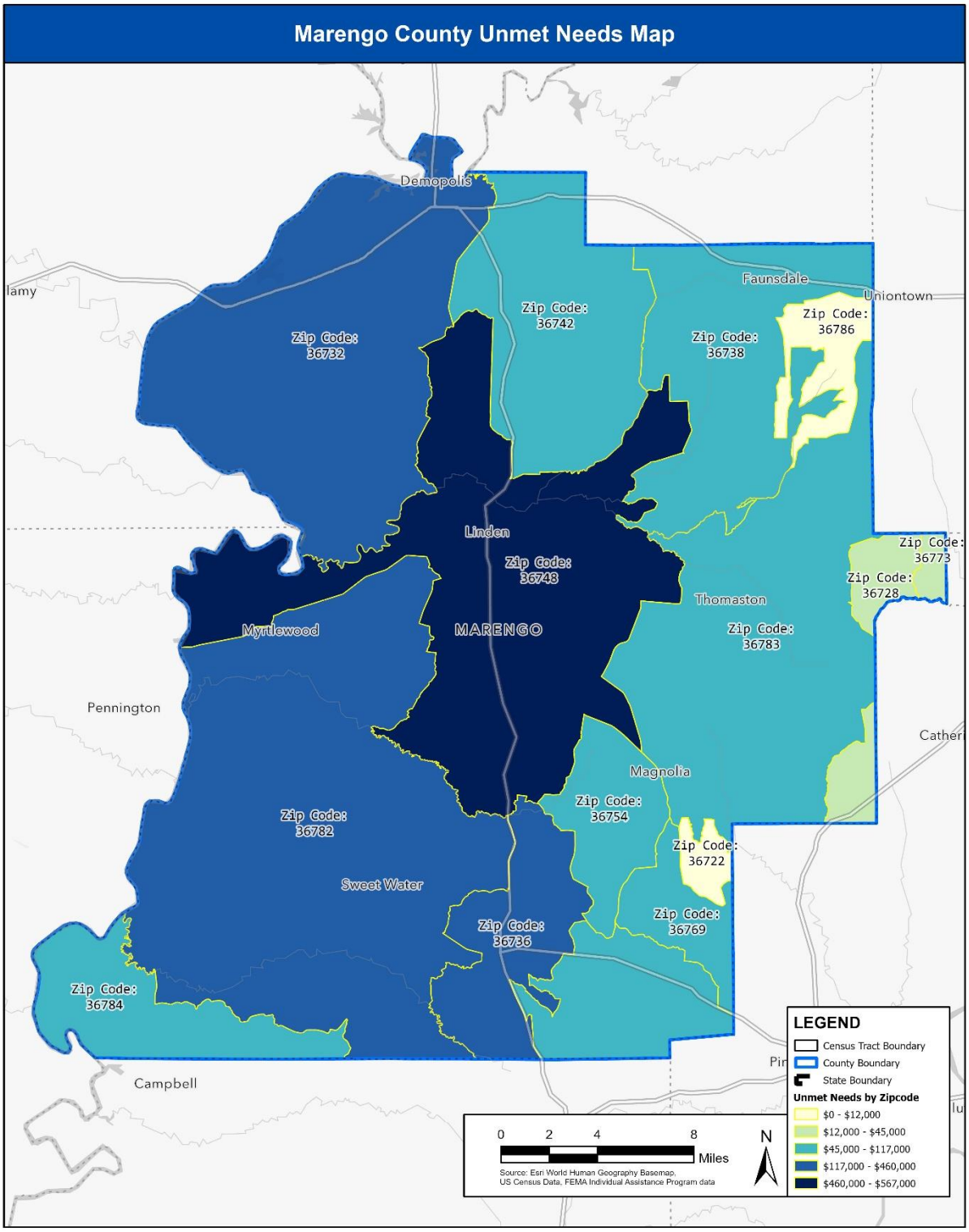
View the table below for a more detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code.

**Table 121 Unmet Need Summary by Zip Code**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36782** | $419,651 | $0 | $40,004 | $459,656 |
| **36736** | $351,383 | $0 | $23,499 | $374,883 |
| **36732** | $371,080 | $0 | $0 | $371,080 |
| **36748** | $348,542 | $0 | $18,732 | $367,274 |
| **36784** | $116,240 | $0 | $0 | $116,240 |
| **36738** | $114,356 | $0 | $0 | $114,356 |
| **36783** | $100,706 | $0 | $0 | $100,706 |
| **36769** | $99,489 | $0 | $0 | $99,489 |
| **36742** | $86,151 | $0 | $0 | $86,151 |
| **36754** | $85,929 | $0 | $0 | $85,929 |
| **36728** | $44,826 | $0 | $0 | $44,826 |
| **36773** | $29,930 | $0 | $0 | $29,930 |
| **36786** | $11,144 | $0 | $0 | $11,144 |
| **36722** | $8,138 | $0 | $0 | $8,138 |
| **Total** | **$2,187,566** | **$0** | **$82,236** | **$2,269,802** |

A map view of the total unmet need by zip code is below.

**Figure 43 Marengo Conty Unmet Needs by Zip Code**

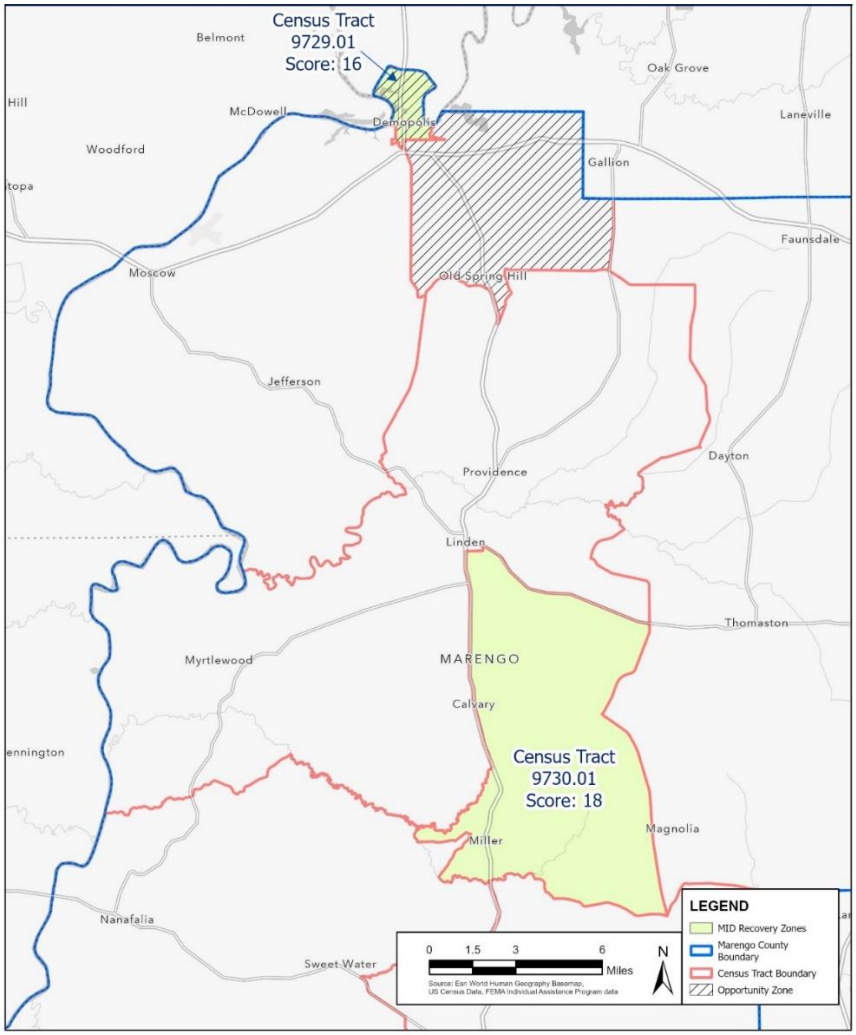


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Marengo County are shown in Figure 45 MID Recovery Zones for Marengo County.

**Figure 44 MID Recovery Zones for Marengo County**




**MID Recovery Zones Identified:** Census Tracts 9730.01 and 9729.01

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, 2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan, data from NOAA and FEMA, and stakeholder input was used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 10 disaster declarations for Marengo County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms/tornadoes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards is critical.

**Table 122 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $1,813,047 |
| **DR-4503-AL** | 2020 | Biological | COVID-19 Pandemic | $6,187 |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, and Flooding | $341,260 |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes, and Straight-Line Winds | $90,998 |
| **DR-1605-AL** | 2005 | Hurricane | Hurricane Katrina | $230,711 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $91,258 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $766,877 |
| **DR-856-AL** | 1990 | Severe Storm | Severe storms, tornadoes & flooding | No Data |
| **DR-598-AL** | 1979 | Hurricane | Hurricane Frederic | No Data |
| **DR-578-AL** | 1979 | Flood | Storms, wind, flooding | No Data |

Source: OpenFEMA Data Sets, Disaster Declaration Summary[64] and Public Assistance Funded Project Details[65]

Historic weather patterns can be determined for Marengo County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 123 provides an outline of the number of recorded storm events from January 1953 to December 2023 for Marengo County. If the same event type occurred on the same date, only one event was recorded; however, the number of fatalities, injuries, and damages were summed across the multiple events for a single day and event type.

[64] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[65] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

Table 123 Marengo County NCEI Storm Events Summary (1953 - 2023)

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Cold/Wind Chill** | 3 | 0 | 0 | $0 | $1,000,000 |
| **Drought** | 24 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 7 | 0 | 0 | $174,000 | $5,000 |
| **Flood** | 6 | 0 | 0 | $5,000 | $0 |
| **Funnel Cloud** | 1 | 0 | 0 | $0 | $0 |
| **Hail** | 54 | 0 | 0 | $124,000 | $4,000 |
| **Heat** | 7 | 1 | 0 | $0 | $0 |
| **Heavy Rain** | 1 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 3 | 0 | 0 | $0 | $0 |
| **Ice Storm** | 1 | 0 | 0 | $0 | $0 |
| **Lightning** | 3 | 0 | 1 | $250,000 | $0 |
| **Sleet** | 1 | 0 | 0 | $0 | $0 |
| **Strong Wind** | 1 | 0 | 0 | $7,000 | $0 |
| **Thunderstorm Wind** | 90 | 0 | 5 | $468,700 | $0 |
| **Tornado** | 35 | 2 | 16 | $26,736,500 | $0 |
| **Tropical Storm** | 3 | 0 | 1 | $3,300,000 | $0 |
| **Winter Storm** | 4 | 0 | 0 | $0 | $0 |
| **Extreme Cold/Wind Chill** | 1 | 0 | 0 | $0 | $0 |
| **High Wind** | 1 | 0 | 0 | $10,015,000 | $250,000 |
| **Tropical Depression** | 2 | 0 | 0 | $1,000 | $0 |
| **Excessive Heat** | 4 | 0 | 0 | $0 | $0 |
| **Grand Total** | **252** | **3** | **23** | **$41,081,200** | **$1,259,000** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[66]

## 2. Greatest Risk Hazards

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized in High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- **High**: Probable major damage in a 1-10 Year Period
- **Medium**: Probable major damage in a 10-50 Year Period
- **Low**: Probable major damage in a 100 Year Period
- **Very Low**: No probable major damage in a 100 Year Period

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified high winds from strong severe storms and tornadoes, and flooding as the most significant risks; however, extreme temperatures including drought were also identified as a great risk.

[66] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

**Table 124 Greatest Risk Hazards for Marengo County**

| Hazard | Risk Rating | Locations Impacted | Associated risk |
|---|---|---|---|
| **Dam Failures** | Medium | Glass Lake Dam #1 is classified as high risk; Demopolis Lock and Dam, Sweet Water Dam, Owensby Number One Dam, Willis Lake Dam, Paul S Owensby Dam #2, Walker Catfish Pone #1 and #3, Spencer Dam #2, Cochran Lake Dam, Devere Dam, Gulf States Paper Company Dam, and N B Fields Lake Dam are classified as significant risk | Flooding of several feet, mainly agricultural areas, infrastructure, and isolated structures would be impacted, and loss of life along with economic, environmental, and lifeline losses could occur. |
| **Flooding** | High | Areas along creeks and rivers, and low-lying areas with poor drainage are most at risk. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged or non-existent drainage infrastructure. The Black Warrior River makes up the western border of the county and borders Demopolis which puts these areas at greater risk compared to other parts of the county. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Tornadoes** | High | County-wide, Tornadoes can occur throughout the year but are most likely to occur in the spring (March-May) and fall (November to December). | Can cause crop, property, and infrastructure damage, injury, and loss of life |
| **Severe Storms** | High | County-wide, Severe storms can occur throughout the year. | Can cause crop, property damage, injury, and loss of life |
| **Extreme Heat and Droughts** | Medium | County-wide, the area is especially susceptible to these events during the summer months. | Can cause crop loss, water quality, and quantity issues, threaten health (heat stroke, etc.) of people living and working in the area |

Source: 2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan

While extreme cold temperatures are uncommon due to Alabama's mild winter climate and therefore it is not classified as a Medium or High Risk in Marengo County, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater risk for dealing with the extreme cold compared to more northern climates. Recent events lead to decreased water supply due to homes running water, or due to burst pipes, which put a strain on the water supply systems. The lack of water can lead to a lack of water supply and pressure for firefighters to combat house fires. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather, and ice storms which can cause downed trees, snap power lines, or result in vehicle accidents. Since 1953, 12 cold weather-related events have occurred in Marengo County.

## b. Dam Failures

According to the National Inventory of Dams, Marengo County has 51 known dams. Twelve (12) of these dams are identified as having a significant hazard potential and 1 dam has a high hazard potential. The extent of a dam failure may vary based on the storage of the affected dam and its proximity to infrastructure and structures. For larger dams or dams classified with a high hazard potential, the extent of damage could be much greater and lead to loss of life along with economic, environmental, and community lifeline losses.

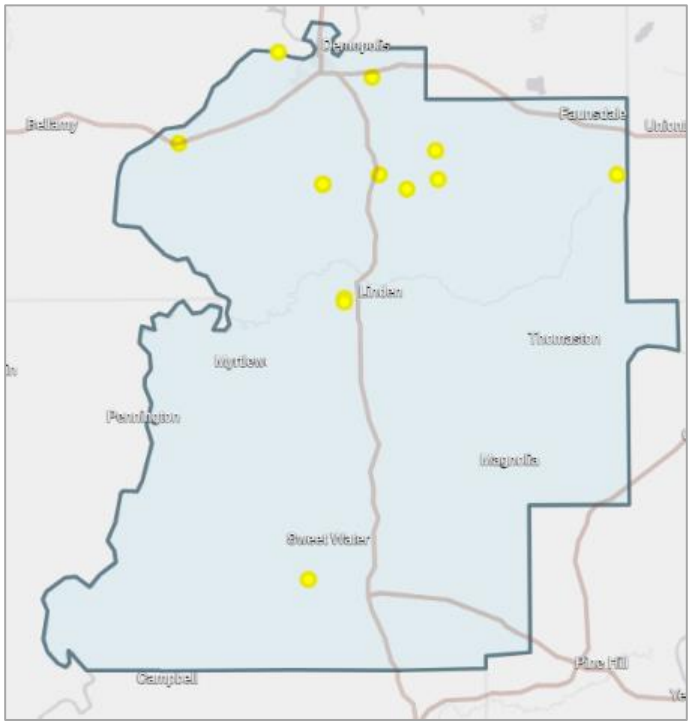



**Figure 45 Significant and High Hazard Potential Dams**
Source: National Inventory of Dams, https://nid.sec.usace.army.mil/

Historically (until June 7, 2023), Alabama did not have a dam safety program[67] which led to Alabama being disqualified from accessing federal infrastructure funds for dam-related inspections, training, and rehabilitation. Because of this, dams in the county may not have an accurate risk classification and they may not have received adequate funding to prevent and mitigate potential dam failures. This leads to a level of unknown risk associated with each dam. Due to the number of dams with high to significant potential hazards and the predicted damages, dam failure is classified as a high risk.

## c. Flooding

Flooding is a problem for many people across the United States. Enduring the consequences of repetitive flooding can put a strain on residents and on state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there are 0 Repetitive Loss Properties and 0 Severe Repetitive Loss Properties in Marengo County.

While repetitive loss flooding is not recorded in Marengo County, Marengo County does experience flooding events. Table 123 shows that there have been 13 recorded flood and flash flood events in the county. According to the *2023 Alabama State Hazard Mitigation Plan*, the most common type of flooding event in Marengo County from 2000-2022 is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 6 | 0 | 0 | 6 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

[67] https://www.alabama-asce.org/alabama-establishes-first-state-dam-safety-program/

According to *Figure 6 Riverine Flooding Risk in MID Counties by Census Tract,* the risk for riverine flooding in Marengo County is relatively low with the exception of the northwest corner of the county, where the Spillway Falls of the Black Warrior River is located, which has a relatively moderate risk of riverine flooding. Parts of Demopolis, particularly the Brickyard area is prone to flooding due to its proximity to the Black Warrior River. Other low-lying areas across the county are also prone to localized flooding events.

### d. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Since 1953, NCEI has recorded 102 hail, heavy rain, lightning, strong wind, thunderstorm windstorms, and tropical depression and storm events, as shown in Table 123. Since this event type has occurred regularly over the years resulting in damage, and severe storms are expected to continue regularly, Marengo County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the majority of the county is relatively low, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract.* For strong winds, the county has a relatively moderate to relatively high risk, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. According to the Table 123, the combination of hail, strong winds, lightning, and thunderstorms has led to estimated property damage costs of $14M and $250K in crop damages.

### e. Tornadoes

Tornadoes are Marengo County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Between 1961 and 2023, Tornadoes caused 16 injuries, 2 deaths, and more than $26.7 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract,* Marengo County has a relatively moderate to very high Tornado Risk rating, with the greatest risk in the central and northwestern portions of the county.

### f. Extreme Heat and Droughts

Extreme heat is often associated with droughts which can lead to greater impacts on communities. Extreme heat is very common in Marengo County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across the majority of the county is Relatively Moderate, as shown in Figure 3 Heat Wave Risk in MID Counties by Census Tract. There is a lack of infrastructure in the county to offer dedicated cooling stations for residents, especially populations that are the most vulnerable to extreme heat.

Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with a lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crop losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. As a result, the past events and future probability of heat and droughts are classified county-wide as medium risk according to the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan.*

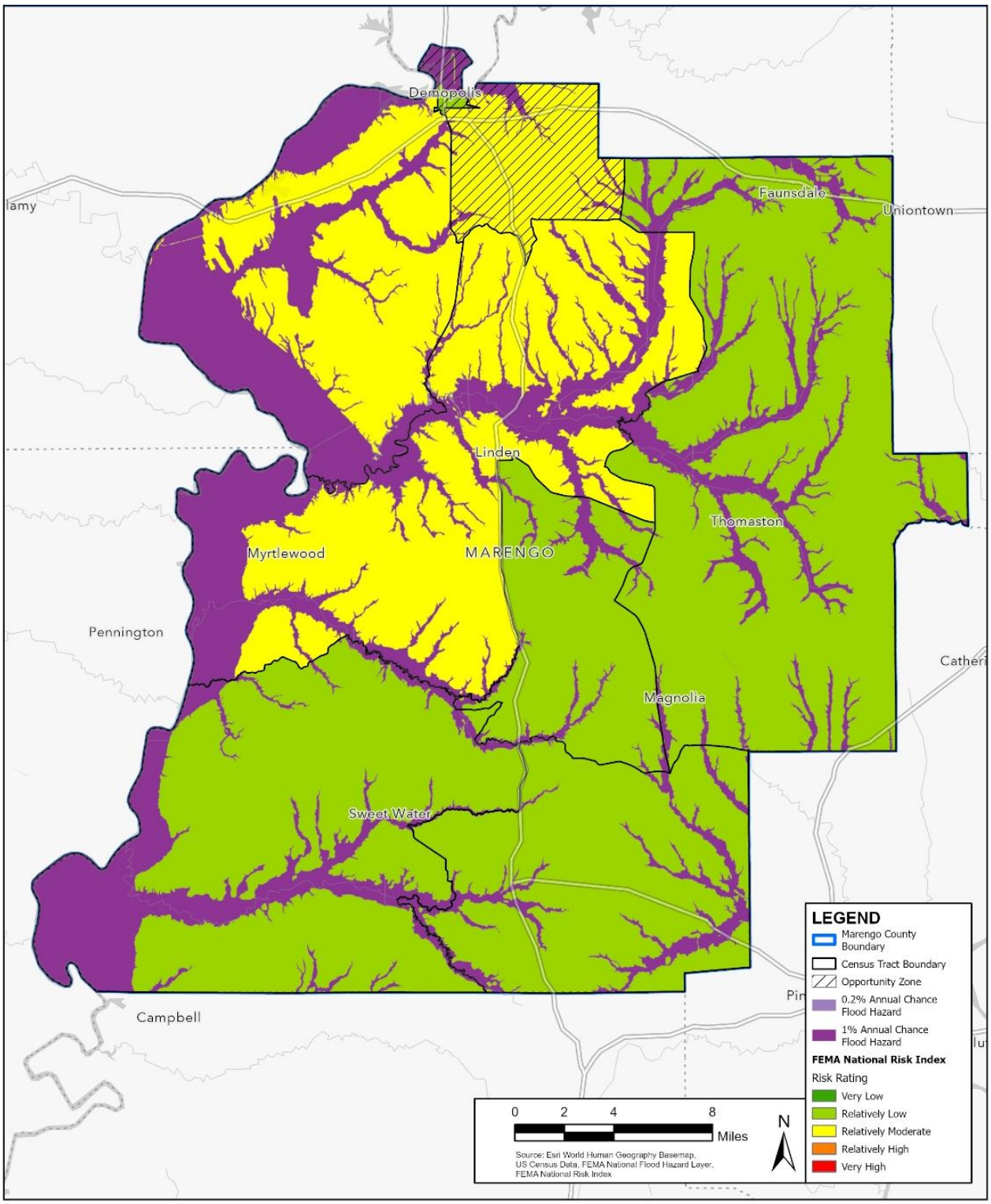
## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

By looking at Figure 47, we can see that there are parts of the county that have a Relatively Moderate National Risk Index score. This area is between Linden Demopolis. Hazard specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

**Figure 46 Marengo County FEMA National Risk Index Map**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Dam Failures** | Very Low | Critical | Small | Less than 24 hours |
| **Flooding** | High | Critical | Moderate | Less than one week |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | Medium | Minor | Moderate | Less than 6 hours |
| **Extreme Heat and Droughts** | Medium | Minor | Small | More than one week |

**Probability defined:**

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

**Impact defined:**

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

**Location Extent defined:**

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact from the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

In order to address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Rental Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 13 responses were received. Of those respondents the majority were homeowners of stick-built homes (3) and mobile homeowners (4). Respondents said that they experienced a moderate amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and flooding. They stated that this resulted in electricity outages, and damage to streets. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 86% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, over one third occupied mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds, flooding, and other extreme weather conditions. Additionally, 84% for the renter population that applied for FEMA assistance reported making less than $30,000 a year.

Surveys were distributed at Marengo County's public meetings. The top results of the surveys are as follows:

- 8 respondents stated interest in development of Affordable Multi-family housing, 0 of whom ranked it as top priority.
- 5 respondents stated interest in a First Time Homeownership Assistance Program, 1 of whom ranked it as their top priority.
- 5 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing multi-family Housing, 1 of whom ranked it as top priority.
- 8 respondents stated interest in residential solar power backup generators, 0 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Development of Affordable Multi-family Housing** | **Strategy** | Recovery | • Marengo County would like to see affordable multifamily housing built to serve vulnerable households that still have an unmet need following Hurricane Zeta.<br>• While the county does not have a PHA, Liden and Demopolis may be able to implement this project depending on their agency's available capacity.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Affordable Multifamily Housing, HCDA Section 105(a) 4 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Voluntary Homeowner Buyout** | **Strategy** | Recovery/Mitigation | • Marengo County would like to provide opportunities for homeowners in floodways or floodplains the option of a voluntary buyout program.<br>• The land acquired during a buyout would remain undeveloped and return to the floodplain, turned into a flood control structure, or turned into an outdoor recreational area (park, campground, etc.)<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, | MID |
| | **Eligible Activity** | HCDA Section 105(a) (7-8) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households.<br>• | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • The county would like to provide opportunities for renters to purchase more secure housing, with an emphasis on supporting first-time homebuyers located within a MID Recovery Zone.<br>• Intended to pay a portion of the cost of purchasing an eligible new home for eligible applicants, which may be based on need, household size, and the cost of a home.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | MID |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Unknown at this time | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up. Based on the FEMA PA submitted request categories (only A, B and Z), there is not a remaining unmet need based on this analysis. However, based on feedback received from the County Emergency Management Agency Director and a County Commissioner, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in the analysis may underestimate the true scale of impact and remaining unmet infrastructure needs. Based on feedback from the meetings, flooding also occurred during the Hurricane leading to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities. It was also identified during the planning process and mitigation needs assessment, that there is a lack of infrastructure in the county to offer dedicated heating and cooling stations, or a place to gather for resources following a storm.

Based on the unmet needs analysis, feedback received from the County and the eligible type of projects under this funding, the county identified Flood Mitigation, the development of a Community Resilience Center, and Stormwater Infrastructure Improvement projects to support

the county's infrastructure recovery efforts. Below is an outline of the associated project descriptions and details.

Surveys were distributed at Marengo County's public meetings. The top results of the surveys are as follows:

- 5 respondents stated interest in Repairs and improvements to communication infrastructure, such as broadband, 0 of whom ranked it as top priority.
- 3 respondents stated interest in Drainage Improvements, 0 of whom ranked it as their top priority.
- 3 respondents stated interest in a program that addresses Stormwater infrastructure and management, 0 of whom ranked it as top priority.
- 3 respondents stated interest in improvements to utilities, such as energy and water infrastructure, repairs and improvements, 0 of whom ranked it as their top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Flood Mitigation** | **Strategy** | Mitigation | • The county identified the need to implement flood control improvement projects in areas subject to re-occurring flooding. Initial areas identified include the Faunsdale and Dixon Mills areas.<br>• During Hurricane Zeta, areas experienced flooding due to nearby creeks overflowing which caused the culverts and roads to wash out and strand communities. Often these same roadways have been repaired multiple times and need significant improvements to be made to mitigate future flooding events along these roadways.<br>• Addresses the public desire for drainage improvements.<br>• Unmet/Mitigation needs – potentially addresses infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs. | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Develop a community resilience center that provides year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. | MID |
| | **Eligible Activity** | Infrastructure & Public Facility, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Geographic Eligibility** | MID Recovery Zone & MID County - Mitigation | During or following a disaster event, this center may serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services.<br>• Unmet/Mitigation needs – potentially addresses structural and infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Stormwater Infrastructure Improvements** | **Strategy** | Recovery | • The county identified the need to make significant stormwater infrastructure improvements in areas to allow for better drainage and prevent future flooding.<br>• Initial needs identified in parts of Demopolis, particularly the Brickyard area, where flooding occurred during Hurricanes Sally and Zeta due to inadequate stormwater infrastructure and to its proximity to the Black Warrior River.<br>• Addresses the public desire for drainage improvements.<br>• Unmet/Mitigation needs – potentially addresses infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs. | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zone & MID County - Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Improvements to Communication Infrastructure** | **Strategy** | Mitigation | • Respondents identified the desire to improve communication infrastructure.<br>• There may be other funding available for broadband and communication infrastructure, whereas CDBG-DR may be used for it, it may not be the best use of funds.<br>• Mitigation needs – potentially addresses mitigation needs by strengthening residents' connection to critical community lifelines | LOW/MID |
| | **Eligible Activity** | Infrastructure & Public Facility, HCDA Section 105(a)(14) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zone & MID County - Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 4. Economic Recovery Strategies

With over 50% of the County's residents to be considered LMI, providing job training and small business technical assistance programs help LMI households by equipping them with the skills and resources needed to secure better-paying jobs or successfully launch and manage their own businesses, thereby improving their financial stability and economic mobility. Additionally, as this region is expected to experience growth over the next couple of years due to the new highway and school being built, it is even more important to impower local residents to support and be a part of this anticipated economic growth in the County.

Surveys were distributed at Marengo County's public meetings. The top results of the surveys are as follows:

- 8 respondents stated interest in Workforce Training and Development, 0 of whom ranked it as their top priority.
- 8 respondents stated interest in small business grant and loan programs, 0 of whom ranked it as top priority.
- 5 respondents stated interest in Job Creation programs, 0 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Small Business Technical Assistance** | **Strategy** | Recovery | • Business owners recovering from disasters are often in need of specific technical assistance to respond to losses to their businesses whether it be a loss of employees or customers or a need for a new product that may present a growth opportunity for a business.<br>•<br>• The county will bolster the grant and loan resources and strengthen the small business community by creating a technical assistance program to support businesses to develop new business and continuity plans and create a disaster resilience plan to help prepare for future disasters. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Other Funding Sources Identified** | No, Conceptual Phase | • Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more stable economy | |
| | **Project Readiness** | Low | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Workforce Training and Development** | **Strategy** | Recovery | • The county looks to bolster and strengthen the local economy by retaining local talent. With the new West Alabama Corridor Highway and Alabama School of Health Sciences projects underway, the county would like to be able to support local residents in job training options to help expand their local economy.<br>• Addresses public desire for workforce training and development, as well as job creation.<br><br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more economically stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

# XII. Perry County

## A. Introduction

Perry County is located within the west-central portion of Alabama and is the second least populous County in Alabama. Perry County is home to the Marion Military Academy, a junior college. The Cahaba River, the longest free-flowing river in Alabama, flows through the east-central part of the county.

According to the American Community Survey (ACS) 2022 5-Year Estimates[68], Perry County has a population of 8,479, a 9% decrease from 9,293 in 2019. Perry County experienced the largest percentage decline for any county in Alabama from 2019 to 2022. The demographic breakdown shows most residents (71%) are Black or African American, followed by 28% identifying as White. Housing in Perry County includes 3,985 occupied units, with 56% being single-family homes and 29% mobile homes. In total, 98% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is high, with 70% of residents owning their homes and 30% renting. In 2020, 66% of the county's residents were considered LMI compared to 57% in 2022[69].

Perry County experienced damage from Hurricane Zeta which mainly resulted in downed trees that cut off power to communities and damaged homes which are still in need of repair. Flooding in Uniontown and the eastern portion of the county along Oakmulgee Creek also occurred. Additionally, due to the lack of sheltering options in the County, many impacted households did not have a safe place to stay or gather after the storm.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Perry County present unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see table below). Over time, ACCA and the county reserves the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 125 Total Estimated Unmet Need for Perry County**

| | Estimated Impact | Amount of Funds from other sources | Total Unmet Need |
|---|---|---|---|
| **Housing** | $2,315,708 | $740,142 | $1,575,566 |
| **Infrastructure** | $507,662 | $397,637 | $85,128 |
| **Economy** | $45,396 | $25,800 | $19,596 |
| **Total** | **$2,868,766** | **$1,163,579** | **$1,680,290** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[68] https://data.census.gov/ - Tables B02001, B25024, B25033

[69] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Perry County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated as a result of the impacts from the 2020 storms.

The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, among other sources. The estimate of unmet needs is in three main categories of damage: housing, economy, and infrastructure. Specifically, the assessment, focuses on Perry County's impacts with specific sections detailing specific unmet needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

The demographic profile of Perry County has not changed significantly since the state of Alabama's 2020 Disaster Recovery Action Plan was published. Specific demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county.

**Vulnerable Populations**

Perry County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Perry County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Perry County has one identified disadvantages area: Opportunity Zones. Perry County does not have any Promise Zones, R/ECAP, Neighborhood Revitalization Strategy Areas, or Tribal areas within the county.

Figure 47 Perry County SVI Themes

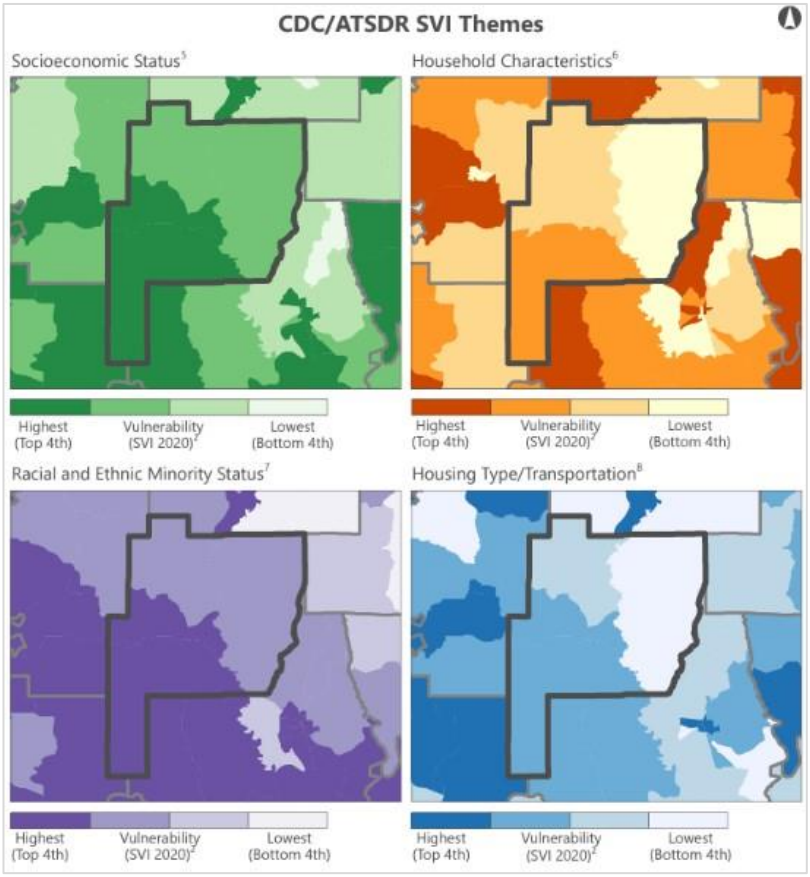
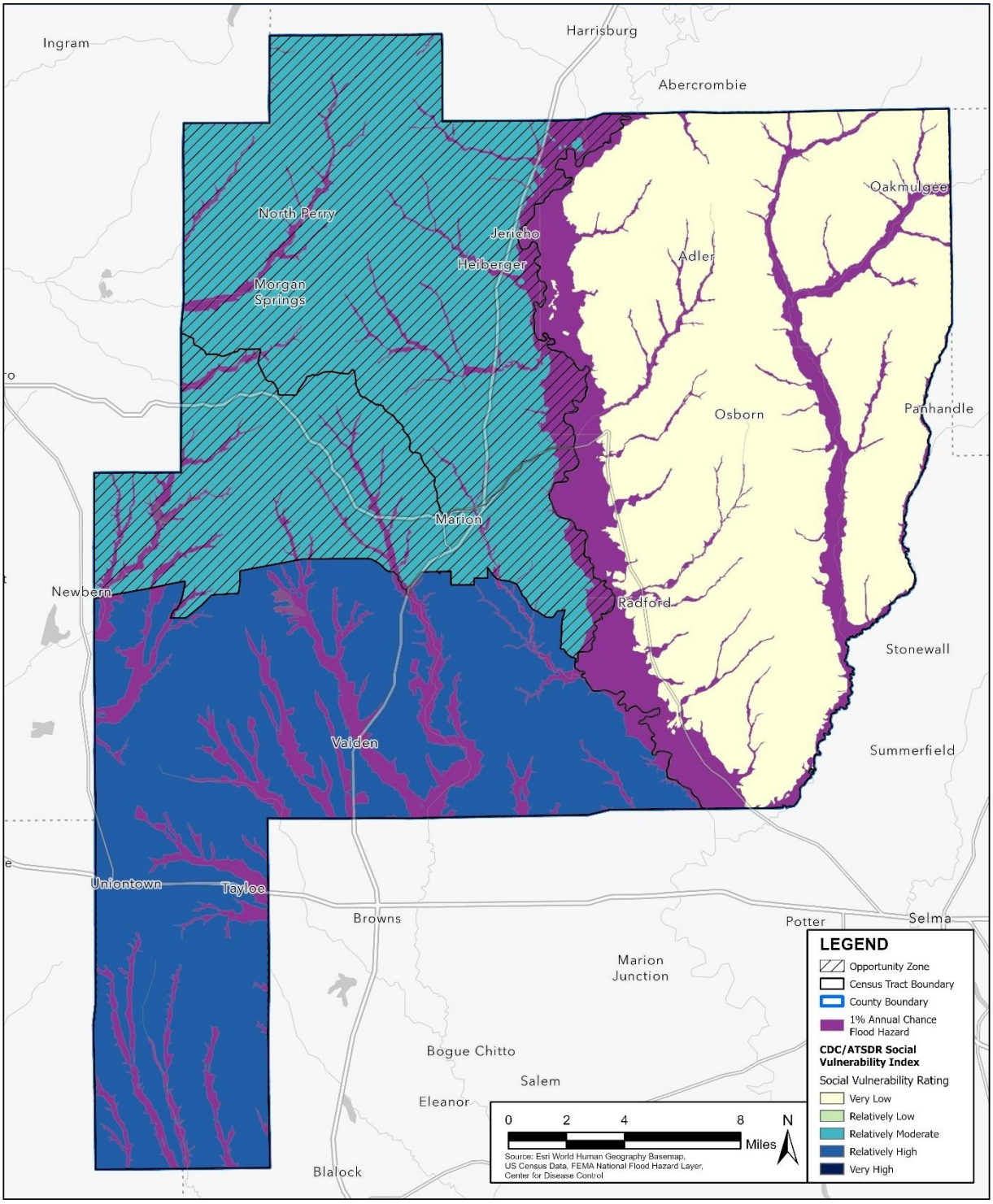



Figure 48 show cases the 2020 vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

The map below provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the High SVI Ratings and where the Opportunity Zones is located.

**Figure 48 Perry County Vulnerability Map**



### LMI Populations

As highlighted in the table below, three of the four census tracts within Perry County have more than 50% of the population that is considered LMI which also have a relatively moderate or very high SVI Rating.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 126 Perry County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[70] | SVI Rating |
|---|---|---|
| 6868 | 49.26% | Very Low |
| **6870.01** | **58.30%** | **Relatively Moderate** |
| **6870.02** | **63.10%** | **Relatively Moderate** |
| **6871** | **78.35%** | **Relatively High** |

[70]HUD GIS Helpdesk, Low to Moderate Income Population by Tract Open dataset. Published July 31, 2023; updated August 14, 2024.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

For each household identified to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the tables below outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons, no damages were found (likely because they were desktop inspections), the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 127 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| **Major-High** | 3 | 0.5% | 0 | 0.0% | 3 | 0.5% |
| **Major-Low** | 10 | 1.7% | 3 | 0.5% | 13 | 2.2% |
| **Minor-High** | 133 | 22.0% | 42 | 6.9% | 175 | 28.9% |
| **Minor-Low** | 73 | 12.1% | 5 | 0.8% | 78 | 12.9% |
| **No FVL** | 250 | 41.3% | 86 | 14.2% | 336 | 55.5% |
| **Total** | **469** | **77.5**% | **136** | **22.5**% | **605** | **100.0**% |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan, to determine the estimated total loss/support for these three damage categories. The tables below outline the total number of properties damaged for homeowners and renters.

Table 128 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 73 | $1,621 | $118,333 |
| **Minor-High** | 133 | $5,495 | $730,835 |
| **Major-Low** | 10 | $11,502 | $115,020 |
| **Total** | **216** | **N/A** | **$964,188** |

Table 129 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 5 | $1,621 | $8,105 |
| **Minor-High** | 42 | $5,495 | $230,790 |
| **Major-Low** | 3 | $11,502 | $34,506 |
| **Total** | **50** | **N/A** | **$273,401** |

Table 130 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renter

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 78 | $1,621 | $126,438 |
| **Minor-High** | 175 | $5,495 | $961,625 |
| **Major-Low** | 13 | $11,502 | $149,526 |
| **Total** | **266** | **N/A** | **$1,237,589** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and required reconstruction. To determine the replacement cost of the home, Perry County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[71]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided in the table below.

Table 131 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $116,876 | $77,138 | 3 | $231,414 |
| **Severe** | $116,876 | $77,138 | 0 | $0 |
| | **Total** | | **3** | **$231,414** |

Of the 3 major-high and severely damaged homes, none of the renter-occupied dwellings are classified as Major-High or Severe.

[71] Perry County Home Values, https://www.zillow.com/home-values/42944/sprott-al/

### FEMA IA Applications without FEMA Verified Loss

Perry County also accounted for the damage to applications without the Real Property FEMA verified loss (RPFVL) for owner-occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter-occupied dwellings. Due to the COVID-19 pandemic and other reasons, inspections never physically took place, and no damages were found – most likely because they were desktop inspections. To account for these types of impacts, Perry County counted applications with no FEMA Verified Loss and multiplied it by the average value for minor-low damage per SBA-verified property loss, provided in the state of Alabama's 2020 Disaster Recovery Action Plan. The results of these calculations are provided in the table below:

**Table 132 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 250 | $1,621 | $405,250 |
| **Renter** | 86 | $1,621 | $139,406 |
| **Total** | **336** | **$1,621** | **$544,656** |

## c. Impacts of Insurance (HOI and NFIP)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See Table 130 for flood-damaged properties by damage category and occupancy type.

**Table 133 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 0 | 1 | 8 | 4 | 1 | 0 | 14 |
| **Renter** | 0 | 0 | 2 | 1 | 0 | 0 | 3 |
| **Total** | **0** | **1** | **10** | **5** | **1** | **0** | **17** |

**Flood Damage and Insurance:** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP), as shown in the table below. In total, **100 percent** of the flood-affected homeowner population is reported to not carry flood insurance per the FEMA IA data.

**Table 134 Homeowner Flood-Damaged Properties and NFIP Counts**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 1 | 7% |
| **Major-Low** | 0 | 0% | 4 | 29% |
| **Minor-High** | 0 | 0% | 8 | 57% |
| **Minor-Low** | 0 | 0% | 1 | 7% |
| **No FVL** | 0 | 0% | 0 | 0% |
| **Totals** | **0** | 0% | **14** | **100%** |

**Wind Damage and Insurance (HOI):** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of households reported not to carry a standard hazard homeowners insurance policy (HOI) that would otherwise be expected to offset documented losses. In total, 77 percent of the wind-impacted homeowner population is reported not to carry hazard insurance as shown below.

**Table 135 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 250 | 72 | 125 | 6 | 2 | 0 | 455 |
| **Renter** | 86 | 5 | 40 | 2 | 0 | 0 | 133 |
| **Total** | **336** | **77** | **165** | **8** | **2** | **0** | **588** |

**Table 136 Homeowner Wind-Damaged Properties and HOI Counts**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 2 | 0% |
| **Major-Low** | 1 | 0% | 5 | 1% |
| **Minor-High** | 14 | 3% | 111 | 24% |
| **Minor-Low** | 5 | 1% | 67 | 15% |
| **No FVL** | 86 | 19% | 164 | 36% |
| **Totals** | 106 | 23% | **349** | 77% |

## d. Impact based on Residence Type

The below table shows FEMA IA applicants by housing type. The highest number of applicants came from Mobile Home units (49%) and housing/duplex units (42%).

**Table 137 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 1 | 0% | 32 | 5% | 33 | 5% |
| **Condo** | 0 | 0% | 1 | 0% | 1 | 0% |
| **House/Duplex** | 189 | 31% | 66 | 11% | 255 | 42% |
| **Mobile Home** | 265 | 44% | 31 | 5% | 296 | 49% |
| **Other** | 8 | 1% | 4 | 1% | 12 | 2% |
| **Townhouse** | 1 | 0% | 2 | 0% | 3 | 1% |
| **Travel Trailer** | 5 | 1% | 0 | 0% | 5 | 1% |
| **Total** | **469** | **78%** | **136** | **22%** | **605** | **100%** |

The below table shows FEMA IA flood-damaged properties by housing type who had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, **zero** of the flood-affected homeowner applicants are reported to carry an NFIP policy per the FEMA IA data.

Table 138 Homeowner Flood Damaged Properties by Residence Type with NFIP

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **House/Duplex** | 5 | 0 | 0% |
| **Mobile Home** | 9 | 0 | 0% |
| **Total** | **14** | **0** | **0%** |

The below table shows FEMA IA wind-damaged properties by housing type, who had Homeowner's Insurance. As indicated in the overview of wind-damaged properties, **23%** of the affected population are reported to carry homeowner's insurance policy per the FEMA IA data.

Table 139 Homeowner Wind Damaged Properties by Residence Type with HOI

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Apartment** | 1 | 0 | 0% |
| **Condo** | 0 | 0 | 0% |
| **House/Duplex** | 184 | 63 | 34% |
| **Mobile Home** | 256 | 41 | 16% |
| **Other** | 8 | 1 | 13% |
| **Townhouse** | 1 | 0 | 0% |
| **Travel Trailer** | 5 | 1 | 20% |
| **Total** | **455** | **106** | **23%** |

Total estimated losses have been summarized by residence type.

Table 140 Total Estimated Loss by Residence Type

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 33 | $68,989 |
| **Condo** | 1 | $1,621 |
| **House/Duplex** | 255 | $925,847 |
| **Mobile Home** | 296 | $980,908 |
| **Other** | 12 | $19,452 |
| **Townhouse** | 3 | $8,737 |
| **Travel Trailer** | 5 | $8,105 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a LMI calculation, as income was categorized by general ranges. To summarize the impact of storms on households based on income, four income groupings are provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Zeta, and 84% of the total impacted population making $30,000 or less.

**Table 141 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 3 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 3 | 1% |
| **Major-Low** | 8 | 2% | 2 | 0% | 0 | 0% | 0 | 0% | 10 | 2% |
| **Minor-High** | 120 | 26% | 11 | 2% | 2 | 0% | 0 | 0% | 133 | 28% |
| **Minor-Low** | 66 | 14% | 4 | 1% | 3 | 1% | 0 | 0% | 73 | 16% |
| **No FVL** | 191 | 41% | 44 | 9% | 14 | 3% | 1 | 0% | 250 | 53% |
| **Totals** | **388** | **83%** | **61** | **13%** | **19** | **4%** | **1** | **0%** | **469** | **100%** |

**Table 142 Gross Income by Damage Level for Renters Only**

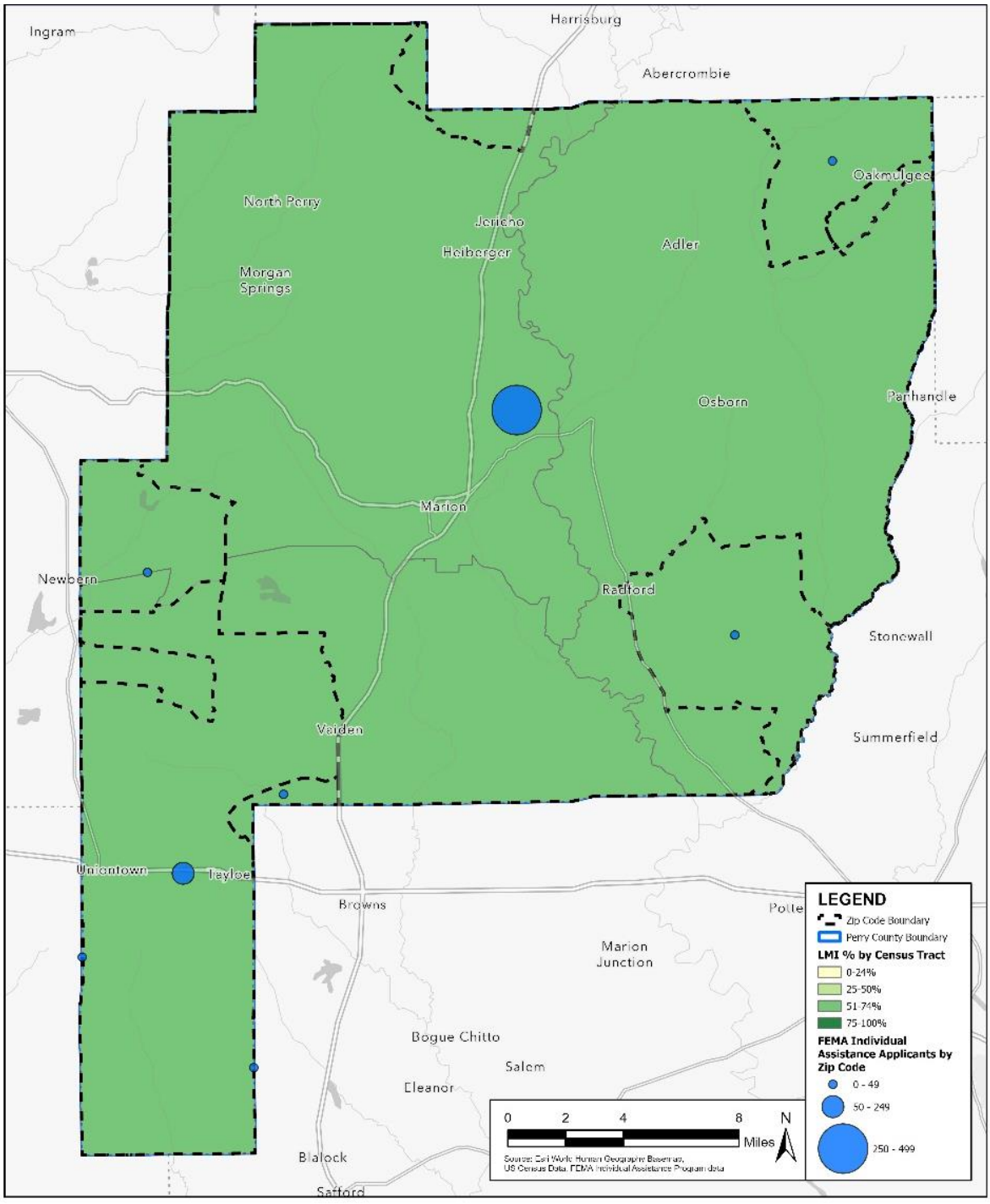
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 2 | 2% | 1 | 1% | 0 | 0% | 0 | 0% | 3 | 2% |
| **Minor-High** | 36 | 27% | 6 | 4% | 0 | 0% | 0 | 0% | 42 | 31% |
| **Minor-Low** | 4 | 3% | 1 | 1% | 0 | 0% | 0 | 0% | 5 | 4% |
| **No FVL** | 76 | 56% | 9 | 7% | 0 | 0% | 1 | 1% | 86 | 63% |
| **Totals** | **118** | **87%** | **17** | **13%** | 0 | 0% | **1** | **1%** | **136** | **100%** |

**Table 143 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 3 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 3 | 0% |
| **Major-Low** | 10 | 2% | 3 | 0% | 0 | 0% | 0 | 0% | 13 | 2% |
| **Minor-High** | 156 | 26% | 17 | 3% | 2 | 0% | 0 | 0% | 175 | 29% |
| **Minor-Low** | 70 | 12% | 5 | 1% | 3 | 0% | 0 | 0% | 78 | 13% |
| **No FVL** | 267 | 44% | 53 | 9% | 14 | 2% | 2 | 0% | 336 | 56% |
| **Totals** | **506** | **84%** | **78** | **13%** | **19** | **3%** | **2** | **0%** | **605** | **100%** |

The map below illustrates the LMI percentage by Census Tract, with heat bubbles indicating the locations of the FEMA IA applications based on the zip codes.

**Figure 49 LMI Populations and FEMA IA Applications by Zip Code for Perry County**




## f. Impact on Public Housing Authorities

Perry County has Section 8 and affordable housing options, with sufficient rental properties for the population. There is no known unmet need for Public Housing Authorities in Perry County.

## g. Impact on Homeless Populations

The impact of natural disasters on the housed population and on people experiencing sheltered homelessness is very different from the impact on people experiencing unsheltered homelessness.

When a natural disaster damages a housing unit, its inhabitant can hypothetically be made whole by insurance or FEMA. When a natural disaster damages a shelter or broader infrastructure, beds can be rendered uninhabitable, but eventually, those beds can be regained via repair and recovery operations.

For people experiencing unsheltered homelessness (e.g. living on the streets), however, the impact is more difficult to see. A natural disaster cannot remove housing or shelter from a person without housing or shelter; instead, it destroys future housing opportunities. One of the primary barriers to permanent housing in any geography is a lack of affordable housing. When a natural disaster damages or destroys an area's affordable housing, it creates a housing cost and availability crisis that prevents people experiencing homelessness from achieving and stabilizing permanent housing.

**Alabama Balance of State CoC**

The Alabama Balance of State CoC serves 37 rural Alabama Counties, ensuring chronic under-counting of homeless populations in rural counties. According to the *2023 AHAR: Part 1 - PIT Estimates of Homelessness in the U.S.*[72], the Alabama Balance of State CoC counted 283 sheltered and unsheltered homeless persons in 2023 and 140 Emergency Sheltered persons. Perry County is one of the counties that makes up this CoC and does not have any homeless shelters, which leads to chronic under-serving of people in need of sheltering pre and post storms. The county struggled to shelter people who lost housing due to Hurricane Zeta, and the housing and shelter crisis will only increase as additional disasters hit the area.

To provide support for those experiencing homelessness, Perry County will need to:

- create new shelter options which include surge capacity for emergency shelter beds required to shelter people displaced by disasters,
- create outreach and drop-in centers required to serve people experiencing unsheltered homelessness; and
- hire outreach workers and resource navigators.

## h. Summary of Housing Impacts

FEMA IA was the primary data source that Perry County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology as summarized in previous sections, categorized by damage and for public housing authorities. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To calculate the total unmet need, received assistance is also summarized and subtracted from the estimated total loss, including resilience costs.

[72] https://www.huduser.gov/portal/datasets/ahar/2023-ahar-part-1-pit-estimates-of-homelessness-in-the-us.html

**Table 144 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 0 | $0 |
| **Major-High** | 3 | $231,414 |
| **Major-Low** | 13 | $149,526 |
| **Minor-High** | 175 | $961,625 |
| **Minor-Low** | 78 | $126,438 |
| **No FEMA Verified Loss** | 336 | $544,656 |
| **Public Housing** | 0 | $0 |
| **Total** | **605** | **$2,013,659** |
| | **+15% Resilience Costs** | **$302,049** |
| **Total Estimated Loss with Resilience Costs** | | **$2,315,708** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA repair and replacement, SBA Real Estate[73] and NFIP payment amounts were added together to determine the total housing assistance received. View below for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received.

**Table 145 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 145 | $547,941 |
| **NFIP Payments** | 0 | $0 |
| **SBA Loan Amounts** | Uknown | $192,200 |
| **Total Housing Assistance** | **145** | **$740,142** |

Total housing assistance was subtracted from the total housing unmet needs with resilience costs included to determine the total housing unmet need of approximately $1.5 million, as result of Hurricane Zeta. See below for the calculation.

**Table 146 Total Housing Unmet Need for Perry County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | **$2,315,708** |
| **Total Housing Assistance** | **-$740,142** |
| **Total Housing Unmet Need** | **$1,575,566** |

[73] SBA Disaster Loan Data, Public Access: https://www.sba.gov/document/report-sba-disaster-loan-data

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Perry County suffered infrastructure damage only from Hurricane Zeta. Several roads and culverts were damaged due to flooding; these roads include Dobyne Road, Jim Foundry Road, St. Mary's Spur, and Medline Road. Dobyne Road, Jim Foundry Road, and St. Mary's Spur are still in need of repair and were not accounted for in the FEMA PA data. In total the unmet need for these roads is estimated to be $470,545. Additionally, during Hurricane Zeta Uniontown and Marion experience street flooding because the capacity of the wastewater systems is inadequate to handle intense rainfall events.

Based on feedback received from the County Engineer, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) and increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G, which includes roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 147 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $141,213 | $0 | $0 | $141,213 |
| **B - Protective Measures** | $104,199 | $0 | $0 | $104,199 |
| **C - Roads and Bridges** | $78,922 | $10,655 | $18,626 | $108,202 |
| **E - Public Buildings** | $50,000 | $6,750 | $11,800 | $68,550 |
| **F - Public Utilities** | $51,817 | $6,995 | $12,229 | $71,041 |
| **Z - State Management** | $14,456 | $0 | $0 | $14,456 |
| **Total** | **$440,608** | **$24,400** | **$42,654** | **$507,662** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures, and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 148 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **A - Debris Removal** | $141,213 | $127,092 | $14,121 |
| **B - Protective Measures** | $104,199 | $93,424 | $10,775 |
| **C - Roads and Bridges** | $108,202 | $71,030 | $37,172 |
| **E - Public Buildings** | $68,550 | $45,000 | $23,550 |
| **F - Public Utilities** | $71,041 | $46,635 | $24,406 |

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **Z - State Management** | $14,456 | $14,456 | $0 |
| **Total** | **$507,662** | **$397,637** | **$110,025** |

Based on the analysis performed, there is a potential unmet need of $85,128 for identified infrastructure damage eligible under FEMA-PA Categories C-G. However, including the 3 roads that require repair, the total unmet infrastructure need for the county is **$555,673.**

**Table 149 Total Estimated Unmet Need by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Need |
|---|---|---|---|---|
| **A - Debris Removal*** | $141,213 | $127,092 | $14,121 | $0 |
| **B - Protective Measures*** | $104,199 | $93,424 | $10,775 | $0 |
| **C - Roads and Bridges** | $108,202 | $71,030 | $37,172 | $37,172 |
| **E - Public Buildings** | $68,550 | $45,000 | $23,550 | $23,550 |
| **F - Public Utilities** | $71,041 | $46,635 | $24,406 | $24,406 |
| **Z - State Management*** | $14,456 | $14,456 | $0 | $0 |
| **Total** | **$507,662** | **$397,637** | **$110,025** | **$85,128** |

*CDBG-DR Funds are not used for PA costs in Categories A, B, and Z.

## 4. Economic Impact & Needs

A summary of the damage and impacts of Hurricane Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricane Zeta.

### Agricultural Impact

Following Hurricane Zeta, USDA did not designate Perry County as a primary disaster area; however, they did allow eligible producers in Perry County to still apply for emergency loans due to losses or impacts from Hurricane Zeta.[74]

### a. Unmet Economic Needs

According to an analysis of the SBA Business loan data for applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss for all businesses of $39,475. Accounting for an additional fifteen percent (15%) in resilience costs, the County's total estimated economic impact is $45,396. According to the SBA business report, the SBA provided $25,800 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $19,596.

[74] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas

Table 150 Unmet Economic Needs Summary

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| $39,475 | $5,921 | $45,396 | $25,800 | $19,596 |

# D. Summary of Unmet Needs & MID Recovery Zones

## 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$2.1 Million** attributable to Hurricane Zeta.

In summary, this analysis projects unmet needs as follows:

Table 151 Summary of Total Unmet Needs

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| **Housing** | **$2,315,708** | **$740,142** | **$1,575,566** |
| **Infrastructure** | **$507,662** | **$397,637** | **$85,128** |
| **Economy** | **$45,396** | **$25,800** | **$19,596** |
| **Total Unmet Needs** | **$2,868,766** | **$1,163,579** | **$1,680,290** |

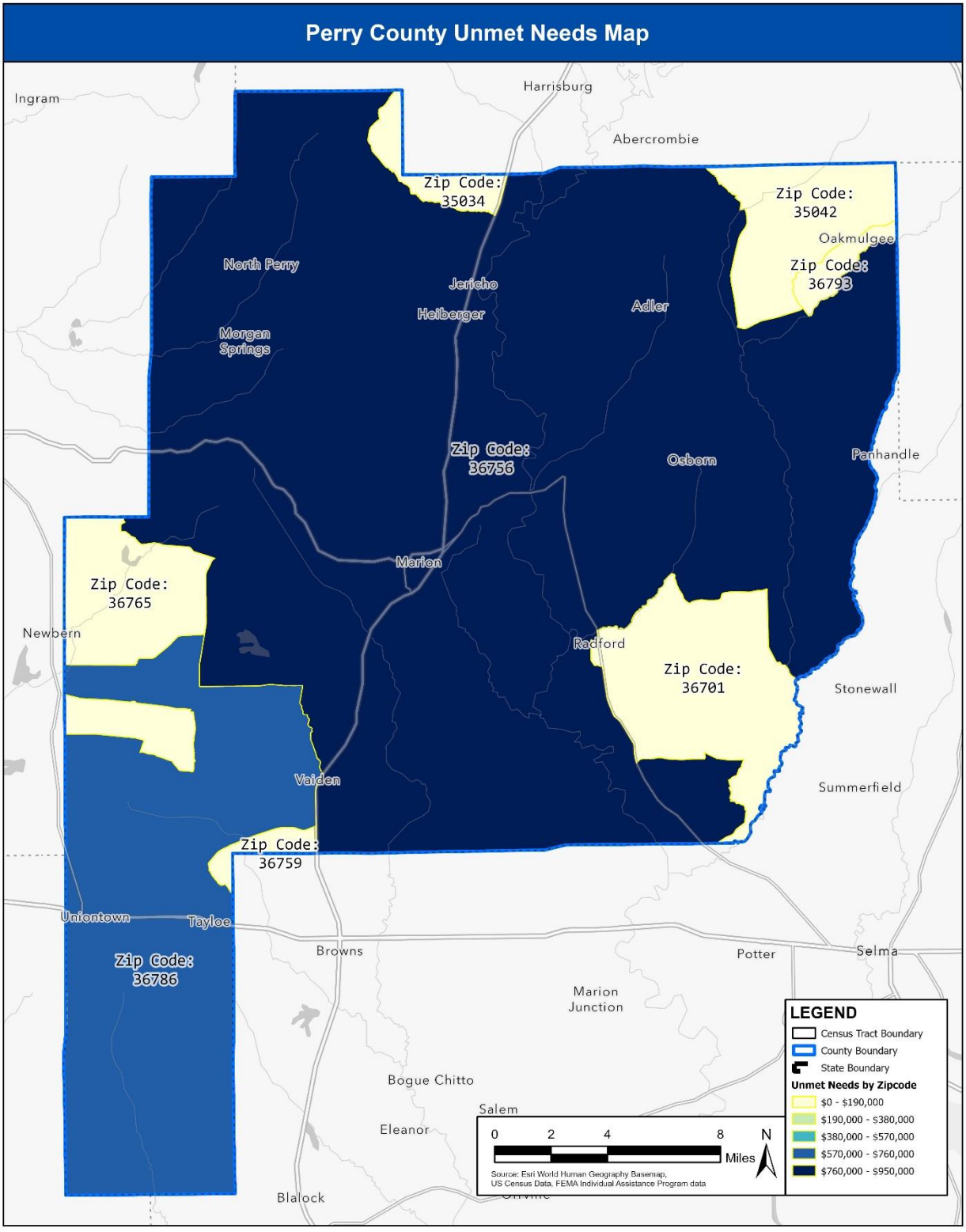
See below for a more detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code.

Table 152 Unmet Need Summary by Zip Code

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36756** | $835,554 | $85,128 | $3,870 | $924,552 |
| **36786** | $598,791 | $0 | $15,726 | $614,517 |
| **36765** | $40,985 | $0 | $0 | $40,985 |
| **36701** | $40,559 | $0 | $0 | $40,559 |
| **36759** | $39,726 | $0 | $0 | $39,726 |
| **36773** | $16,222 | $0 | $0 | $16,222 |
| **35042** | $1,864 | $0 | $0 | $1,864 |
| **36783** | $1,864 | $0 | $0 | $1,864 |
| **Total** | **$1,575,566** | **$85,128** | **$19,596** | **$1,680,290** |

A map view of the total unmet need by zip code is on the following page.

**Figure 50 Perry County Unmet Need by Zip Code**

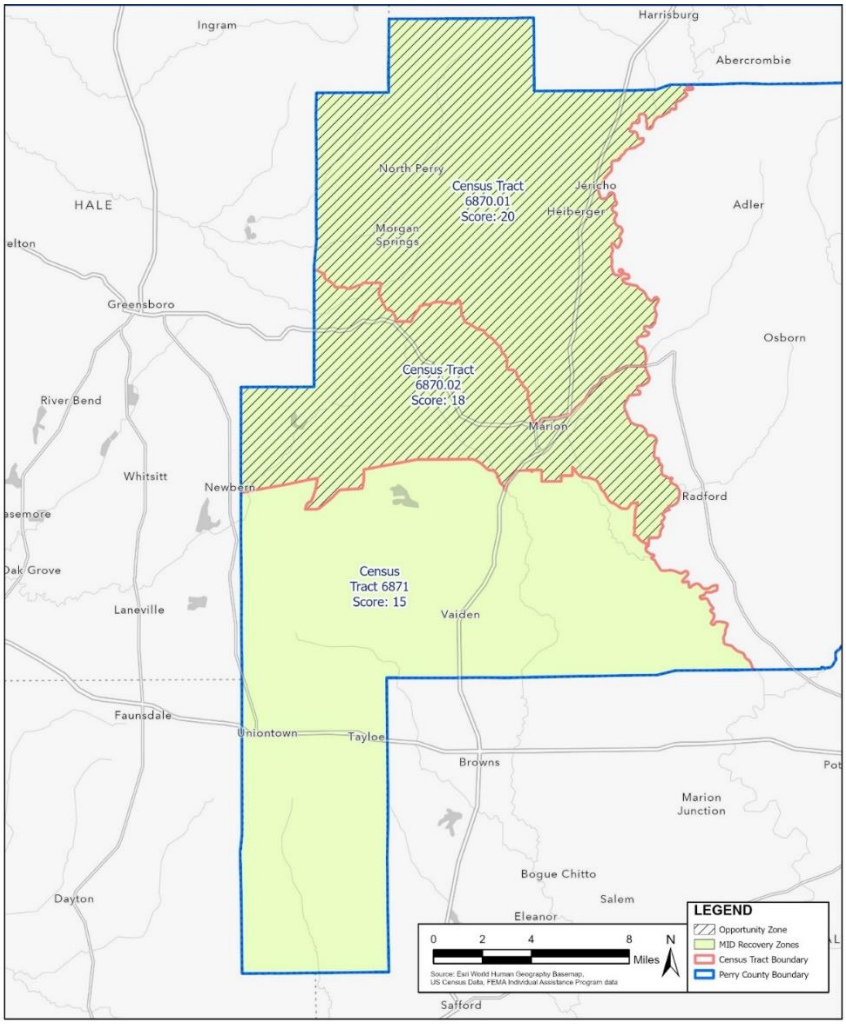


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology for determining the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Perry County is shown in Figure 52 MID Recovery Zones for Perry County. See Appendix B for the scores of each census tract in determining the MRZ.

**Figure 51 MID Recovery Zones for Perry County**




**Identified Mid Recovery Zones:** Census Tracts: 6781, 6870.02, and 6870.01.

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, 2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan, data from NOAA and FEMA, and stakeholder input were used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 14 disaster declarations for Perry County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are severe storms/tornadoes and Hurricanes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards are critical.

**Table 153 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date for Perry County**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4596-AL** | 2021 | Severe Storm | Severe Storms, Straight-Line Winds, & Tornadoes | $667,173 |
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $397,637 |
| **DR-4546-AL** | 2020 | Severe Storm | Severe Storms and Flooding | $880,161 |
| **DR-4503-AL** | 2020 | Biological | Covid-19 Pandemic | No Data |
| **DR-4251-AL** | 2016 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, And Flooding | $359,822 |
| **DR-4176-AL** | 2014 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, & Flooding | $210,398 |
| **DR-4082-AL** | 2012 | Hurricane | Hurricane Isaac | $91,591 |
| **DR-4052-AL** | 2012 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, & Flooding | No Data |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, & Flooding | $155,833 |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes & Straight-Line | $109,184 |
| **DR-1605-AL** | 2005 | Hurricane | Hurricane Katrina | $32,742 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $85,423 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $355,317 |
| **DR-388-AL** | 1973 | Flood | Severe Storms & Flooding | No Data |

Source: OpenFEMA Data Sets, Disaster Declaration Summary[75] and Public Assistance Funded Project Details[76]

Historic weather patterns can be determined for Perry County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 155 provides an outline of the number of recorded storm events from January 1950 to December 2023 for Perry County. If the same event type occurred on the same date, only one event was recorded; however, the number

[75] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[76] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

of fatalities, injuries, and damages were summed across the multiple events for a single day and event type.

**Table 154 NCEI Storm Events Summary (1950 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Cold/Wind Chill** | 3 | 0 | 0 | $0 | $1,000,000 |
| **Drought** | 30 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 9 | 0 | 0 | $69,000 | $5,000 |
| **Flood** | 1 | 0 | 0 | $0 | $0 |
| **Hail** | 34 | 0 | 0 | $436,000 | $24,000 |
| **Heat** | 6 | 0 | 0 | $0 | $0 |
| **Heavy Rain** | 1 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 2 | 0 | 0 | $0 | $0 |
| **Ice Storm** | 1 | 0 | 0 | $0 | $0 |
| **Strong Wind** | 2 | 0 | 0 | $7,000 | $0 |
| **Thunderstorm Wind** | 48 | 0 | 1 | $399,000 | $0 |
| **Tornado** | 29 | 0 | 5 | $30,610,000 | $25,000 |
| **Tropical Storm** | 3 | 0 | 0 | $1,240,000 | $0 |
| **Winter Storm** | 4 | 0 | 0 | $22,000 | $1,000 |
| **Winter Weather** | 1 | 0 | 0 | $0 | $0 |
| **Extreme Cold/Wind Chill** | 1 | 0 | 0 | $0 | $0 |
| **High Wind** | 4 | 0 | 0 | $3,506,000 | $200,000 |
| **Tropical Depression** | 2 | 0 | 0 | $6,000 | $0 |
| **Excessive Heat** | 3 | 0 | 0 | $0 | $0 |
| **Frost/Freeze** | 2 | 0 | 0 | $0 | $0 |
| **Grand Total** | **186** | **0** | **6** | **$36,295,000** | **$1,255,000** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[77]

## 2. Greatest Risk Hazards

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized as High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- High: Probable major damage in a 1-10 Year Period
- Medium: Probable major damage in a 10-50 Year Period
- Low: Probable major damage in a 100 Year Period
- Very Low: No probable major damage in a 100 Year Period

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified high winds from strong severe storms and tornadoes, and flooding as the most significant risks;

[77] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

however, extreme temperatures including drought, and wildfires were also identified as great risks.

**Table 155 Greatest Risk Hazards for Perry County**

| Hazard | Risk Rating | Locations Impacted | Associated risk |
|---|---|---|---|
| **Flooding** | High | Areas along creeks and rivers, and low-lying areas with poor drainage are most at risk. If enough rain falls every area is at risk of flash flooding. The Cahaba River, the Oakmulgee Creek and their tributaries are prone to reoccurring flooding events. Urban areas of Uniontown and Marion also flood in high rain events. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Tornadoes** | High | County-wide, Tornadoes can occur throughout the year but most likely to occur in the spring (March - May) and fall (November to December). Mobile home communities are most vulnerable. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Severe Storms** | High | County-wide, Severe storms can occur throughout the year. Downtown structures are susceptible to roof damage along with glass storefronts. | Can cause crop, property damage, injury, and loss of life |
| **Extreme Heat and Droughts** | Medium | County-wide, the area is especially susceptible to these events during the summer months. The Southern part of the county is most susceptible. No cooling stations within the county to support residents. | Can cause crop loss, water quality and quantity issues, threaten health (heat stroke, etc.) of people living and working in the area |
| **Wildfires** | Medium to High | Urban, more densely populated areas have a higher | Can cause crop and property and infrastructure damage, threaten health due to poor air quality and result in injury and loss of life |

While extreme cold temperatures are uncommon due to Alabama's mild winter climate and therefore it is not classified as a Medium or High Risk in Perry County, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather, and ice storms which can cause downed trees or result in vehicle accidents. Since 1950, 13 cold weather-related events have occurred in Perry County which has led to over $1 million in reported crop damages. There is a lack of infrastructure in the county to offer dedicated warming stations for residents, especially populations that are the most vulnerable to extreme cold.

## a. Flooding

Flooding is a problem for many people across the United States. Enduring the consequences of repetitive flooding can put a strain on residents and state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the NFIP, which pays flood claims. According to the NFIP data, as of April

2024, there are 0 Repetitive Loss Properties and 0 Severe Repetitive Loss Properties in Perry County.

While repetitive loss flooding is not recorded in Perry County, Perry County does experience flooding events. Table 154 shows that there have been 10 recorded flood and flash flood events in the county. According to the *2023 Alabama State Hazard Mitigation Plan*, the most common type of flooding event in Perry County from 2000-2022 is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 8 | 1 | 0 | 9 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

According to *Figure 6 Riverine Flooding Risk in MID Counties by Census Tract,* the risk for riverine flooding in Perry County is relatively low; however, the Cahaba River runs through the county which puts the area at risk for flooding events. Other low-lying areas across the county, especially along Oakmulgee Creek and its tributaries are prone to reoccurring localized flooding events which can lead to road washouts that leave communities stranded for significant periods. Additionally, the water and sewer systems in Uniontown and Marion do not have the capacity to handle runoff during significant rainfall events.

### b. Extreme Heat and Drought

Extreme heat is often associated with droughts which can lead to greater impacts on communities. Extreme heat is very common to Perry County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across the Relatively Low to Relatively Moderate, with the relatively moderate risk in the more populated areas, as shown in Figure 3 Heat Wave Risk in MID Counties by Census Tract. There is a lack of infrastructure in the county to offer dedicated cooling stations for residents, especially populations that are the most vulnerable to extreme heat.

Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with a lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crop losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. The southern parts of the county have the greatest risk of drought impacts, as shown in *Figure 2 Drought Risk in MID Counties by Census Tract.* As a result, the past events and future probability of heat and droughts are classified county-wide as medium risk according to the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan.*

### c. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. Since 1950, NCEI has recorded 94 hail, heavy rain, lightning, strong wind, thunderstorm windstorms, and tropical depression and storm events, with recorded damages of more than $5.8 million as shown in Table 154. Since this event type has occurred regularly over the years resulting in damage, and severe storms are expected to continue regularly, Perry County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the county is relatively low to relatively moderate, as shown in *Figure 7 Hail Risk in MID Counties by*

*Census Tract.* For strong winds, the county has a relatively low to relatively moderate risk, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

### d. Tornadoes

Tornadoes are Perry County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Between 1950 and 2022, Tornadoes have led to 68 injuries and more than $30.6 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract,* Perry County has a varying degree of risk of Tornadoes, ranging from Relatively low to Very High. The greatest risk is in the central part of the county where Marion is located followed by the southern portion of the county where Uniontown is located.

There is a lack of infrastructure in the county to offer post-disaster shelter assistance for residents, who may be displaced due to Tornadoes, or other storm events.

### e. Wildfires

According to the Alabama Forestry Commission's Current Wildfire Totals summary[78], between 2000 and June 19, 2024, there were 582 total wildfires in Perry County. Those fires burned 8,184 acres. That translates to a yearly average of 24 fires and 348 acres burned per year. The largest fire recorded in the county between these years was 1,644 acres and occurred in 2022. Based on past occurrences, every area of the county has a degree of risk.

According to *Figure 10 Wildfire Risk in MID Counties by Census Tract*, Perry County has a relatively low risk for wildfire compared to the rest of the country. However, according to the 2023 Alabama State Hazard Mitigation Plan, as the climate changes, Alabama is projected to become more prone to wildfire occurrences between now and 2050. It is projected that by 2050 the average number of days with high wildfire will double from 25 to 50 days a year.

## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk Index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability, and community resilience.

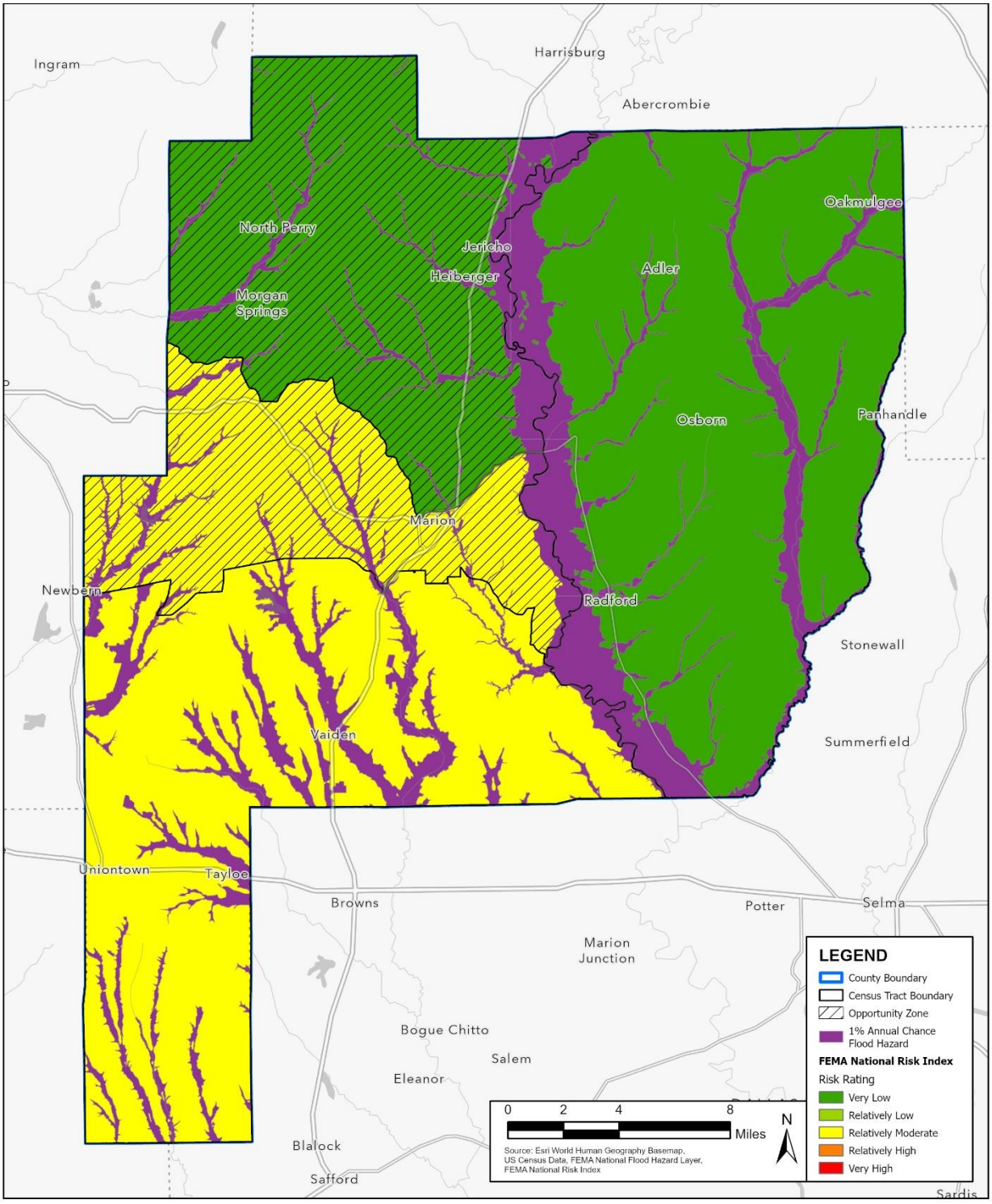
**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

As shown in

Figure 53, we can see that there are parts of the county that have a Relatively Moderate National Risk Index rating. This area includes Marion and Uniontown. Hazard-specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

[78] https://forestry.alabama.gov/pages/fire/totals.aspx

**Figure 52 FEMA National Risk Index Map for Perry County**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Flooding** | High | Critical | Moderate | Less than one week |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | Medium | Minor | Moderate | Less than 6 hours |
| **Extreme Heat and Droughts** | Medium | Minor | Small | More than one week |
| **Wildfires** | High | Minor | Small | Less than one week |

#### Probability defined:

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

#### Impact defined:

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

#### Location Extent defined:

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact from the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

To address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Rental Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 15 responses were received. Of those respondents the majority were homeowners of stick-built homes (12). Respondents said that they experienced a moderate to significant amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and flooding. They stated that this resulted in electricity outages, and damage to streets. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 78% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, about two-thirds occupied apartments, mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds, flooding, and other extreme weather conditions. Additionally, 87% for the renter population that applied for FEMA assistance reported making less than $30,000 a year.

From the Planning Charette, the stakeholders in attendance noted that there was the lack of sheltering options for residents that were impacted by the storm because there isn't any one homeless shelter that currently exist in the county.

Surveys were distributed at Perry County's public meetings. The top results of the surveys are as

- 8 respondents stated interest in development of Affordable Multi-family housing, 4 of whom ranked it as top priority.
- 10 respondents stated interest in a First Time Homeownership Assistance Program, 3 of whom ranked it as their top priority.
- 6 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing multi-family Housing, 1 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. According to feedback from the Stakeholder Charette and the Public meetings, multi-family housing is not a top priority for Perry County; the majority of input placed an emphasis on infrastructure or single-family housing over multi-family. Regardless, the surveys distributed asked for input on what would be the top priority for the County's housing programs and feedback was received. Ultimately,, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Affordable Multifamily Housing** | **Strategy** | Housing Recovery | • Perry County identified the need to create and rehabilitate affordable multifamily housing.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | MED |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | Yes, Public Housing Authority | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MED | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • The county would like to provide opportunities for renters to purchase more secure housing, with an emphasis on supporting first-time homebuyers located within a MID Recovery Zone. | MED |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **SVI Score** | High | • Intended to pay a portion of the cost of purchasing an eligible new home for eligible applicants, which may be based on need, household size, and the cost of a home.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Rehabilitation to Multi-Family Housing** | **Strategy** | Housing Recovery | • Provide repair and rehabilitation to existing multi-family properties damaged by Hurricanes Sally and Zeta or to make more sanitary, safe, and secure housing availability to those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | LOW |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was to roads and bridges. Based on feedback received from the County, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in the analysis may underestimate the true scale of impact and remaining unmet infrastructure needs. Flooding occurred during the events leading to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities.

It was also identified during the planning process and mitigation needs assessment, that there is a lack of infrastructure in the county to offer dedicated heating and cooling stations, or a place to gather for resources following a storm. And as mentioned in the housing recovery strategies section, there is a lack of homeless shelters within the community.

Surveys were distributed at Perry County's public meetings. The top results of the surveys are as follows:

- 10 respondents stated interest in drainage improvements, 1 of whom ranked it as their top priority.
- 7 respondents stated interest in a program that addresses Stormwater infrastructure and management, 3 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Flood Mitigation** | **Strategy** | Mitigation | • Implement flood control improvement projects in areas subject to re-occurring flooding, which leave communities cut off from the rest of the county. This was particularly problematic during and after Hurricanes Zeta.<br>• Specific areas initially identified are along Dobyne Road, Jim Foundry Road, Medline Road, and St. Mary's Spur. While these roads were restored to passable through the FEMA PA program, there is a need to return the roads to pre-disaster condition and to redesign and raise these roads to prevent future flooding events | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score (County Wide)** | High | | |
| | **Geographic Eligibility** | MID County - Mitigation | | |
| | **Administering Entity Identified** | Perry County Engineering / Highway | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Perry County would like to develop a community resilience center in Marion. Community resilience centers provide year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. During or | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Administering Entity Identified** | No, Conceptual Phase | following a disaster event, this center may serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services.<br>• Unmet/Mitigation Need - addresses need for greater community resilience the face of increased damage from wind, rain, tornado, and flooding events that impede access to lifelines. | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Stormwater Infrastructure Improvements** | **Strategy** | Recovery & Mitigation | • The county identified the need to make significant stormwater infrastructure improvements so that towns are able to handle stormwater runoff and prevent future flooding.<br>• Projects require initial assessment before they can be properly scoped and estimated.<br>• For example, following Hurricanes Sally and Zeta, parts of Uniontown and Marion flooded as the stormwater system was unable to handle the capacity of the runoff produced by the amount of rainfall. By improving the infrastructure in these areas, or other areas experiencing this same challenge, flooding and backups can be reduced.<br>• Unmet/Mitigation needs – may address direct unmet need from storm related to flooding and stormwater infrastructure or a mitigation need to mitigate risks from flooding and maintain residents access to critical lifelines | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Homeless Shelter** | **Strategy** | Recovery | • Perry County does not have a homeless shelter that can serve vulnerable populations pre- and post-disaster. The county would like a homeless shelter that may also be doubled to be used as a community resilience center if the right conditions are met.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Project Amount Identified** | No, Conceptual Phase | developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | |
| | **Other Funding Sources Identified** | Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 4. Economic Recovery Strategies

With 57% of the County's residents to be considered LMI, providing job training and small business technical assistance programs helps LMI households by equipping them with the skills and resources needed to secure better-paying jobs or successfully launch and manage their own businesses, thereby improving their financial stability and economic mobility.

Surveys were distributed at Dallas County's public meetings. The top results of the surveys are as follows:

- 7 respondents stated interest in Job Creation, 3 of whom ranked it as their top priority.
- 8 respondents stated interest in Workforce Training and Development, 2 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Small Business Technical Assistance** | **Strategy** | Recovery | • Business owners recovering from disasters are often in need of specific technical assistance to respond to losses to their businesses whether it be a loss of employees or customers or a need for a new product that may present a growth opportunity for a business.<br>• The county will bolster the grant and loan resources and strengthen the small business community by creating a technical assistance program to support businesses with financial literacy programs, develop new business and continuity plans, and create a disaster resilience plan to help prepare for future disasters.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | N/A | or may address a mitigation need to minimize risk with development of a more stable economy. | |
| Workforce training and development | **Strategy** | Recovery | • The county looks to bolster and strengthen the local economy by retaining local talent. With the new West Alabama Corridor Highway and Alabama School of Health Sciences projects underway, the county would like to be able to support local residents in job training options to help expand their local economy.<br>• Addresses public desire for workforce training and development, as well as job creation.<br><br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

# XIII. Washington County

## A. Introduction

Washington County is located in the southwestern part of Alabama and borders Mississippi on the county's western border and the Tombigbee River, which is a tributary of the Mobile River, on the county's eastern border. Washinton County boasts a strong timber industry and has over 625,000 timberland acres.[79] Washington County is also the home of the state-recognized tribe, MOWA Band of Choctaw Indians, which is in the southeastern part of the county.

According to the ACS 2022 5-Year Estimates[80], Washington County has a population of 15,434, a 7% decrease from 16,541 in 2019. The demographic breakdown shows most residents (67%) are White, followed by 23% identifying as Black or African American. Housing in Washington County includes 7,779 occupied units, with 71% being single-family homes and 27% mobile homes. In total, 99.7% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is extremely high, with 88% of residents owning their homes and 12% renting. In general, there is a lack of rental and affordable housing stock to support the needs of the county which has been exacerbated by transient labor from manufacturing and chemical plants. Approximately 38% of the households in Washington County have one or more people 65 years and over. Currently, there is only 1 assisted living facility in Camden that has 88 beds, presenting a potential shortage of living options for county residents in future years as the population continues to age. In 2020, 39% of the county's residents were considered LMI compared to 45% in 2022.

Washington County experienced damage from Hurricane Zeta which mainly resulted in downed trees that cut off power to communities for weeks, and damaged homes which are still in need of repair including in the MOWA tribal area. The debris that was required to be removed led to roadways being damaged due to the frequency and weight of debris vehicles driving over them. Generators were borrowed from neighboring counties to be used for water pumps, radio towers, and for fire departments. Flooding also occurred in low-lying areas including on some roadways.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Washington County present unmet need estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see table below). Over time, ACCA and the county reserves the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 156 Total Estimated Unmet Need for Washington County**

| | Estimated Impact | Amount of Funds from other sources | Total Unmet Need |
|---|---|---|---|
| **Housing** | **$4,755,659** | **$2,246,539** | **$2,509,120** |
| **Infrastructure** | **$3,280,941** | **$2,943,430** | **$13,389** |
| **Economy** | **$834,278** | **$0** | **$834,278** |
| **Total** | **$8,870,878** | **$5,189,969** | **$3,356,787** |

[79] 2021 Alabama Forestry Report, https://forestry.alabama.gov/Pages/Management/Forms/Forest_Resource_Report_2021.pdf
[80] https://data.census.gov/ - Tables B02001, B25024, B25033

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Washington County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated because of impacts from the 2020 storms.

The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, among other sources, to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. These particular unmet needs assessment focuses on Washington County's impacts with specific sections detailing particular needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

The demographic profile of Washington County has not changed significantly since the state of Alabama's 2020 Disaster Recovery Action Plan was published. Demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county.

**Vulnerable Populations**

Washington County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Washington County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Washington County has two identified disadvantages areas: Opportunity Zones and Tribal Areas. Washington County does not have any Promise Zones, R/ECAP, or Neighborhood Revitalization Strategy Areas within the county.

**Figure 53 Washington County SVI Themes**

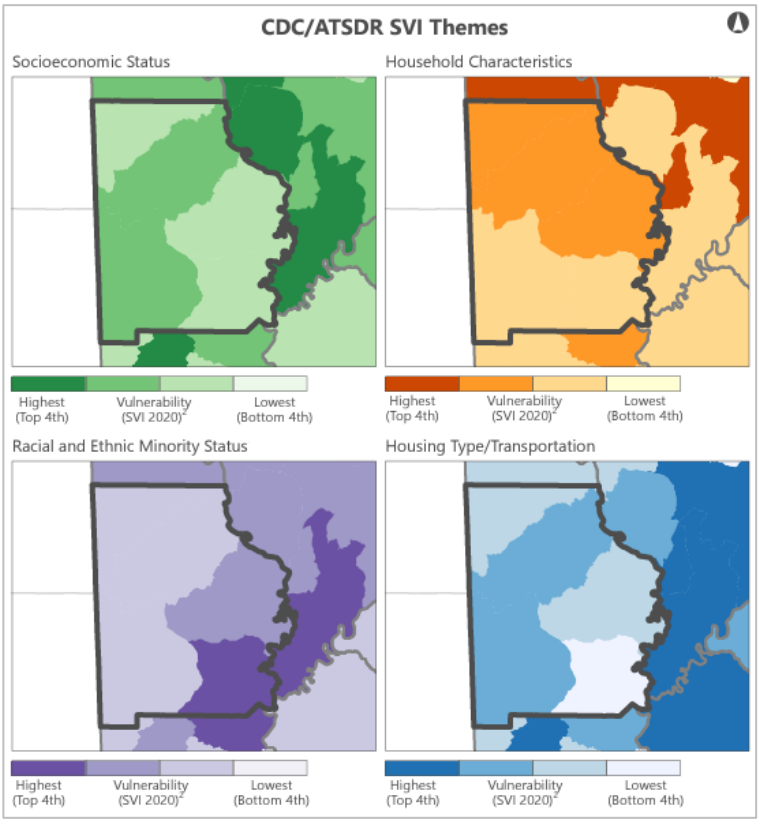
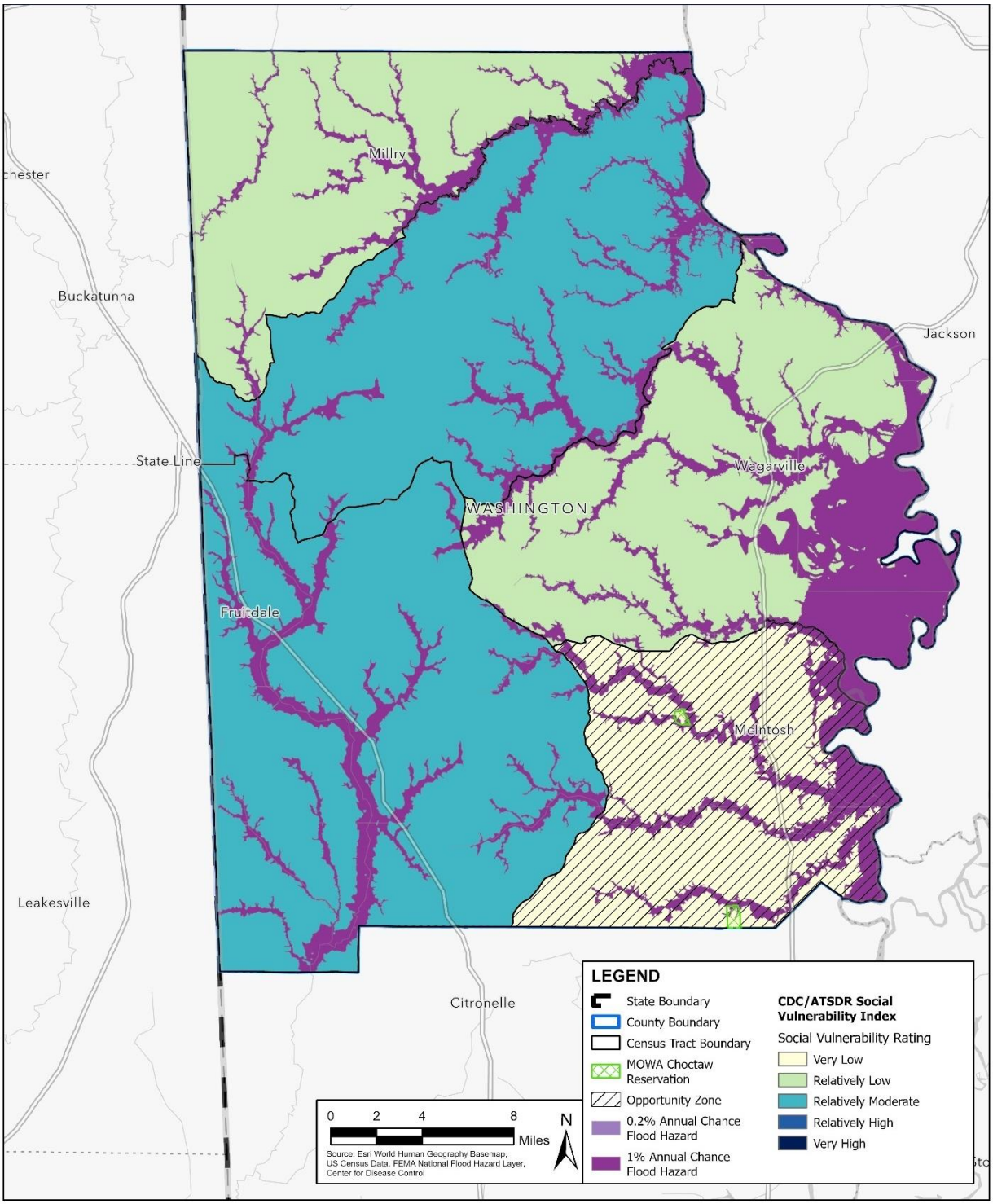



Figure 54 show cases the 2020 vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme. The map below provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the highest SVI Ratings and where the Opportunity Zone is located.

**Figure 54 Washington County Vulnerability Map**



### LMI Populations

As highlighted shown in the table below, Wilcox County does not have any census tracts with more than 50% of the population that is considered LMI, nor do they have any census tracts with high SVI Ratings.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities. Although Washington County does not have any majority LMI census tracts nor ones with high vulnerabilities, this does not preclude Washington from having vulnerable or LMI residents.

**Table 157 Wilcox County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[81] | SVI Rating |
|---|---|---|
| 439 | 40.49% | Relatively Low |
| 440 | 45.68% | Relatively Moderate |
| 441 | 33.71% | Relatively Low |
| 442 | 38.64% | Very Low |
| 443 | 32.68% | Relatively Moderate |

[81]HUD GIS Helpdesk, Low to Moderate Income Population by Tract Open dataset. Published July 31, 2023; updated August 14, 2024.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

For each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

Total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the below tables outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 158 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 4 | 0.3% | 0 | 0.0% | 4 | 0.3% |
| **Major-High** | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| **Major-Low** | 42 | 3.4% | 5 | 0.4% | 47 | 3.8% |
| **Minor-High** | 288 | 23.1% | 48 | 3.8% | 336 | 26.9% |
| **Minor-Low** | 144 | 11.5% | 4 | 0.3% | 148 | 11.8% |
| **No FVL** | 650 | 52% | 64 | 5.1% | 714 | 57.2% |
| **Total** | **1,128** | **90.3%** | **121** | **9.7%** | **1,249** | **100.0%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

For FEMA IA Applications with minor-low, minor-high, and major-low damage, the count of those applications in each county was multiplied by the overall average SBA verified property loss per damage category provided in the state of Alabama's 2020 Disaster Recovery Action Plan to determine the estimated total loss/support for these three damage categories. The below tables outline the total number of properties damaged for homeowners and renters.

Table 159 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 144 | $1,621 | $233,424 |
| **Minor-High** | 288 | $5,495 | $1,582,560 |
| **Major-Low** | 42 | $11,502 | $483,084 |
| **Total** | **474** | **N/A** | **$2,299,068** |

Table 160 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 4 | $1,621 | $6,484 |
| **Minor-High** | 48 | $5,495 | $263,760 |
| **Major-Low** | 5 | $11,502 | $57,510 |
| **Total** | **57** | **N/A** | **$327,754** |

Table 161 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 148 | $1,621 | $239,908 |
| **Minor-High** | 336 | $5,495 | $1,846,320 |
| **Major-Low** | 47 | $11,502 | $540,594 |
| **Total** | **531** | **N/A** | **$2,626,822** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and required reconstruction. To determine the replacement cost of the home, Washington County replicated ADECA's approach and used the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[82]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided below.

Table 162 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $133,008 | $87,785 | 0 | $0 |
| **Severe** | $133,008 | $87,785 | 4 | $351,140 |
| | **Total** | | **4** | **$351,140** |

Of the 4 severely damaged homes, no renter occupied dwellings are classified as Severe.

[82] Washington County Home Values, https://www.zillow.com/home-values/3047/washington-county-al/

### FEMA IA Applications without FEMA Verified Loss

Washington County also accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter-occupied dwellings because due to the COVID-19 pandemic and other reasons, an inspection never physically took place or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Washington County counted applications with no FEMA Verified Loss and multiplied it by the average value for minor-low damage per SBA-verified property loss provided in the state of Alabama's 2020 Disaster Recovery Action Plan. The results of these calculations are provided in the table below:

**Table 163 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 650 | $1,621 | $1,053,650 |
| **Renter** | 64 | $1,621 | $103,744 |
| **Total** | **714** | **$1,621** | **$1,157,394** |

## c. Impacts of Insurance (HOI and NFIP)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See below for flood-damaged properties by damage category and occupancy type.

**Table 164 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 0 | 2 | 11 | 4 | 0 | 0 | 17 |
| **Renter** | 0 | 0 | 3 | 0 | 0 | 0 | 3 |
| **Total** | **0** | **2** | **14** | **4** | **0** | **0** | **20** |

**Flood Damage and Insurance (NFIP):** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP) as shown in the table below. In total, **100 percent** of the flood-affected population are reported to not carry an NFIP policy per the FEMA IA data.

**Table 165 Flood Damaged Owner-Occupied Properties with Flood Insurance**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% |
| **Major-Low** | 0 | 0% | 4 | 24% |
| **Minor-High** | 0 | 0% | 11 | 65% |
| **Minor-Low** | 0 | 0% | 2 | 12% |
| **No FVL** | 0 | 0% | 0 | 0% |
| **Total** | **0** | **0%** | **17** | **100%** |

**Wind Damage and Insurance (HOI):** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of owner-occupied households reported not to carry a standard hazard insurance policy that would otherwise be expected to offset documented losses. In total, 72 percent of the wind-impacted owner-occupied population is reported not to carry hazard insurance as shown below.

**Table 166 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 650 | 142 | 277 | 38 | 0 | 4 | 1,111 |
| **Renter** | 64 | 4 | 45 | 5 | 0 | 0 | 118 |
| **Total** | **714** | **146** | **322** | **43** | **0** | **4** | **1,229** |

**Table 167 Wind Damaged Owner-Occupied Properties with Flood Insurance**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 4 | 0.5% |
| **Major-High** | 0 | 0% | 0 | 0% |
| **Major-Low** | 1 | 0% | 37 | 3.5% |
| **Minor-High** | 10 | 1% | 267 | 24% |
| **Minor-Low** | 13 | 1% | 129 | 12% |
| **No FVL** | 291 | 26% | 359 | 32% |
| **Totals** | **315** | **28%** | **796** | **72%** |

## d. Impact based on Residence Type

The below table shows FEMA IA applicants by housing type. The highest number of applicants came from housing/duplex units (49%) and Mobile Home units (46%).

**Table 168 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 0 | 0% | 5 | 0% | 5 | 0% |
| **Boat** | 1 | 0% | 0 | 0% | 1 | 0% |
| **House/Duplex** | 542 | 43% | 66 | 5% | 608 | 49% |
| **Mobile Home** | 528 | 42% | 43 | 3% | 571 | 46% |
| **Other** | 29 | 2% | 5 | 0% | 34 | 3% |
| **Travel Trailer** | 28 | 2% | 2 | 0% | 30 | 2% |
| **Total** | **1,128** | **90%** | **121** | **10%** | **1,249** | **100%** |

The below table shows FEMA IA flood-damaged properties by housing type that had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, 0**%** of the flood-affected population is reported to carry an NFIP policy per the FEMA IA data.

Table 169 Flood Damaged Properties by Residence Type and Count with NFIP

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **House/Duplex** | 12 | 0 | 0% |
| **Mobile Home** | 5 | 0 | 0% |
| **Total** | **17** | **0** | **0%** |

The below table shows FEMA IA wind-damaged properties by housing type who had Homeowner's insurance. As indicated in the overview of wind-damaged properties, 28**%** of the affected population are reported to carry homeowner's insurance policy per the FEMA IA data.

Table 170 Wind Damaged Properties by Residence Type and Count with HOI

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Boat** | 1 | 0 | 0% |
| **House/Duplex** | 530 | 232 | 44% |
| **Mobile Home** | 523 | 71 | 14% |
| **Other** | 29 | 11 | 38% |
| **Travel Trailer** | 28 | 1 | 4% |
| **Total** | **1,111** | **315** | **28%** |

Total estimated losses have been summarized by residence type.

Table 171 Total Estimated Loss by Residence Type

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 5 | $8,105 |
| **Boat** | 1 | $1,621 |
| **House/Duplex** | 608 | $1,817,327 |
| **Mobile Home** | 571 | $2,192,937 |
| **Other** | 34 | $55,114 |
| **Travel Trailer** | 30 | $60,252 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a low-and moderate-income calculation as some of the data overlapped LMI and non-LMI category classifications for a specific household. To summarize the impact of storms had on households based on income, four income groupings are provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Zeta, with 69% of the total impacted population making $30,000 or less.

**Table 172 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 3 | 0% | 1 | 0% | 0 | 0% | 0 | 0% | 4 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 35 | 3% | 4 | 0% | 3 | 0% | 0 | 0% | 42 | 4% |
| **Minor-High** | 240 | 21% | 43 | 4% | 5 | 0% | 0 | 0% | 288 | 26% |
| **Minor-Low** | 116 | 10% | 17 | 2% | 11 | 1% | 0 | 0% | 144 | 13% |
| **No FVL** | 360 | 32% | 166 | 15% | 118 | 10% | 6 | 1% | 650 | 58% |
| **Totals** | **754** | **67%** | **231** | **20%** | **137** | **12%** | **6** | **1%** | **1,128** | **100%** |

**Table 173 Gross Income by Damage Level for Renters Only**

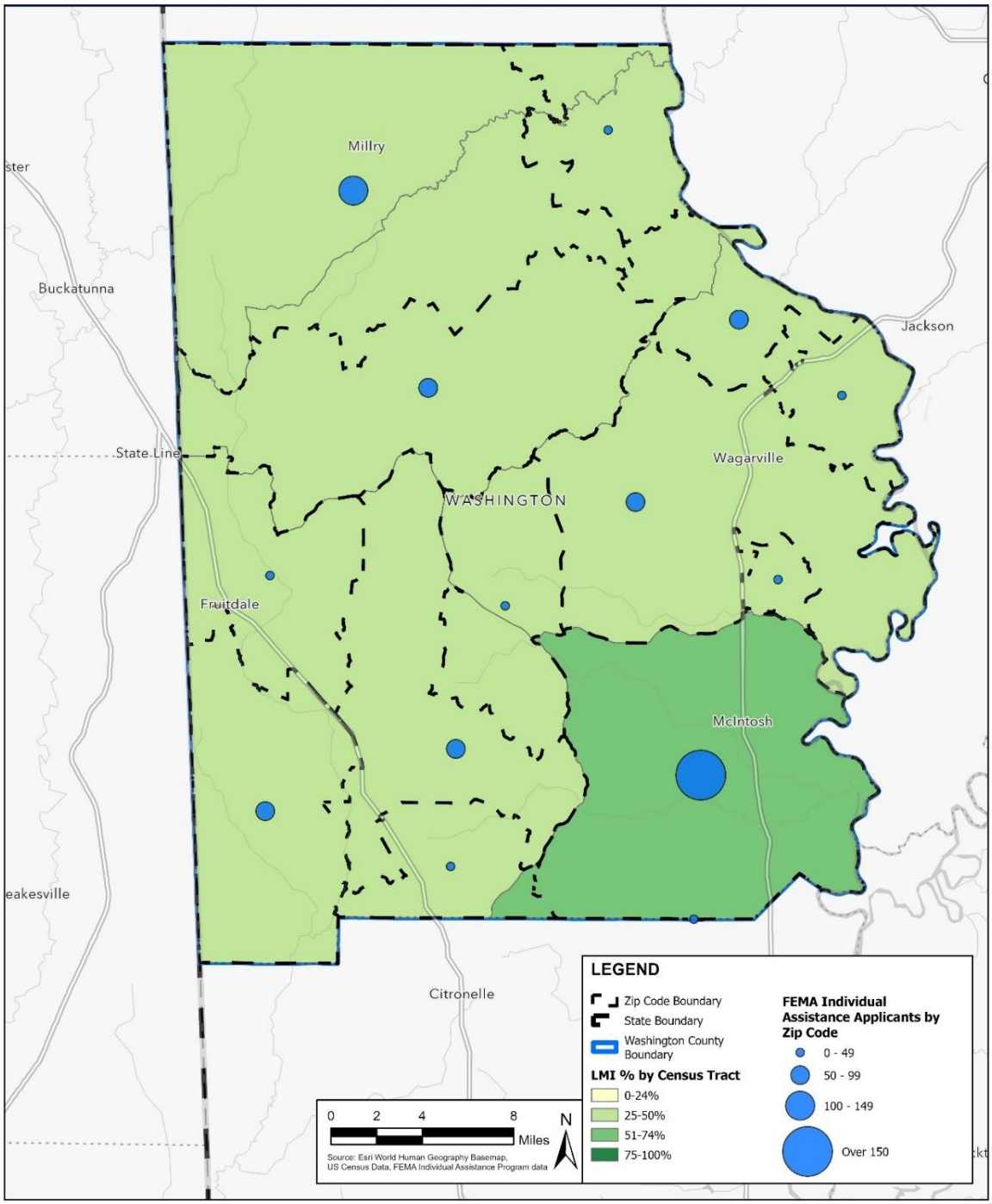
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 5 | 4% | 0 | 0% | 0 | 0% | 0 | 0% | 5 | 4% |
| **Minor-High** | 43 | 36% | 3 | 2% | 2 | 2% | 0 | 0% | 48 | 40% |
| **Minor-Low** | 3 | 2% | 1 | 1% | | 0% | 0 | 0% | 4 | 3% |
| **No FVL** | 52 | 43% | 7 | 6% | 5 | 4% | 0 | 0% | 64 | 53% |
| **Totals** | **103** | **85%** | **11** | **9%** | **7** | **6%** | **0** | **0%** | **121** | **100%** |

**Table 174 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 3 | 0% | 1 | 0% | 0 | 0% | 0 | 0% | 4 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 40 | 3% | 4 | 0% | 3 | 0% | 0 | 0% | 47 | 4% |
| **Minor-High** | 283 | 23% | 46 | 4% | 7 | 1% | 0 | 0% | 336 | 27% |
| **Minor-Low** | 119 | 10% | 18 | 1% | 11 | 1% | 0 | 0% | 148 | 12% |
| **No FVL** | 412 | 33% | 173 | 14% | 123 | 10% | 6 | 0% | 714 | 57% |
| **Totals** | **857** | **69%** | **242** | **19%** | **144** | **12%** | **6** | **0%** | **1,249** | **100%** |

The map below illustrates the Low-Moderate Income percentage by Census Tract, with heat bubbles of where the FEMA IA applications are located based on the zip code location.

**Figure 55 LMI Populations and FEMA IA Applications by Zip Code for Washington County**




## f. Impact on Public Housing Authorities

A Public Housing Authority (PHA) for the county does not exist. Washington County would like to have a PHA in order to access available housing funds through the federal government which restricts the county from assisting vulnerable populations.

## g. Summary of Housing Impacts

FEMA IA was the primary data source that Washington County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology as summarized in previous sections by damage category and for public housing authorities. An additional 15% is added at the end of the calculation to account for resilience costs to make buildings more resilient to future disasters. To calculate the total unmet need, received assistance is also summarized and subtracted from the estimated total loss including resilience costs.

**Table 175 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 4 | $351,140 |
| **Major-High** | 0 | $0 |
| **Major-Low** | 47 | $540,594 |
| **Minor-High** | 336 | $1,846,320 |
| **Minor-Low** | 148 | $239,908 |
| **No FEMA Verified Loss** | 714 | $1,157,394 |
| **Public Housing** | 0 | $0 |
| **Total** | **1,249** | **$4,135,356** |
| **+15% Resilience Costs** | | **$620,303** |
| **Total Estimated Loss with Resilience Costs** | | **$4,755,659** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA repair and replacement, SBA Real Estate, and NFIP payment amounts were added together to get the total housing assistance received. See below for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received.

**Table 176 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 301 | 1,436,439 |
| **NFIP Payments** | 0 | 0 |
| **SBA Loan Amounts** | Unknown | $810,100 |
| **Total Housing Assistance** | **301** | **$2,246,539** |

Total housing assistance was subtracted from the total housing unmet needs with resilience included to get a total housing unmet need of approximately $2.5 million as a result of Hurricane Zeta. See below for the calculation.

**Table 177 Total Housing Unmet Need for Washington County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $4,755,659 |
| **Total Housing Assistance Received** | -$2,246,539 |
| **Total Housing Unmet Need** | **$2,509,120** |

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Washington County experienced damage from Hurricane Zeta which resulted in downed trees that cut off power to communities for weeks, and the debris removal process led to damaged roadways due to the frequency and weight of debris vehicles driving over them. Generators were borrowed from neighboring counties to be used for water pumps, radio towers, and for fire departments. Flooding also occurred in low-lying areas and damaged roadways and bridges, primarily in the southern and eastern portions of the counties. Based on feedback received from the County Emergency Management Agency Director and County Engineer, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost and additional costs for resiliency measures (15%) the increased cost of construction (23.6%) to estimate the Federal Share (90%) and the local share/unmet need (10%). More accurately, this applies to Categories C through G: roads and bridges, public facilities and buildings, public utilities, and other public assistance needs.

**Table 178 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $3,202,127 | $0 | $0 | $3,202,127 |
| **B - Protective Measures** | $36,014 | $0 | $0 | $36,014 |
| **C - Roads and Bridges** | $7,003 | $945 | $1,653 | $9,601 |
| **E - Public Buildings** | $12,152 | $1,640 | $2,868 | $16,660 |
| **G - Recreational / Other** | $9,272 | $1,252 | $2,188 | $12,713 |
| **Z - State Management** | $3,826 | $0 | $0 | $3,826 |
| **Total** | **$3,270,394** | **$3,838** | **$6,709** | **$3,280,941** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures, increased construction costs with the total Federal Obligated Amount, and the Non-Federal Share Amount.

**Table 179 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **A - Debris Removal** | $3,202,127 | $2,881,914 | $320,213 |
| **B - Protective Measures** | $36,014 | $32,105 | $3,909 |
| **C - Roads and Bridges** | $9,601 | $6,303 | $3,298 |
| **E - Public Buildings** | $16,660 | $10,936 | $5,723 |
| **G - Recreational / Other** | $12,713 | $8,345 | $4,367 |
| **Z - State Management** | $12,713 | $3,826 | $0 |
| **Total** | **$3,280,941** | **$2,943,430** | **$337,511** |

Based on the analysis performed, there is a potential unmet need of $**13,389** for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 180 Total Estimated Unmet Need by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Need |
|---|---|---|---|---|
| **A - Debris Removal*** | $3,202,127 | $2,881,914 | $320,213 | $0 |
| **B - Protective Measures*** | $36,014 | $32,105 | $3,909 | $0 |
| **C - Roads and Bridges** | $9,601 | $6,303 | $3,298 | $3,298 |
| **E - Public Buildings** | $16,660 | $10,936 | $5,723 | $5,723 |
| **G - Recreational / Other** | $12,713 | $8,345 | $4,367 | $4,367 |
| **Z - State Management*** | $3,826 | $3,826 | $0 | $0 |
| **Total** | **$3,280,941** | **$2,943,430** | **$337,511** | **$13,389** |

*CDBG-DR Funds are not used for PA costs in Categories A, B and Z.

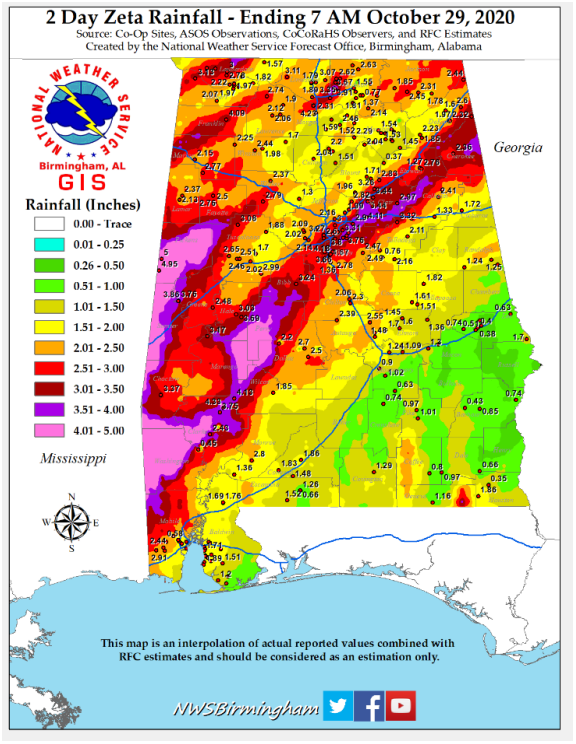
## 4. Economic Impact & Needs

A summary of the damage and impacts of Hurricane Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricane Zeta.

### Agricultural Impact

Following Hurricane Zeta, USDA designated Washington County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Zeta to apply for emergency loans with the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). This natural disaster designation allows the FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation or the refinance of certain debts.[83] As reported in the November 2nd, 2020, Alabama Crop Progress and Condition Report[84], Hurricane Zeta delivered heavy rains and damaging winds. The high soil moisture prevented fieldwork in many areas of the state following the Hurricane. As shown in Figure 57, the majority of Washington County received upwards of 5 inches of rain across a 48-hour period.

**Figure 56 Hurricane Zeta 2 Day Rainfall Total**




[83] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas

[84] https://www.nass.usda.gov/Statistics_by_State/Alabama/Publications/Crop_Progress_&_Condition/2020/AL-CropProgress-11-02-20.pdf

### a. Unmet Economic Needs

According to an analysis of SBA Business loan data for applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss of $725,459 across all businesses. After accounting for an additional fifteen percent (15%) in resilience costs, the County's total estimated economic impact stands at $834,278. According to the SBA business report, the SBA provided $0 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs is valued at $834,278.

**Table 181 Unmet Economic Needs Summary**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| **$725,459** | **$108,819** | **$834,278** | **$0** | **$834,278** |

## D. Summary of Unmet Needs & MID Recovery Zones

### 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$3.35 Million** attributable to Hurricane Zeta. In summary, this analysis projects unmet needs as follows:

**Table 182 Summary of Total Unmet Needs**

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| **Housing** | **$4,755,659** | **$2,246,539** | **$2,509,120** |
| **Infrastructure** | **$3,280,941** | **$2,943,430** | **$13,389** |
| **Economy** | **$834,278** | **$0** | **$834,278** |
| **Total** | **$8,870,878** | **$5,189,969** | **$3,356,787** |

See below for a more detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code.

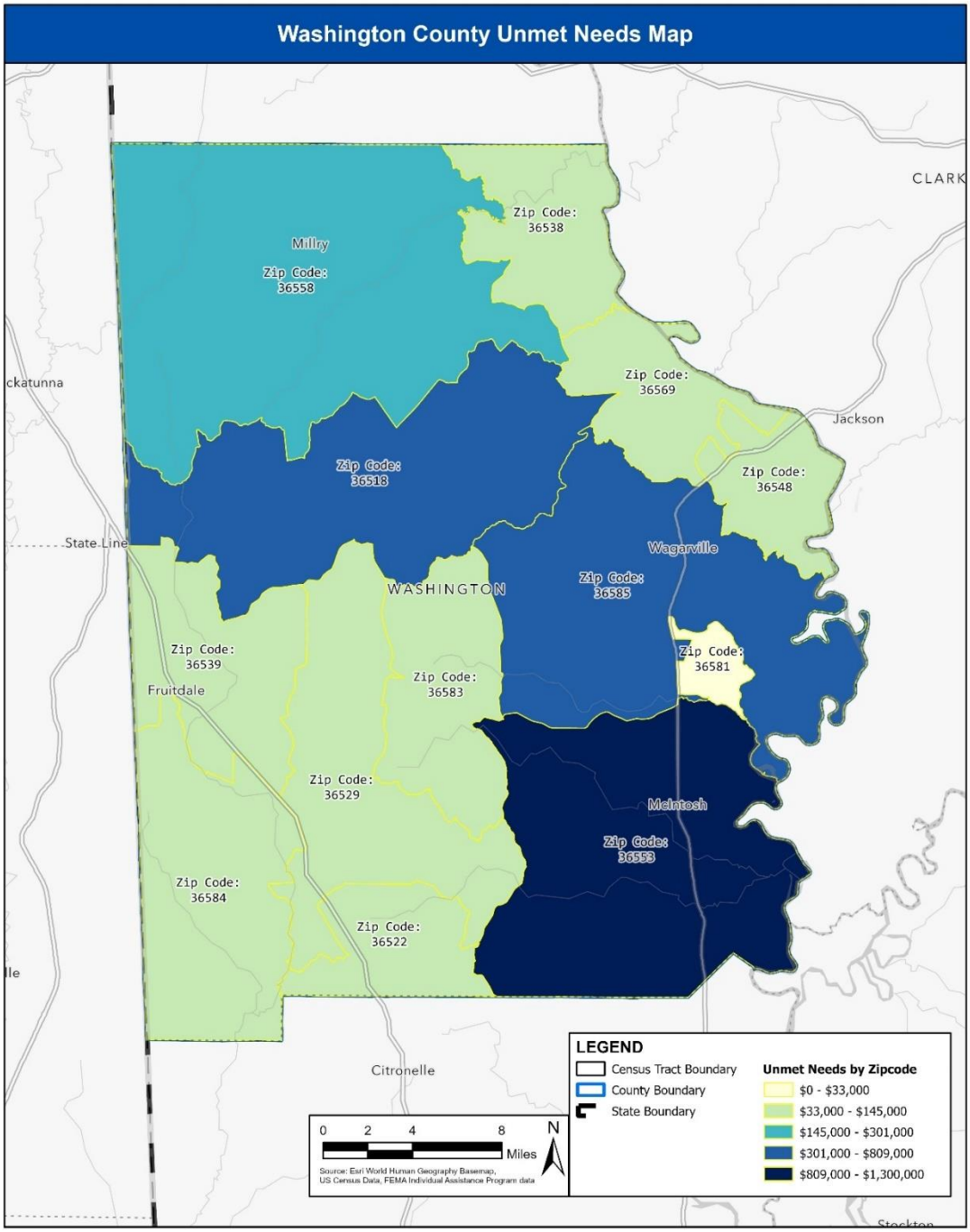
**Table 183 Unmet Need Summary by Zip Code**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36553** | $1,256,813 | $0 | $40,661 | $1,297,474 |
| **36585** | $122,574 | $0 | $685,882 | $808,457 |
| **36558** | $299,821 | $0 | $0 | $299,821 |
| **36518** | $167,710 | $3,298 | $0 | $171,008 |
| **36548** | $144,369 | $0 | $0 | $144,369 |
| **36529** | $106,418 | $0 | $14,962 | $121,380 |
| **36569** | $86,244 | $10,091 | $24,923 | $121,258 |
| **36539** | $32,703 | $0 | $67,850 | $100,553 |
| **36583** | $91,373 | $0 | $0 | $91,373 |
| **36584** | $67,330 | $0 | $0 | $67,330 |
| **36538** | $60,490 | $0 | $0 | $60,490 |
| **36522** | $57,925 | $0 | $0 | $57,925 |

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36581** | $32,386 | $0 | $0 | $32,386 |
| **36560** | -$17,036 | $0 | $0 | -$17,036 |
| **Total** | **$2,509,120** | **$13,389** | **$834,278** | **$3,356,787** |

A map view of the total unmet need by zip code is provided below.

**Figure 57 Washington County Unmet Need by Zip code**

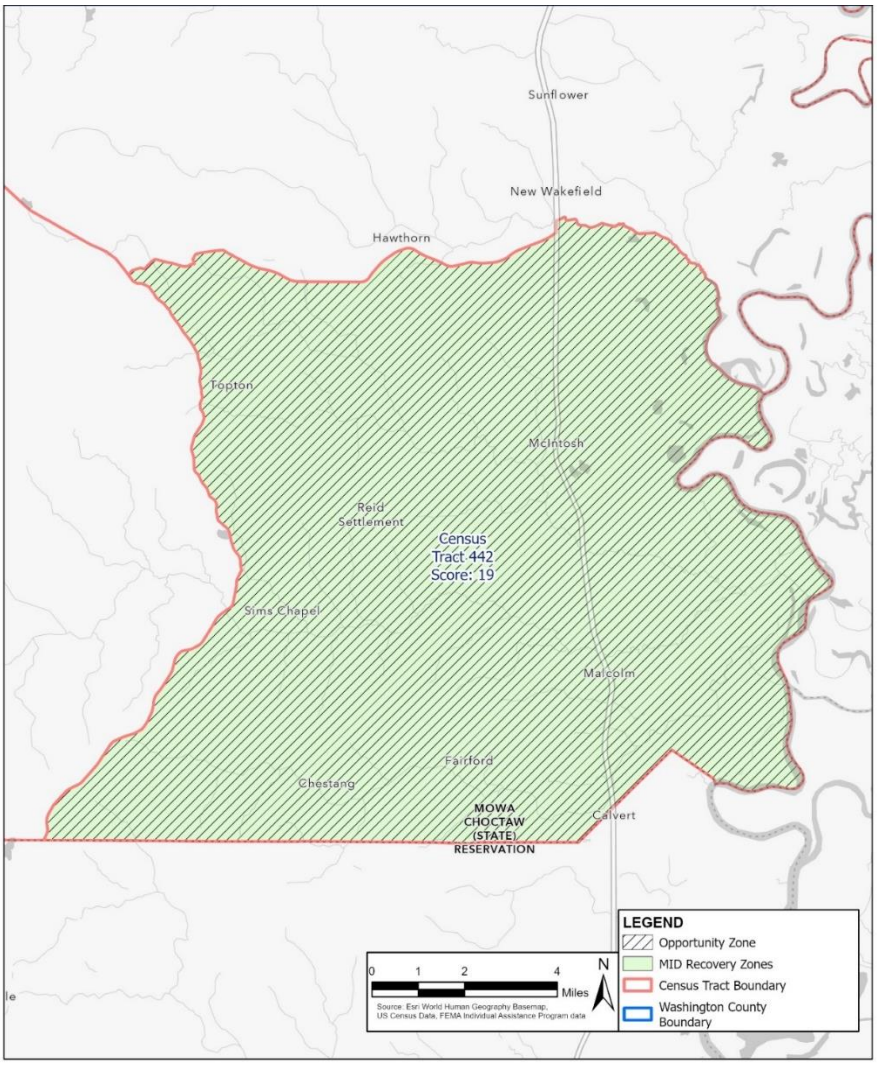


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ. By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive.

The MRZ identified for Washington County is shown in Figure 60. See Appendix B for the scores of each census tract in determining the MRZ.

**Figure 58 MID Recovery Zones for Washington County**




**Identified Mid Recovery Zone**: Census Tract 442

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, 2016 Washington County Hazard Mitigation Plan, 2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan, and data from NOAA and FEMA were used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 14 disaster declarations for Washington County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms/tornadoes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards are critical.

**Table 184 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date for Washington County**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $2,943,430 |
| **DR-4503-AL** | 2020 | Biological | Covid-19 Pandemic | No Data |
| **DR-4349-AL** | 2018 | Hurricane | Hurricane Nate | $12,634 |
| **DR-4176-AL** | 2014 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, and Flooding | $15,864 |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, and Flooding | $17,036 |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes & Straight-Line | $329,472 |
| **DR-1605-AL** | 2005 | Hurricane | Hurricane Katrina | $714,657 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $130,772 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $299,002 |
| **DR-1466-AL** | 2003 | Severe Storm | Severe Storms, Tornadoes, and Flooding | No Data |
| **DR-1250-AL** | 1998 | Hurricane | Hurricane Georges - 18 Sep 98 | No Data |
| **DR-861-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-598-AL** | 1979 | Hurricane | Hurricane Frederic | No Data |
| **DR-458-AL** | 1975 | Flood | Severe Storms & Flooding | No Data |

Source: OpenFEMA Data Sets, Disaster Declaration Summary[85] and Public Assistance Funded Project Details[86]

Historic weather patterns can be determined for Washington County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 185 provides an outline of the number of recorded storm events from January 1950 to December 2023 for Washington County. If the same event type occurred on the same date, only one event was

[85] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[86] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

recorded; however, the number of fatalities, injuries, and damages were summed across the multiple events for a single day and event type.

**Table 185 NCEI Storm Events Summary (1953 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Drought** | 3 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 22 | 0 | 0 | $1,792,000 | $0 |
| **Hail** | 65 | 0 | 0 | $1,470,000 | $25,000 |
| **Heat** | 2 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 2 | 0 | 0 | $0 | $0 |
| **Hurricane (Typhoon)** | 3 | 0 | 0 | $100,000 | $0 |
| **Lightning** | 10 | 0 | 1 | $239,000 | $0 |
| **Sleet** | 2 | 0 | 0 | $0 | $0 |
| **Thunderstorm Wind** | 111 | 0 | 7 | $4,079,000 | $0 |
| **Tornado** | 25 | 3 | 4 | $6,219,250 | $0 |
| **Tropical Storm** | 4 | 0 | 0 | $25,000 | $0 |
| **Winter Storm** | 5 | 0 | 0 | $15,000 | $0 |
| **Funnel Cloud** | 2 | 0 | 0 | $0 | $0 |
| **Winter Weather** | 1 | 0 | 0 | $0 | $0 |
| **Strong Wind** | 1 | 0 | 0 | $5,000 | $0 |
| **Grand Total** | **258** | **3** | **12** | **$13,944,250** | **$25,000** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[87]

## 2. Greatest Hazard Risks

The 2016 Washington County HMP and the 2021-2026 Division A Regional Multi-Jurisdictional Hazard Mitigation Phase II Plan identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized in High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- High: Probable major damage in a 1-10 Year Period
- Medium: Probable major damage in a 10-50 Year Period
- Low: Probable major damage in a 100 Year Period
- Very Low: No probable major damage in a 100 Year Period

The greatest risks identified in these plans are dam failures, flooding, strong severe storms, hurricanes, and tornadoes, and extreme temperatures and drought.

**Figure 59 Greatest Risk Hazards for Washington County**

| Hazard | Risk Rating | Locations Impacted | Associated risk |
|---|---|---|---|
| **Dam Failure** | High | Washington County Public Lake, Stallworth Dam, D R Stallworth Dam, Henson Dam and Wade H Odom Dam | Flooding of several feet, mainly agricultural areas, infrastructure, and isolated |

[87] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

| | | | |
|---|---|---|---|
| | | are all identified as significant hazard dams. The failure of the Coffeeville Lock and Dam in Choctow County could also affect Washington County. | structures would be impacted, and loss of life along with economic, environmental, and lifeline losses could occur. |
| **Extreme Temperatures and Drought** | High | County-wide, the area is especially susceptible to extreme heat and drought events during the summer months and extreme cold during the winter months. | Can cause crop loss, threat to health of people living and working in the area |
| **Hurricanes & Tropical Storms** | High | County-wide, however, the impact of these events can range from localized to extensive. | Can lead to crop and property damage, disruption in utility services, roadway damage, injury to residents, and loss of life. |
| **Severe Storms** | High | County-wide, Severe storms can occur throughout the year. | Can lead to crop and property damage, disruption in utility services, roadway damage, injury to residents, and loss of life. |
| **Tornadoes** | High | County-wide, however, there is generally higher frequency of tornado warnings, particularly in Yarbo, Tibbie, Fruitdale, and Deer Park. Northern portion of the County is Zone IV with a higher ultimate design wind speed (load a structure will experience). | Can lead to crop and property damage, disruption in utility services, roadway damage, injury to residents, and loss of life. |
| **Flooding** | Medium | Areas along creeks and rivers, and low-lying areas with poor drainage are most at risk. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged, or non-existent drainage infrastructure. Riverine flooding occurs along Tomibgbee and Escatawpa Rivers and their tributaries and usually occurs after periods of heavy rainfall | Can cause crop, property and infrastructure damage, injury, and loss of life |

## b. Dam Failure

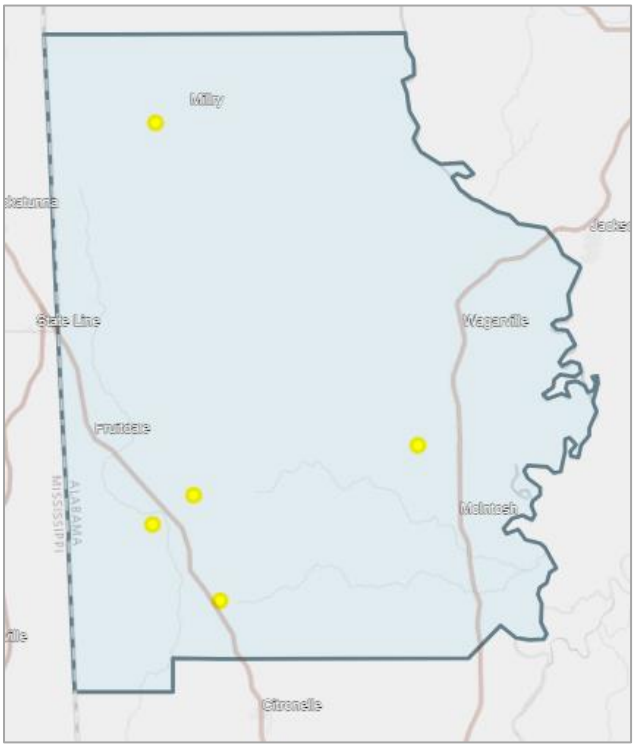
According to the National Inventory of Dams, Washington County has 15 known dams. Five (5) of these dams are identified as having a significant hazard. The Coffeeville Lock and Dam in Choctow County, rated a significant hazard potential, could also affect Washington County. The extent of a dam failure may vary based on the storage of the affected dam and its proximity to infrastructure and structures. For larger dams or dams classified with a high hazard potential, the extent of damage could be much greater and lead to loss of life along with economic, environmental, and community lifeline losses.

Historically (until June 7, 2023), Alabama did not have a dam safety program[88] which led to Alabama being disqualified from accessing federal infrastructure funds for dam-related inspections, training, and rehabilitation. Because of this, dams in the county may not have an

[88] https://www.alabama-asce.org/alabama-establishes-first-state-dam-safety-program/

accurate risk classification and they may not have received adequate funding to prevent and mitigate potential dam failures. This leads to a level of unknown risk associated with each dam. Due to the number of dams with high to significant potential hazards and the predicted damages, dam failure is classified as a high risk.

**Figure 60 Significant and High-Hazard Potential Dams**




Source: National Inventory of Dams, https://nid.sec.usace.army.mil/

## c. Extreme Temperatures and Drought

Extreme cold and heat is often associated with winter weather or droughts that can lead to greater impacts on communities. According to the 2023 State Hazard Mitigation Plan, the observed extreme temperature events in Alabama have ranged in magnitude from a high of 100 F to a low of 2 F.

Extreme heat is very common in Washington County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across parts of the county is relatively high, as shown in Figure 3 Heat Wave Risk in MID Counties by Census Tract. Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with a lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crop losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. As a result, the past events and future probability of heat and droughts are classified risks with parts of the county having a relatively moderate risk as supported by *Figure 2 Drought Risk in MID Counties by Census Tract.*

While extreme cold temperatures are uncommon due to Alabama's mild winter climate, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater

risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather and storms, and ice storms which can cause downed trees or result in vehicle accidents. Since 1950, 8 cold weather-related events have occurred in Washington County.

### d. Hurricane/Tropical Storms

As shown in Tables 182 and 183, hurricanes have historically made landfall in the region and have impacted Washington County. Due to the county's proximity to the Gulf of Mexico, hurricanes and coastal storms continue to be a high risk for Washington County. *Figure 4 Hurricane Risk in MID Counties by Census Tract,* in section VII.D, indicates that the county has a relatively high Hurricane Risk. Additionally, analysis performed by Florida State University's Meteorology Department, indicates that the probability of a hurricane of any intensity passing over Alabama is between 60% and 80%[89].

Any increased intensities in the future are likely to exacerbate the county's future vulnerability, given that intense hurricanes and coastal storms have enormous potential to devastate the physical, agricultural, economic, and sociocultural infrastructure of the county.

### e. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Since 1950, NCEI has recorded 187 hail, lightning, strong wind, and thunderstorm windstorm events, as shown in Table 183. Since this event type has occurred regularly over the years resulting in damage, and severe storms are expected to continue regularly, Washington County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the county is relatively moderate to relatively high, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract.* For strong winds, the entirety of the county has a relatively high risk, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. According to Table 185, the combination of hail, strong winds, lightning, and thunderstorms has led to an estimated $5.8 million in property and crop damages.

### f. Tornadoes

Tornadoes are Washington County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Tornadoes can damage homes, businesses, utility infrastructure and may require substantial debris cleanup. Between 1950 and 2022, Tornadoes caused 12 injuries, 3 deaths, and more than $6.2 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract*, the majority of Washington County has a relatively high to very-high Tornado Risk rating. Due to Washington County's amount of forestry land, Tornadoes could cause a lot of downed trees which can damage property, block roadways, and result in power outages.

[89] https://moe.met.fsu.edu/tcprob/al.php

Washington County faces a unique challenge related to strong storms and tornadoes due to a meteorological radar gap, which leads to insufficient tornado alerts in certain areas along the Alabama and Mississippi state border.

### g. Flooding

Flooding is a problem for many people across the United States. Enduring the consequences of repetitive flooding can put a strain on residents and on state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there is only 1 Repetitive Loss Property and 0 Severe Repetitive Loss Properties in Washington County.

While repetitive loss flooding is not common in Washington County, Washington County does have flood events, according to the *2023 Alabama State Hazard Mitigation Plan* between 2000 and 2022 the most common flood event is flash flooding as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 19 | 0 | 0 | 19 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

Where the Alabama and Tombigbee Rivers meet at the southern tips of Clarke and Washington Counties, there is a very low risk for coastal flooding as shown in *Figure 5 Coastal Flood Risk in MID Counties by Census Tract.* According to Table 185*,* the flash flooding events have led to the estimated property damage of $1.7M.

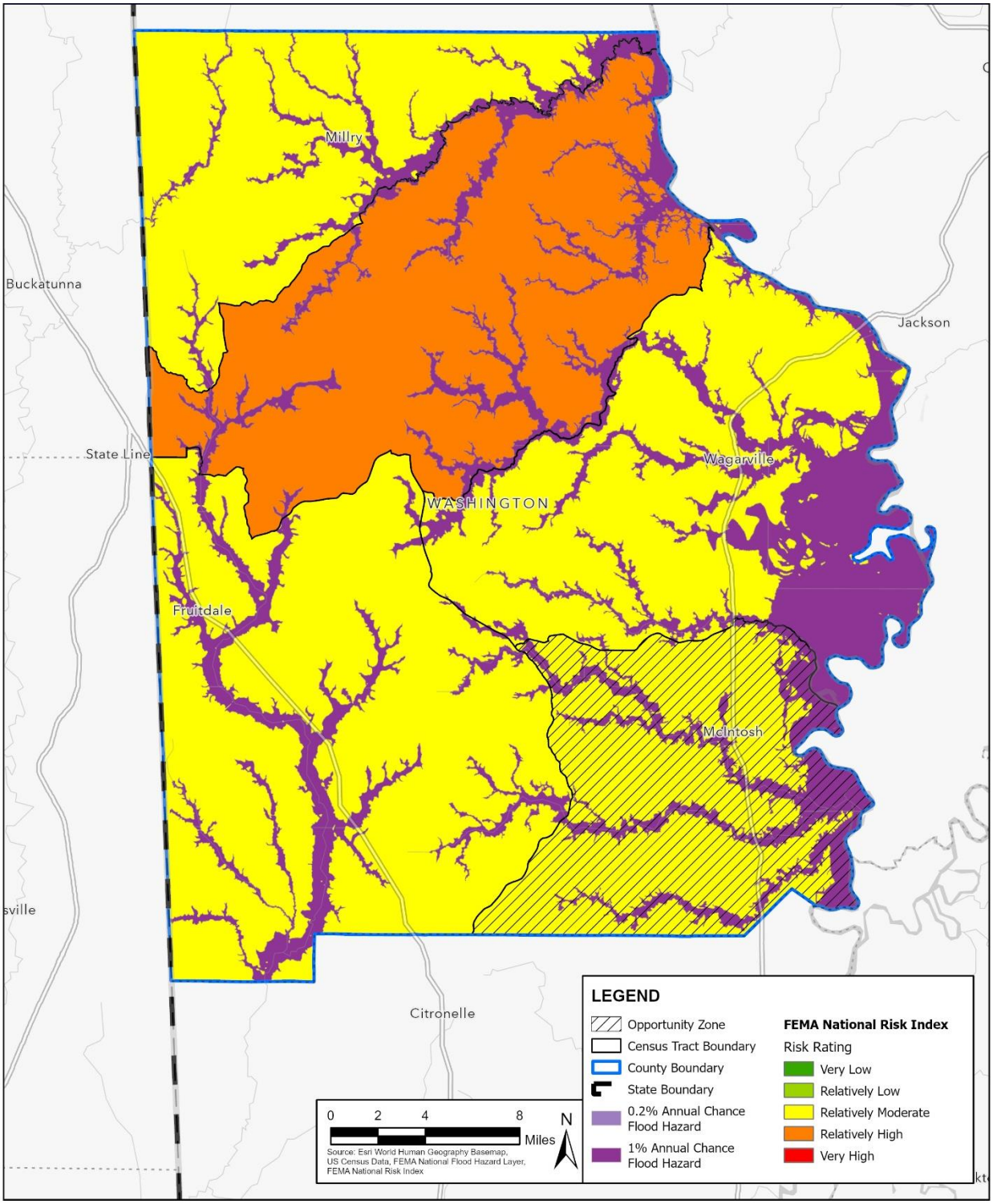
## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

As shown in Figure 62, we can see that there are parts of the county that have a Relatively High National Risk Index rating; this area includes the Chatom area. Hazard specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

**Figure 61 Washington County FEMA National Risk Index Map**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the Hazard Mitigation Plans are shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Dam Failure** | Very Low | Critical | Small | Less than 24 hours |
| **Flooding** | Medium-High | Critical | Moderate | Less than one week |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | High | Minor | Moderate | Less than 6 hours |
| **Extreme Temperatures and Droughts** | Medium | Minor | Moderate | More than 24 hours |
| **Hurricane/Tropical Storms** | Medium-High | Catastrophic | Large | Less than 24 hours |

#### Probability defined:

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

#### Impact defined:

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

#### Location Extent defined:

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact of the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic, and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

In order to address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The results from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 60 responses were received. Of those respondents the majority were homeowners of stick-built homes (25), and owners of mobile homes (16). Respondents said that they experienced a moderate amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and secondarily flooding. They stated that this resulted in electricity outages, and damage to streets. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 88% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Washington County identified a need to create affordable small rental units (1-4); however, under this LRP, only multifamily housing activities are considered eligible. The MOWA MOWA Choctaw Housing Authority indicated a shortage of available housing as there are currently 160 households on the waitlist for a unit in Washington County.

Of the renter households that applied for FEMA IA, about 37% occupied mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds,

flooding, and other extreme weather conditions. Additionally, 85% for the renter population that applied for FEMA assistance reported making less than $30,000 a year.

Surveys were distributed at Washington County's public meetings. The results of the surveys are as follows:

- 38 respondents stated interest in development of Affordable Multi-family housing, 5 of whom ranked it as top priority.
- 33 respondents stated interest in a First Time Homeownership Assistance Program, 4 of whom ranked it as their top priority.
- 40 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing Multi-family Housing, 7 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Affordable Multifamily Housing** | **Strategy** | Housing Recovery | • MOWA Choctaw Housing Authority needs to expand the number of affordable housing units as there are currently 558 households on the waitlist for a unit, 160 of which reside in Washington County.<br>• MOWA Choctaw Housing Authority would build 4 quadplexes for 16 affordable family multifamily units to serve some of the 160 Washington County households currently on a waitlist for a unit.<br>• Project would need to address an unmet need from the storm and comply with Fair Housing laws. It is unknown at this time if it directly addresses an unmet need from the storm. In addition, CDBG-DR is funding of last resort, so if there are other funding streams available, they would need to be identified and used first. | MID |
| | **Eligible Activity** | Affordable Multifamily Housing, HCDA Section 105(a) 4 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | MOWA Choctaw Housing Authority | | |
| | **Project Amount Identified** | $3,200,000 | | |
| | **Other Funding Sources Identified** | Potentially IHBG funds | | |
| | **Project Readiness** | Shovel Ready | | |
| | **Operations and Maintenance Feasibility Identified** | Yes, MOWA Choctaw Housing Authority IHBG Funding | | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • Provide opportunities for vulnerable mobile home renters and owners to purchase more secure housing, with an emphasis on | LOW |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI, UN | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Benefits vulnerable populations** | Yes | supporting first-time homebuyers located within a MID Recovery Zone.<br><br>• Homeownership assistance programs typically subsidize down payments, interest rates, or mortgage principal amounts to LMI households to assist in purchasing a home.<br><br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | Low | | |
| | **Operations and Maintenance Feasibility Identified** | No | | |
| **Rehabilitation for Multi-Family Housing** | **Strategy** | Housing Recovery | • Provide repair and rehabilitation to existing multi-family properties damaged by Hurricanes Sally and Zeta or to make more sanitary, safe, and secure housing availability to those who are experiencing housing insecurity as a result of the impacts of Hurricanes Sally and Zeta<br><br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | LOW |
| | **Eligible Activity** | Affordable Multifamily Rental, HCDA Section 105(a)(4) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 3. Infrastructure Recovery Strategies

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up, damaged electric utilities which then in turn left communities without power for an extended period of time. This required borrowing generators from neighboring counties to support critical infrastructure.

Flooding also occurred during the events leading to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities. It was also identified during the planning process and mitigation needs assessment, that there is a lack of infrastructure in the county to offer dedicated heating and cooling stations, or a place to gather for resources following a storm such as a community center. Stakeholders in attendance at the Planning Charette also noted that there was the lack of assisted living options for the aging population in the County.

Based on the unmet needs analysis, feedback received from the County Charettes and the eligible type of projects under this funding, the county identified Roadway Improvement and Bridge Replacements, Public Facilities Generators, Flood Mitigation, Assisted Living Facility and Community Resilience Center projects to support the county's infrastructure recovery efforts. Below is an outline of the associated project descriptions and details.

Surveys were distributed at Washington County's public meetings. The top results of the surveys are as follows:

- 27 respondents stated interest in drainage improvements, 10 of whom ranked it as their top priority.
- 26 respondents stated interest in a program that addresses Public Utilities, such as energy and water infrastructure repairs and improvements and management, 3 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Roadway Improvement and Bridge Replacement** | **Strategy** | Recovery & Mitigation | • The county has identified the need to improve and replace the bridge on Luke Rivers Road, outside of McIntosh, to prevent the flooding of the roadway and bridge during future events. This area of roadway flooded during both Hurricanes and the bridge was damaged due to debris pile ups.<br>• Unmet Mitigation Needs – May address direct bridge or roadway damage from the storms or conduct work that satisfies a mitigation need to maintain access for residents to critical lifelines | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | Washington County Engineer | | |
| | **Project Amount Identified** | $3,005,71220 | | |
| | **Other Funding Sources Identified** | None Identified | | |
| | **Project Readiness** | Planning Phase | | |
| | **Operations and Maintenance Feasibility Identified** | Yes, Road and Bridge Department O&M | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Public Facilities Generators** | **Strategy** | Mitigation | • The county has identified the need for providing backup generators at several critical public infrastructure sites including pumping stations and fire stations.<br>• Mitigation needs – address mitigation needs by providing back up generation of power to ensure access to critical services in case of power outages | MID |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID County – Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Flood Mitigation** | **Strategy** | Mitigation | • Implement flood control improvement projects in areas subject to re-occurring flooding, which leave communities cut off from the rest of the county. This was particularly problematic during and after Hurricanes Zeta.<br>• Mitigation needs- address mitigation need by conducting flood control projects that will assist in maintaining access to critical lifelines.<br>. | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID County - Mitigation | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Develop a community resilience center that provides year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. During or following a disaster event, this center may | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Project Amount Identified** | No, Conceptual Phase | serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services.<br>• Unmet/Mitigation needs – potentially addresses structural and infrastructure damage from Hurricanes Sally and Zeta reflected in PA; may also address mitigation needs | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Assisted Living Facility** | **Strategy** | Recovery | • Washington County does not have adequate assisted living facilities to serve the aged population. The county would like to propose creating a new assisted living facility as a project of this LRP and may also be doubled to be used as a community resilience center if the right conditions are met.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | MID |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Low | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | Washington County Healthcare Authority DBA Washington County Hospital & Nursing Home | | |
| | **Project Amount Identified** | $4,309,564 | | |
| | **Other Funding Sources Identified** | Yes, Healthcare Authority | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | Yes, from revenue generated by facility | | |

## 4. Economic Recovery Strategies

Providing public services is crucial for economic recovery because they create a stable and supportive environment that attracts businesses, residents, and investments. When a community has reliable public services—such as healthcare, education, transportation, and safety—people are more likely to stay and spend, and businesses are more inclined to operate and expand. This leads to job creation, increased consumer spending, and a stronger local economy. Additionally, well-maintained infrastructure and services can reduce the long-term costs of disaster recovery and health emergencies, further promoting economic stability and growth.

Following the Planning Charette and public meetings, planning and zoning regulations and the need to strengthen emergency response services were identified. Planning and zoning regulations can enhance the county's ability to withstand and bounce back from storms by ensuring homes and business are built to more resilient standards. This in turn reduces the chances of considerable damages to buildings allowing business owners and homeowners to spend less on repairs]. By adding more medical vehicles, the county can improve emergency response times and healthcare access, which strengthens overall public health services. Below is an outline of the associated project descriptions and details.

Surveys were distributed at Washington County's public meetings. The top results of the surveys are as follows:

- 31 respondents stated interest in Job Creation, 10 of whom ranked it as their top priority.
- 33 respondents stated interest in small business loan and grant programs, 13 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Planning and Zoning Regulations** | **Strategy** | Mitigation | • Washington County does not have planning and zoning codes outside of Chatom and other cities to ensure that structures undergoing construction and rehabilitation are built to resilient standards. The county would like to develop a set of planning and zoning codes that would be implemented across the county. | LOW |
| | **Eligible Activity** | Public Service, HCDA Section 105(a)(8) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Conceptual Phase | | |
| | **SVI Score** | No, Conceptual Phase | | |
| | **Geographic Eligibility** | Recovery | | |
| | **Administering Entity Identified** | Public Service, HCDA Section 105(a)(8) | | |
| | **Project Amount Identified** | LMI, UN | | |
| | **Other Funding Sources Identified** | Yes | | |
| | **Project Readiness** | Low | | |
| | **Operations and Maintenance Feasibility Identified** | MID Recovery Zones | | |
| **Strengthen Emergency Medical Services** | **Strategy** | Recovery/Mitigation | • The county only has 1 to 3 ambulances available for use for over 15,000 residents, and often only 1 ambulance is available. Additionally, the county does not have a satisfactory inventory for fire trucks and have a critical need for adding new trucks. This shortage of ambulance | MID |
| | **Eligible Activity** | Public Service, HCDA Section 105(a)(8) | | |
| | **National Objective** | UN | | |
| | **Benefits vulnerable populations** | Conceptual Phase | | |
| | **SVI Score** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Geographic Eligibility** | No, Conceptual Phase | services, and the lack of sufficient fire trucks puts the health and safety of residents at risk pre- and post-disaster.<br><br>• The county would like to add EMS and ambulance services including the purchase of vehicles, and potentially include a job training program as a component of this project.<br><br>• Unmet/Mitigation needs – A direct tie-back to the storm has not yet been identified but it is identified as a need critical need to enhance the safety of the population and may meet a mitigation need | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Small Business Technical Assistance Program** | **Strategy** | Recovery | • Business owners recovering from disasters are often in need of specific technical assistance to respond to losses to their businesses whether it be a loss of employees or customers or a need for a new product that may present a growth opportunity for a business.<br>• The county will bolster the grant and loan resources and strengthen the small business community by creating a technical assistance program to support businesses with financial literacy programs, develop new business and continuity plans, and create a disaster resilience plan to help prepare for future disasters.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Workforce Training and Development Program** | **Strategy** | Recovery | • The county looks to bolster and strengthen the local economy by retaining local talent. With the new West Alabama Corridor Highway and Alabama School of Health Sciences projects underway, the county would like to be able to support local | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | Medium | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Geographic Eligibility** | MID Recovery Zone | residents in job training options to help expand their local economy.<br>• Addresses public desire for workforce training and development, as well as job creation.<br><br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more stable economy. | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

# XIV. Wilcox County

## A. Introduction

Wilcox County is in the southwestern part of Alabama and is split by the Alabama River with only one bridge in the county connecting it from one side of the river to the other. To get from one side of the river to the other, it can take upwards of 45 minutes by car or a few minutes by ferry, when the ferry is working.

According to the American Community Survey (ACS) 2022 5-Year Estimates[90], Wilcox County has a population of 10,441, a 2% decrease from 10,681 in 2019. The demographic breakdown shows most residents (70%) are Black or African American, followed by 28% that are White. Housing in Wilcox County includes 5,314 occupied units, with 59% being single-family homes and 38% mobile homes. In total, 99% of units in the county are 1–4-unit dwellings or mobile homes. Homeownership is extremely high, with 79% of residents owning their homes and 21% renting. In 2020, 54% of the county's residents were considered LMI compared to 60% in 2022[91].

Wilcox County experienced damage from Hurricane Zeta which mainly resulted in downed trees that cut off power to communities for weeks, and damaged homes which are still in need of repair. Residents faced challenges in accessing FEMA and HRAP assistance due to literacy issues. The housing stock shortages were exacerbated because of the storms with no homeless shelters available to provide post-disaster assistance. Flooding was a significant issue, particularly in low-lying areas like Meadowbrook, where drainage and sewage problems persisted. County-owned buildings, including a vital Community Center, also sustained damage.

## B. Unmet Needs Gap

Through this Local Recovery Plan, the ACCA and Wilcox County present unmet needs estimates from Hurricane Sally and Hurricane Zeta based on current best available data (see Table 182 below). Over time, ACCA and the county reserve the right to continue to update these estimates as additional assessments are made, and more complete data becomes available.

**Table 186 Total Estimated Unmet Need for Wilcox County**

| | Estimated Impact | Amount of Funds from other sources | Total Unmet Need |
|---|---|---|---|
| **Housing** | $4,455,169 | $1,475,951 | $2,979,218 |
| **Infrastructure** | $1,186,050 | $1,053,707 | $23,550 |
| **Economy** | $139,868 | $0 | $139,868 |
| **Total** | **$5,781,087** | **$2,529,658** | **$3,142,636** |

Estimated impact includes added resilience and increased construction costs and may include FEMA Public Assistance Categories A, B and Z, where applicable. Total Unmet Need does not include FEMA PA categories A, B and Z.

[90] https://data.census.gov/ - Tables B02001, B25024, B25033

[91] HUD GIS Helpdesk Low to Moderate Income Population by Tract. Published July 31,2023.

# C. Impact and Unmet Needs Assessment

## 1. Background

In accordance with HUD guidance, Wilcox County completed the following unmet needs assessment to identify priorities for CDBG-DR funding allocated because of the impact from the 2020 storms. The assessment below utilizes federal and state resources, including data provided by FEMA, HUD, and SBA, and among other sources to estimate unmet needs in three main categories of damage: housing, economy, and infrastructure. The unmet needs assessment focuses on the impacts upon Wilcox County, with specific sections detailing needs within the most impacted area, and where relevant, smaller geographic units.

### a. Demographic Profile of the Affected Areas

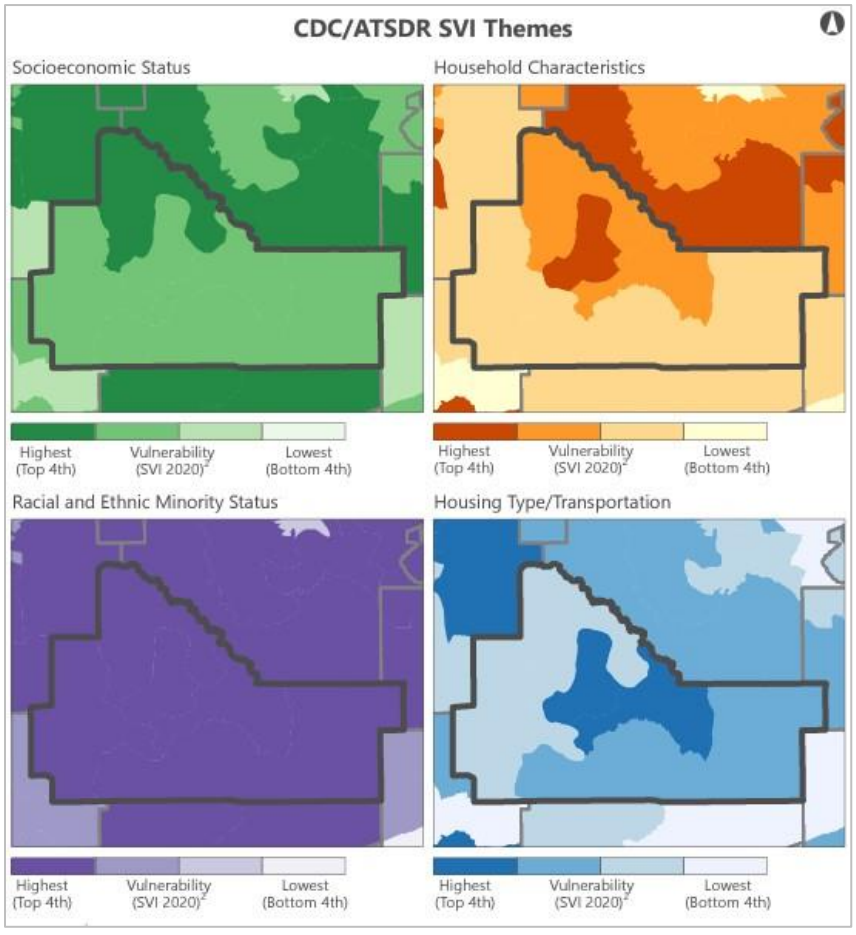
The demographic profile of Wilcox County has not changed significantly since the state of Alabama's 2020 Disaster Recovery Action Plan was published. Specific demographic information can be reviewed in the state of Alabama's 2020 Disaster Recovery Action Plan for the county.

**Vulnerable Populations**

Wilcox County identified vulnerable populations within the county as part of the establishment of MID Recovery Zones. For the purposes of this LRP, Wilcox County has identified vulnerable population areas using the CDC/ATSDR Overall SVI rating and geographically underserved and historically disadvantaged areas. Wilcox County has one identified disadvantages area: Opportunity Zones. Wilcox County does not have any Promise Zones, R/ECAP, Neighborhood Revitalization Strategy Areas, or Tribal areas within the county.

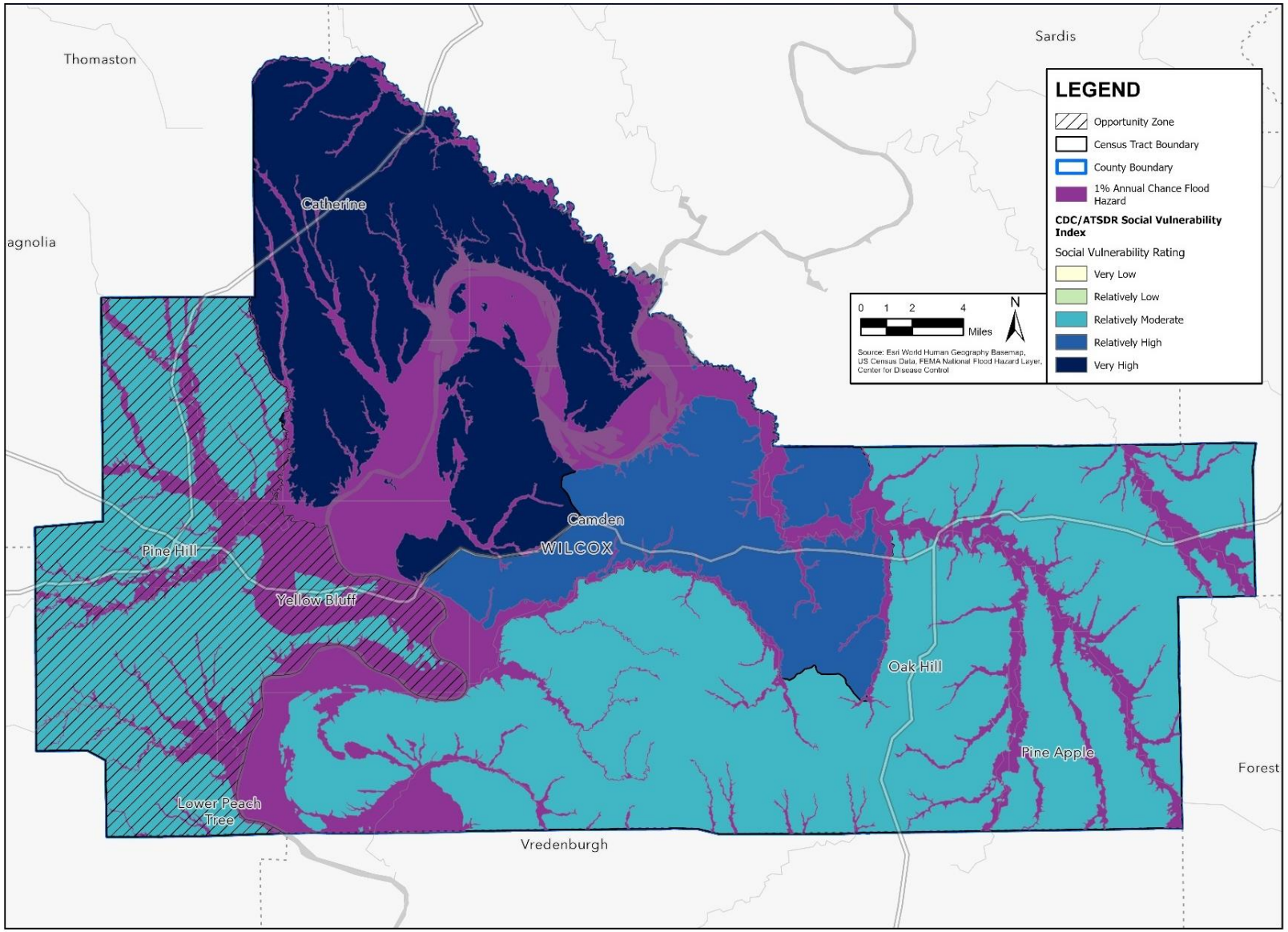
Figure 63 show cases the 2020 vulnerability ratings within the four SVI themes. The darker the color, the greater vulnerability an area related to the specific theme.

**Figure 62 Wilcox County SVI Themes**



The map below provides an overview of areas with the greatest vulnerabilities. These areas are census tracts with the Very High SVI Ratings and where the Opportunity Zone is located.

**Figure 63 Wilcox County Vulnerability Map**



### LMI Populations

As highlighted in the table below, two of the five census tracts within Wilcox County have more than 50% of the population that is considered LMI which also have a very high SVI Rating.

High social vulnerability is often correlated with low-to-moderate income populations because these groups tend to have limited access to resources, opportunities, and support systems. This makes them more susceptible to adverse effects from economic, environmental, and health-related challenges, which in turn exacerbates their existing vulnerabilities.

**Table 187 Wilcox County Low Mod Percentage and SVI Rating by Census Tract**

| Census Tract | Low Mod %[92] | SVI Rating |
|---|---|---|
| **347** | **74.50%** | **Very High** |
| **348.01** | **59.40%** | **Very High** |
| 348.02 | 45.58% | Relatively High |
| 351 | 45.38% | Relatively Moderate |
| 352 | 47.80% | Relatively Moderate |

[92]HUD GIS Helpdesk, Low to Moderate Income Population by Tract Open dataset. Published July 31, 2023; updated August 14, 2024.

# 2. Housing Impact & Needs

## a. Housing Damage and Loss Assessment

Unless otherwise noted, all housing summary data were compiled from these datasets for Hurricane Zeta only.

For each household determined to have unmet housing needs, their estimated average unmet housing need was calculated using similar variables and calculation methods from the state of Alabama's 2020 Disaster Recovery Action Plan. These variables are:

1. FEMA Damage Category Application Counts of Minor-Low to Major-Low
2. FEMA Damage Category Application Counts of Major-High to Severe
3. FEMA IA Applications without FEMA Verified Loss
4. Public Housing Damages

The total impact tables have been summarized based on owner-occupied vs renter-occupied households, impacted populations with flood and homeowner insurance, impact by residence type, impact by gross income, and impact to housing authorities in the following sections.

## b. Total Impact (Owner-Occupied and Renter Households)

The information in the following table outlines the total damaged properties population with documented damages. To account for properties that never had an inspection physically take place due to the COVID-19 pandemic and other reasons no damages were found, likely because they were desktop inspections, the county has classified these applications as "No FVL". A detailed description is provided in the FEMA IA Applications without Real Property FEMA Verified Loss section.

**Table 188 Homeowner/Renter Damaged Properties by All Damage Categories**

| Damage Category | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Severe** | 0 | 0.0% | 0 | 0.0% | 0 | 0.0% |
| **Major-High** | 3 | 0.3% | 0 | 0.0% | 3 | 0.3% |
| **Major-Low** | 36 | 3.2% | 1 | 0.1% | 37 | 3.2% |
| **Minor-High** | 318 | 27.8% | 42 | 3.7% | 360 | 31.5% |
| **Minor-Low** | 178 | 15.6% | 6 | 0.5% | 184 | 16.1% |
| **No FVL** | 482 | 42.2% | 76 | 6.7% | 558 | 48.9% |
| **Total** | **1,017** | **89.1%** | **125** | **10.9%** | **1,142** | **100%** |

### FEMA Damage Category Applications - Minor-Low, Minor-High, and Major-Low

The count for FEMA IA Applications with minor-low, minor-high, and major-low damage in each county was multiplied by the overall average of SBA-verified property loss per damage category. The information is provided in the state of Alabama's 2020 Disaster Recovery Action Plan to determine the estimated total loss/support for these three damage categories. The tables below demonstrate the total number of properties of the county's homeowners and renters damaged.

Table 189 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Homeowners

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 178 | $1,621 | $288,538 |
| **Minor-High** | 318 | $5,495 | $1,747,410 |
| **Major-Low** | 36 | $11,502 | $414,072 |
| **Total** | **532** | **N/A** | **$2,450,020** |

Table 190 Minor-Low, Minor-High, and Major-Low Estimated Total Loss Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 6 | $1,621 | $9,726 |
| **Minor-High** | 42 | $5,495 | $230,790 |
| **Major-Low** | 1 | $11,502 | $11,502 |
| **Total** | **49** | **N/A** | **$252,018** |

Table 191 Minor-Low, Minor-High, and Major-Low Estimated Total Loss - Homeowners & Renters

| Damage Category | Count | Average SBA Verified Property Loss | Estimated Total Loss |
|---|---|---|---|
| **Minor-Low** | 184 | $1,621 | $298,264 |
| **Minor-High** | 360 | $5,495 | $1,978,200 |
| **Major-Low** | 37 | $11,502 | $425,574 |
| **Total** | **581** | **N/A** | **$2,702,038** |

### FEMA Damage Category Applications - Major-High to Severe

For FEMA IA Applications with major-high to severe damage, it was assumed that those structures were substantially damaged and required reconstruction. To determine the replacement cost of the homes, Wilcox County replicated ADECA's approach and utilized the county's Zillow Home Value from August 2020 for All Homes (none-adjusted)[93]. Since the Zillow home value includes the cost of the land, it is assumed 66% of the value was attributable to the structure on the property. This adjusted home value is multiplied by the total count of applications in the major-high to severe damage categories. The results of these calculations are provided in the table below.

Table 192 Major-High and Severe Estimated Total Loss Homeowners and Renters

| Damage Category | Zillow Home Value | 66% of Zillow Value | Count | Estimated Total Loss |
|---|---|---|---|---|
| **Major-High** | $135,103 | $89,168 | 3 | $267,504 |
| **Severe** | $135,103 | $89,168 | 0 | $0 |
| | **Total** | | **3** | **$267,504** |

From the 3 Major-High damaged homes, no renter-occupied dwellings are classified as Severe.

[93] Wilcox County Home Values, https://www.zillow.com/home-values/105012/kimbrough-pine-hill-al/

### FEMA IA Applications without FEMA Verified Loss

Wilcox County also accounted for the damage to applications without Real Property FEMA verified loss (RPFVL) for owner-occupied dwellings and without Personal Property FEMA Verified Loss (PPFVL) for renter-occupied dwellings because due to the COVID-19 pandemic and other reasons, an inspection never physically took place or no damages were found, likely because they were desktop inspections. To account for these types of impacts, Wilcox County had the applications with no FEMA Verified Loss and multiplied them by the average value for minor-low damage per SBA verified property loss, as provided in the state of Alabama's 2020 Disaster Recovery Action Plan. The results of these calculations are provided in Table 188 below:

**Table 193 Estimated Total Loss for IA Applications without FEMA Verified Loss**

| Occupancy Type | Count of Applications | Average SBA Value | Estimated Total Loss |
|---|---|---|---|
| **Owner** | 482 | $1,621 | $781,322 |
| **Renter** | 76 | $1,621 | $123,196 |
| **Total** | **558** | **$1,621** | **$904,518** |

## c. Impacts of Insurance (HOI and NFIP)

For the purposes of this analysis, households inspected by FEMA and shown to have a 'Water Level' greater than 0.0 inches are considered to have been flooded, while all other units with no 'Water Level' are considered to have been impacted exclusively by wind.

See Table 189 for flood-damaged properties by damage category and occupancy type.

**Table 194 Flood Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 2 | 4 | 8 | 7 | 1 | 0 | 22 |
| **Renter** | 0 | 0 | 1 | 1 | 0 | 0 | 2 |
| **Total** | **2** | **4** | **9** | **8** | **1** | **0** | **24** |

**Flood Damage and Insurance (NFIP):** An alarmingly high proportion of units with evidence of flood damage were reported in the FEMA IA data not to carry a flood insurance policy through the National Flood Insurance Program (NFIP) as shown in the table below. In total, **100 percent** of the flood-affected population is reported to not carry an NFIP policy per the FEMA IA data.

**Table 195 Flood Damaged Owner-Occupied Properties with Flood Insurance**

| Damage Category | With NFIP | % With NFIP | Without NFIP | % Without NFIP |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 1 | 5% |
| **Major-Low** | 0 | 0% | 7 | 32% |
| **Minor-High** | 0 | 0% | 8 | 36% |
| **Minor-Low** | 0 | 0% | 4 | 18% |
| **No FVL** | 0 | 0% | 2 | 9% |
| **Totals** | **0** | 0% | **22** | **100%** |

**Wind Damage and Insurance (HOI):** In the absence of evidence of flood damage, units are assumed to be impacted exclusively by wind. As such, for the proportion of owner-occupied units with no evidence of flooding damage, the county is especially concerned about the high rate of owner-occupied households reported not to carry a standard hazard insurance policy that would otherwise be expected to offset documented losses. In total, 81 percent of the wind-impacted owner-occupied population is reported not to carry hazard insurance as shown in the table below.

**Table 196 Wind Damaged Properties by Damage Category**

| Occupancy Type | No FVL | Minor-Low | Minor-High | Major-Low | Major-High | Severe | Total |
|---|---|---|---|---|---|---|---|
| **Owner** | 480 | 174 | 310 | 29 | 2 | 0 | 995 |
| **Renter** | 76 | 6 | 41 | 0 | 0 | 0 | 123 |
| **Total** | **556** | **180** | **351** | **29** | **2** | **0** | **1,118** |

**Table 197 Wind Damaged Owner-Occupied Properties with Homeowners Insurance**

| Damage Category | With HOI | % With HOI | Without HOI | % Without HOI |
|---|---|---|---|---|
| **Severe** | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 2 | 0% |
| **Major-Low** | 1 | 0% | 28 | 3% |
| **Minor-High** | 25 | 3% | 285 | 29% |
| **Minor-Low** | 14 | 1% | 160 | 16% |
| **No FVL** | 147 | 15% | 333 | 33% |
| **Total** | **187** | **19%** | **808** | **81%** |

## d. Impact based on Residence Type

The table below shows FEMA IA applicants by housing type. The highest number of applicants came from mobile home units (68%) and housing/duplex units (29%).

**Table 198 FEMA IA Applicants by Residence Type and Occupancy Type**

| Residence Type | Owner | | Renter | | Total | |
|---|---|---|---|---|---|---|
| | Count | % of Total | Count | % of Total | Count | % of Total |
| **Apartment** | 0 | 0% | 8 | 1% | 8 | **1%** |
| **House/Duplex** | 283 | 25% | 46 | 4% | 329 | **29%** |
| **Mobile Home** | 706 | 62% | 65 | 6% | 771 | **68%** |
| **Other** | 18 | 2% | 5 | 0% | 23 | **2%** |
| **Travel Trailer** | 10 | 1% | 1 | 0% | 11 | **1%** |
| **Total** | **1,017** | **89%** | **125** | **11%** | **1,142** | **100%** |

The table below shows FEMA IA flood-damaged properties by housing type that had Flood or Homeowner's insurance. As indicated in the overview of flood-damaged properties, 0**%** of the flood-affected population is reported to carry an NFIP policy per the FEMA IA data.

Table 199 Flood Damaged Properties by Residence Type and Count with NFIP

| Residence Type | Count of Applications | Count with NFIP | % with NFIP |
|---|---|---|---|
| **House/Duplex** | 9 | 0 | 0% |
| **Mobile Home** | 13 | 0 | 0% |
| **Total** | **22** | **0** | **0%** |

The table below shows FEMA IA wind-damaged properties by housing type who had Homeowner's insurance. As indicated in the overview of wind-damaged properties, 19**%** of the affected population is reported to carry a homeowner's insurance policy per the FEMA IA data.

Table 200 Wind Damaged Properties by Residence Type and Count with HOI

| Residence Type | Count of Applications | Count with HOI | % with HOI |
|---|---|---|---|
| **Apartment** | 0 | 0 | 0% |
| **House/Duplex** | 274 | 91 | 33% |
| **Mobile Home** | 693 | 88 | 13% |
| **Other** | 18 | 7 | 39% |
| **Travel Trailer** | 10 | 1 | 10% |
| **Total** | **995** | **187** | **19%** |

Total estimated losses have been summarized by residence type.

Table 201 Total Estimated Loss by Residence Type

| Residence Type | Count | Estimated Total Loss |
|---|---|---|
| **Apartment** | 8 | $16,842 |
| **House/Duplex** | 329 | $1,045,082 |
| **Mobile Home** | 771 | $2,753,148 |
| **Other** | 23 | $37,283 |
| **Travel Trailer** | 11 | $21,705 |

## e. Impact on LMI Households

The income data provided in the FEMA IA data set was not specific enough to perform a low- and moderate-income (LMI) calculation as some of the data overlapped with LMI and non-LMI category classifications for a specific household. To summarize, the impact of storms on households based on income includes four income groupings provided in the tables below. Overall, households with lower incomes were disproportionately impacted by Hurricane Zeta, with 86% of the total impacted population making $30,000 or less.

**Table 202 Gross Income by Damage Level for Homeowners Only**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 3 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 3 | 0% |
| **Major-Low** | 32 | 3% | 4 | 0% | 0 | 0% | 0 | 0% | 36 | 4% |
| **Minor-High** | 293 | 29% | 21 | 2% | 4 | 0% | 0 | 0% | 318 | 31% |
| **Minor-Low** | 162 | 16% | 13 | 1% | 3 | 0% | 0 | 0% | 178 | 18% |
| **No FVL** | 392 | 39% | 74 | 7% | 12 | 1% | 4 | 0% | 482 | 47% |
| **Totals** | **882** | **87%** | **112** | **11%** | **19** | **2%** | **4** | **0%** | **1,017** | **100%** |

**Table 203 Gross Income by Damage Level for Renters Only**

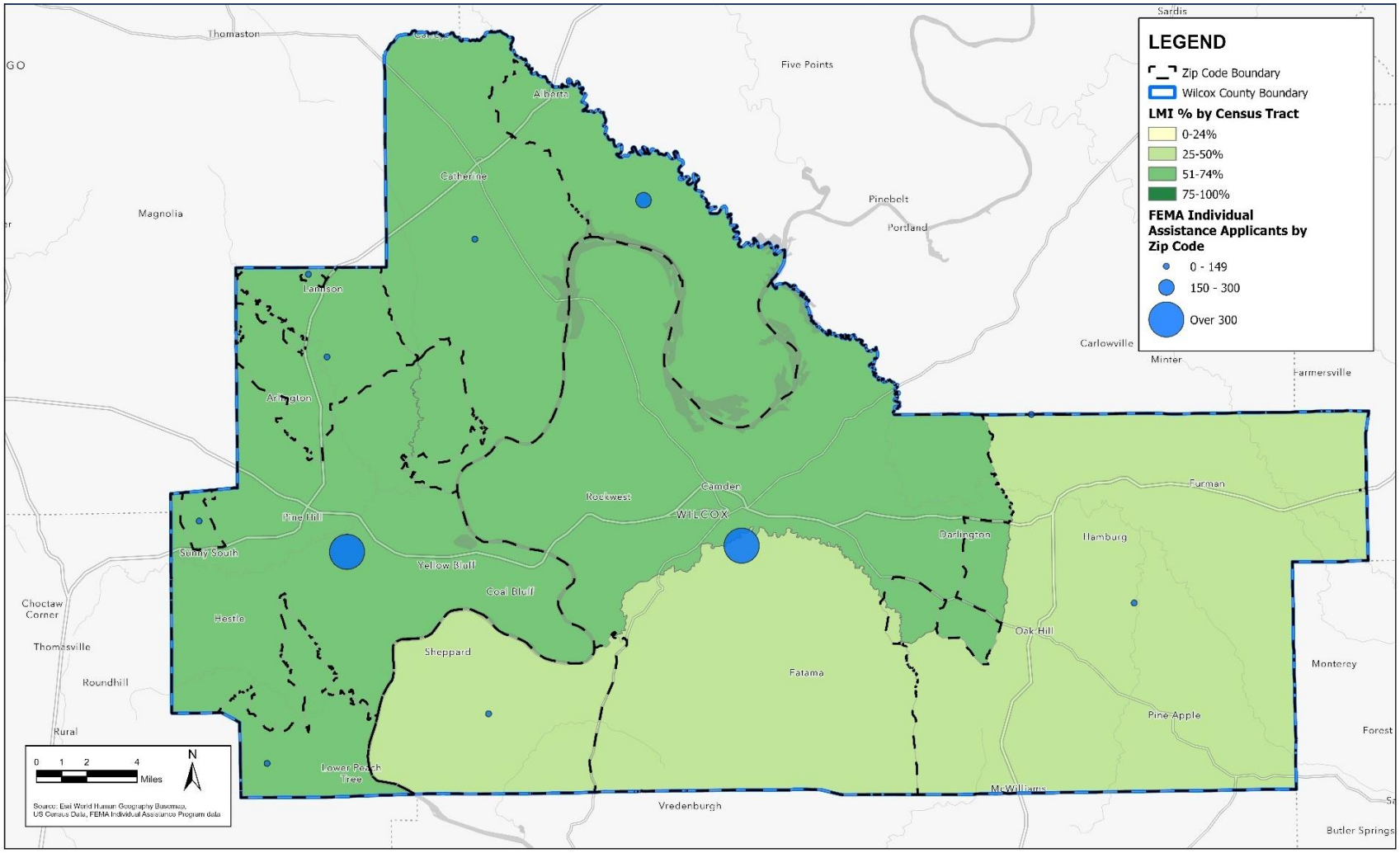
| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-Low** | 1 | 1% | 0 | 0% | 0 | 0% | 0 | 0% | 1 | 1% |
| **Minor-High** | 35 | 28% | 7 | 6% | 0 | 0% | 0 | 0% | 42 | 34% |
| **Minor-Low** | 5 | 4% | 1 | 1% | 0 | 0% | 0 | 0% | 6 | 5% |
| **No FVL** | 59 | 47% | 16 | 13% | 1 | 1% | 0 | 0% | 76 | 61% |
| **Totals** | **100** | **80%** | **24** | **19%** | **1** | **1%** | 0 | 0% | **125** | **100%** |

**Table 204 Gross Income by Damage Level for Homeowners and Renters**

| Damage Category | Less than $30,000 | | $30,001-$60,000 | | $60,001-$120,000 | | Greater than $120,000 | | Total Over All Categories | |
|---|---|---|---|---|---|---|---|---|---|---|
| | # | % | # | % | # | % | # | % | # | % |
| **Severe** | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 0 | 0% |
| **Major-High** | 3 | 0% | 0 | 0% | 0 | 0% | 0 | 0% | 3 | 0% |
| **Major-Low** | 33 | 3% | 4 | 0% | 0 | 0% | 0 | 0% | 37 | 3% |
| **Minor-High** | 328 | 29% | 28 | 2% | 4 | 0% | 0 | 0% | 360 | 32% |
| **Minor-Low** | 167 | 15% | 14 | 1% | 3 | 0% | 0 | 0% | 184 | 16% |
| **No FVL** | 451 | 39% | 90 | 8% | 13 | 1% | 4 | 0% | 558 | 49% |
| **Totals** | **982** | **86%** | **136** | **12%** | **20** | **2%** | **4** | **0%** | **1,142** | **100%** |

The following map illustrates the Low-Moderate Income percentage by Census Tract with heat bubbles, of which the location of the FEMA IA applications is based on the zip code.

**Figure 64 LMI Populations and FEMA IA Applications by Zip Code for Wilcox County**



## f. Impact on Public Housing Authorities

A Public Housing Authority (PHA) for the county was recently re-established; however, the county does not own any buildings. Wilcox County needs to add additional PHA staff to better support the community.

## g. Impact on Homeless Populations

The impact of natural disasters on the housed population and people experiencing sheltered homelessness is very different from the impact on people experiencing unsheltered homelessness.

When a natural disaster damages a housing unit, its inhabitants can hypothetically be made whole by insurance or FEMA. When a natural disaster damages a shelter or broader infrastructure, beds can be rendered uninhabitable, but eventually, those beds can be regained via repair and recovery operations.

For people experiencing unsheltered homelessness (e.g. living on the streets), however, the impact is more difficult to see. A natural disaster cannot remove housing or shelter from a person without housing or shelter; instead, it destroys future housing opportunities. One of the primary barriers to permanent housing in any geography is a lack of affordable housing. When a natural disaster damages or destroys an area's affordable housing, it creates a housing cost and availability crisis that prevents people experiencing homelessness from achieving and stabilizing permanent housing.

**Alabama Balance of State CoC**

The Alabama Balance of State CoC serves 37 rural Alabama Counties, ensuring chronic under-counting of homeless populations in rural counties. According to the *2023 AHAR: Part 1 - PIT Estimates of Homelessness in the U.S.*[94], the Alabama Balance of State CoC counted 283 sheltered and unsheltered homeless persons in 2023 and 140 Emergency Sheltered persons. Wilcox County is one of the counties that makes up this CoC and does not have any homeless shelters, which leads to chronic under-serving of people in need of sheltering pre- and post-storms. The county struggled to shelter people who lost housing due to Hurricane Zeta, and the housing and shelter crisis will only increase as additional disasters hit the area.

To provide support for those experiencing homelessness, Wilcox County will need to:

- create new shelter options which include surge capacity for emergency shelter beds required to shelter people displaced by disasters,
- create outreach and drop-in centers required to serve people experiencing unsheltered homelessness; and
- hire outreach workers and resource navigators.

## h. Summary of Housing Impacts

FEMA IA was the primary data source that Wilcox County used to determine housing unmet needs. Total estimated losses have been summarized by the data source and calculation methodology as mentioned in previous sections, sorted by damage category and for public

[94] https://www.huduser.gov/portal/datasets/ahar/2023-ahar-part-1-pit-estimates-of-homelessness-in-the-us.html

housing authorities. Additionally, 15% is added at the end of the calculation to account for resilience costs, allow for buildings becoming more resilient to future disasters. To calculate the total unmet need, received assistance is also summarized and subtracted from the estimated total loss, including resilience costs.

**Table 205 Total Estimated Loss by Damage Category**

| Data Source/Calculation | Count | Estimated Total Loss |
|---|---|---|
| **Severe** | 0 | $0 |
| **Major-High** | 3 | $267,504 |
| **Major-Low** | 37 | $425,574 |
| **Minor-High** | 360 | $1978,200 |
| **Minor-Low** | 184 | $298,264 |
| **No FEMA Verified Loss** | 558 | $904,518 |
| **Public Housing** | 0 | $0 |
| **Total** | **1,142** | **$3,874,060** |
| **+15% Resilience Costs** | | **$581,109** |
| **Total Estimated Loss with Resilience Costs** | | **$4,455,169** |

To ensure that housing repair assistance is factored into the housing unmet needs calculation, FEMA IA repair and replacement, SBA Real Estate[95] and NFIP payment amounts were added to determine the total housing assistance received. Refer to Table 200 for the calculation. Assistance received does not include any potential assistance received from the Home Recovery Alabama Program as there is no publicly available data for assistance received.

**Table 206 Total Housing Assistance Received Calculation**

| Data | Count | Total Amount |
|---|---|---|
| **FEMA IA Payments** | 347 | $1,362,550 |
| **NFIP Payments** | 0 | 0 |
| **SBA Loan Amounts** | Unknown | $113,400 |
| **Total Housing Assistance** | **301** | **$1,475,950** |

The total housing assistance was subtracted from the total housing unmet needs, including resilience costs, resulting in a total housing unmet need of approximately $2.9 million due to Hurricane Zeta. See Table 202 for the calculation.

**Table 207 Total Housing Unmet Need for Wilcox County**

| Data | Estimated Amount |
|---|---|
| **Total Estimated Loss including 15% Resilience Costs** | $4,455,169 |
| **Total Housing Assistance** | -$1,475,950 |
| **Total Housing Unmet Need** | **$2,979,219** |

[95] SBA Disaster Loan Data, Public Access: https://www.sba.gov/document/report-sba-disaster-loan-data

# 3. Infrastructure Impact & Needs

## a. Infrastructure Damage & Loss Assessment

Wilcox County was only impacted by Hurricane Zeta. Flooding was a significant issue, particularly in low-lying areas like Meadowbrook, where drainage and sewage problems persisted. Additionally, Camden saw flooding due to the storm water system being unable to handle the capacity during intense rain events and had 3 storm drains damaged that have yet to be repaired. A vital Community Center in Camden also sustained damage, and the insurance funds received did not pay for the full repair for the building. Several bridges throughout the county were damaged and need replacement. Areas in the county lack proper sewage treatment infrastructure. Homes may have septic systems that get backed up during storms, or they have what is called straight pipes outside of their homes, which sends raw sewage straight into yards. When flooding happens, there is a high risk for health concerns due to raw sewage contaminating the landscape and homes. Based on feedback received from the County Emergency Management Agency Director and County Engineer, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit and the reported infrastructure values performed in this analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

The table below includes the Estimated PA Cost, additional costs for resiliency measures (15%), increased cost of construction (23.6%), to estimate the Federal Share (90%) and the local share/unmet need (10%) more accurately for Categories C through G.

**Table 208 Total Estimated Infrastructure Costs by PA Damage Category**

| Damage Category | PA Project Amount | 15% Resilience Measures | 23.6% Construction Costs | Total PA Project Amount |
|---|---|---|---|---|
| **A - Debris Removal** | $1,028,128 | $0 | $0 | $1,028,128 |
| **B - Protective Measures** | $55,658 | $0 | $0 | $55,658 |
| **E - Public Buildings** | $50,000 | $6,750 | $11,800 | $68,550 |
| **Z - State Management** | $33,714 | $0 | $0 | $33,714 |
| **Total** | **$1,167,500** | **$6,750** | **$11,800** | **$1,186,050** |

## b. Unmet Infrastructure Needs

The table below includes the Total Estimated PA Cost, consisting of resiliency measures and increased construction costs with the total Federal Obligated Amount and the Non-Federal Share Amount.

**Table 209 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount |
|---|---|---|---|
| **A - Debris Removal** | $1,028,128 | $925,315 | $102,813 |
| **B - Protective Measures** | $55,658 | $49,678 | $5,980 |
| **E - Public Buildings** | $68,550 | $45,000 | $23,550 |
| **Z - State Management** | $33,714 | $33,714 | $0 |
| **Total** | **$1,186,050** | **$1,053,707** | **$132,343** |

Based on the analysis performed, there is a potential unmet need of $23,550 for identified infrastructure damage eligible under FEMA-PA Categories C-G.

**Table 210 Total Estimated Non-Federal Share Amount by PA Damage Category**

| Damage Category | Total PA Project Amount | Federal Share Obligated | Non-Federal Share Amount | Unmet Need |
|---|---|---|---|---|
| **A - Debris Removal*** | $1,028,128 | $925,315 | $102,813 | $0 |
| **B - Protective Measures*** | $55,658 | $49,678 | $5,980 | $0 |
| **E - Public Buildings** | $68,550 | $45,000 | $23,550 | $23,550 |
| **Z - State Management*** | $33,714 | $33,714 | $0 | $0 |
| **Total** | **$1,186,050** | **$1,053,707** | **$132,343** | **$23,550** |

*CDBG-DR Funds are not used for PA costs in Categories A, B and Z.

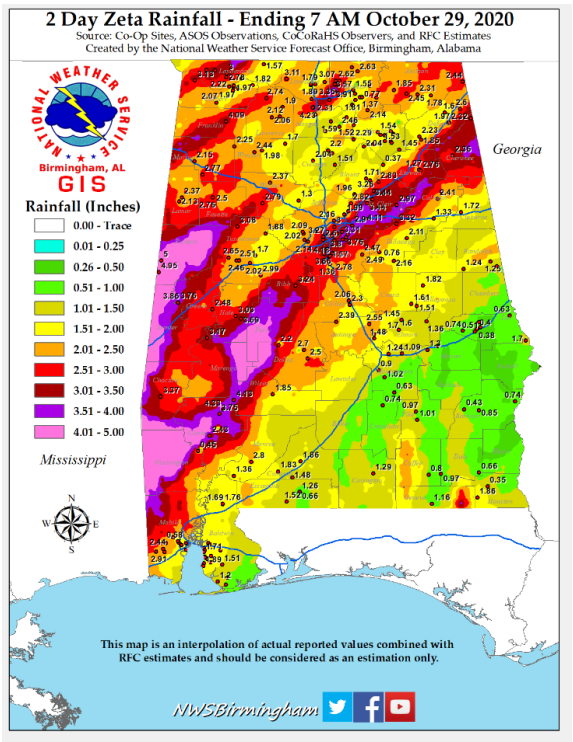
## 4. Economic Impact & Needs

A summary of damage and impacts of Hurricane Zeta is provided below, along with an analysis of Small Business Administration loans provided to the business community following Hurricane Zeta.

### Agricultural Impacts

Following Hurricane Zeta, USDA designated Wilcox County as a primary natural disaster area, which allows producers who suffered losses by Hurricane Zeta to apply for emergency loans with the U.S. Department of Agriculture (USDA) Farm Service Agency (FSA). This natural disaster designation allows FSA to extend much-needed emergency credit to producers recovering from natural disasters. Emergency loans can be used to meet various recovery needs including the replacement of essential items such as equipment or livestock, reorganization of a farming operation or the refinance of certain debts.[96] As reported in the November 2, 2020, Alabama Crop Progress and Condition Report[97], Hurricane Zeta delivered heavy rains and damaging winds. The high soil moisture prevented fieldwork in many areas of the state following the Hurricane. As shown in Figure 67, parts of Wilcox County Received upwards of 5 inches of rain across a 48-hour period.

**Figure 65 Hurricane Zeta 2 Day Rainfall Total**




### a. Unmet Economic Needs

According to an analysis of the SBA Business loan data for applications with approved or denied loans that meet a HUD category of loss, the county realized a total verified loss for all businesses

[96] https://www.fsa.usda.gov/state-offices/Alabama/news-releases/2021/usda-designates-13-alabama-counties-as-primary-natural-disaster-areas

[97] https://www.nass.usda.gov/Statistics_by_State/Alabama/Publications/Crop_Progress_&_Condition/2020/AL-CropProgress-11-02-20.pdf

of $121,624. Additionally, fifteen percent (15%) in resilience costs was included, and the County's total estimated economic impact is $139,868. According to the SBA business report, the SBA provided $0 in total benefits for real estate losses. Therefore, the County's remaining economic unmet needs are valued at $139,868.

**Table 211 Unmet Economic Needs Summary**

| Total Verified Loss | 15% Resilience Costs | Total Estimated Impact | Total SBA Benefits | Remaining Unmet Needs |
|---|---|---|---|---|
| **$121,624** | **$18,244** | **$139,868** | **$0** | **$139,868** |

## D. Summary of Unmet Needs & MID Recovery Zones

### 1. Unmet Needs Summary

Based on the above analysis, the county has calculated a total unmet need of **$3.1 Million** attributable to Hurricane Zeta. In summary, this analysis projects unmet needs as follows:

**Table 212 Summary of Total Unmet Needs**

| Category | Estimated Impact | Amount of Funds from other sources | Remaining Unmet Need |
|---|---|---|---|
| **Housing** | $4,455,169 | $1,475,951 | $2,979,218 |
| **Infrastructure** | $1,186,050 | $1,053,707 | $23,550 |
| **Economy** | $139,868 | $0 | $139,868 |
| **Total** | **$5,781,087** | **$2,529,658** | **$3,142,636** |

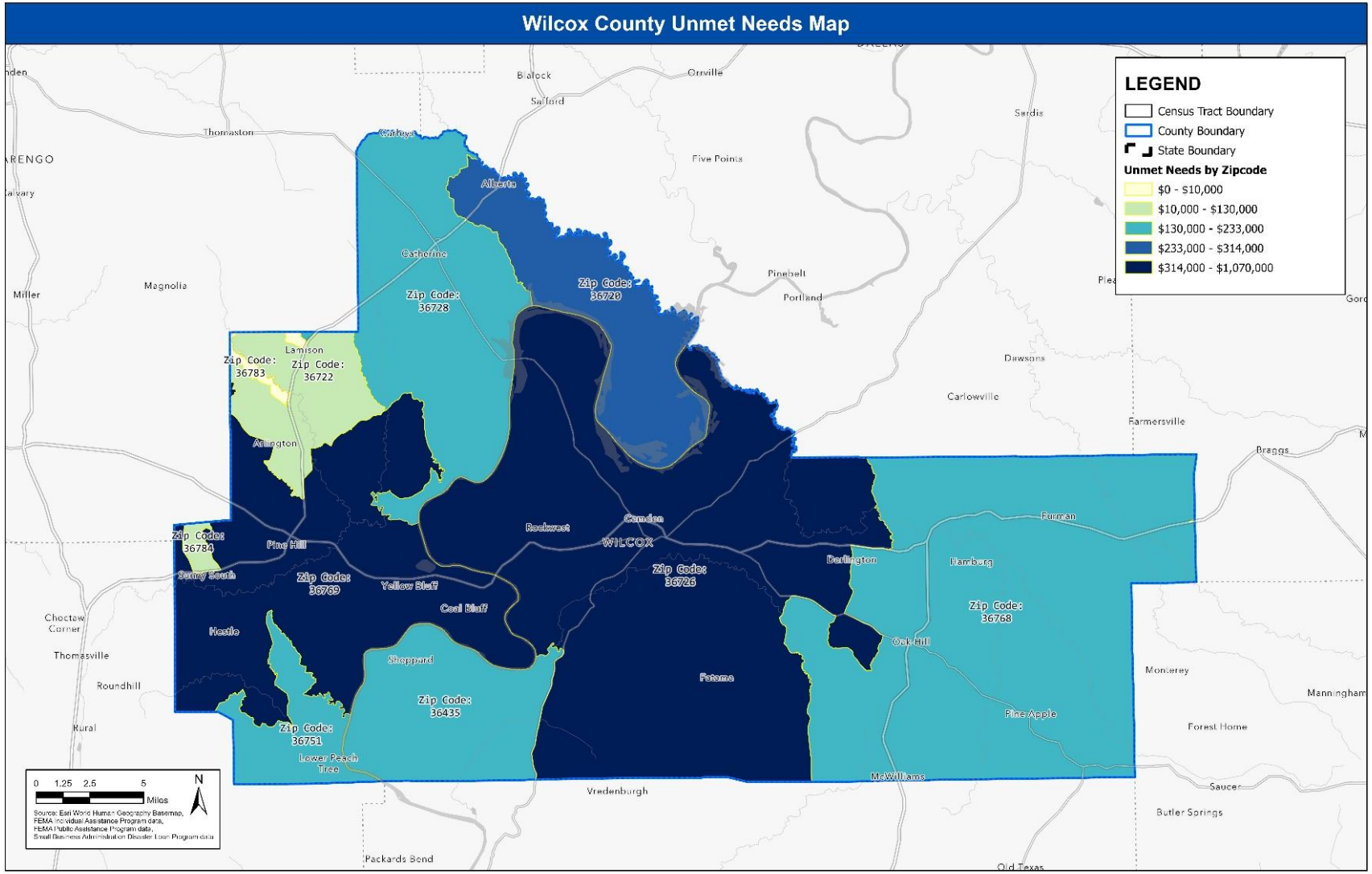
Refer to the table below for a more detailed analysis of how the unmet needs were calculated based on known losses and investments across each zip code.

**Table 213 Unmet Need Summary by Zip Code**

| Zip Code | Unmet Housing Need | Unmet Infrastructure Needs | Unmet Economy Needs | Total Unmet Need |
|---|---|---|---|---|
| **36726** | $940,883 | $23,550 | $0 | $964,433 |
| **36769** | $795,699 | $0 | $4,600 | $800,299 |
| **36720** | $313,081 | $0 | $0 | $313,081 |
| **36768** | $113,931 | $0 | $118,185 | $232,116 |
| **36751** | $218,725 | $0 | $0 | $218,725 |
| **36728** | $200,792 | $0 | $0 | $200,792 |
| **36435** | $160,200 | $0 | $17,083 | $177,282 |
| **36722** | $129,084 | $0 | $0 | $129,084 |
| **36784** | $101,232 | $0 | $0 | $101,232 |
| **36761** | $1,864 | $0 | $0 | $1,864 |
| **36773** | $1,864 | $0 | $0 | $1,864 |
| **36783** | $1,864 | $0 | $0 | $1,864 |
| **Total** | **$2,979,218** | **$23,550** | **$139,868** | **$3,142,636** |

A map view of the total unmet need by zip code is on the following page.

**Figure 66 Wilcox County Unmet Needs by Zip Code**

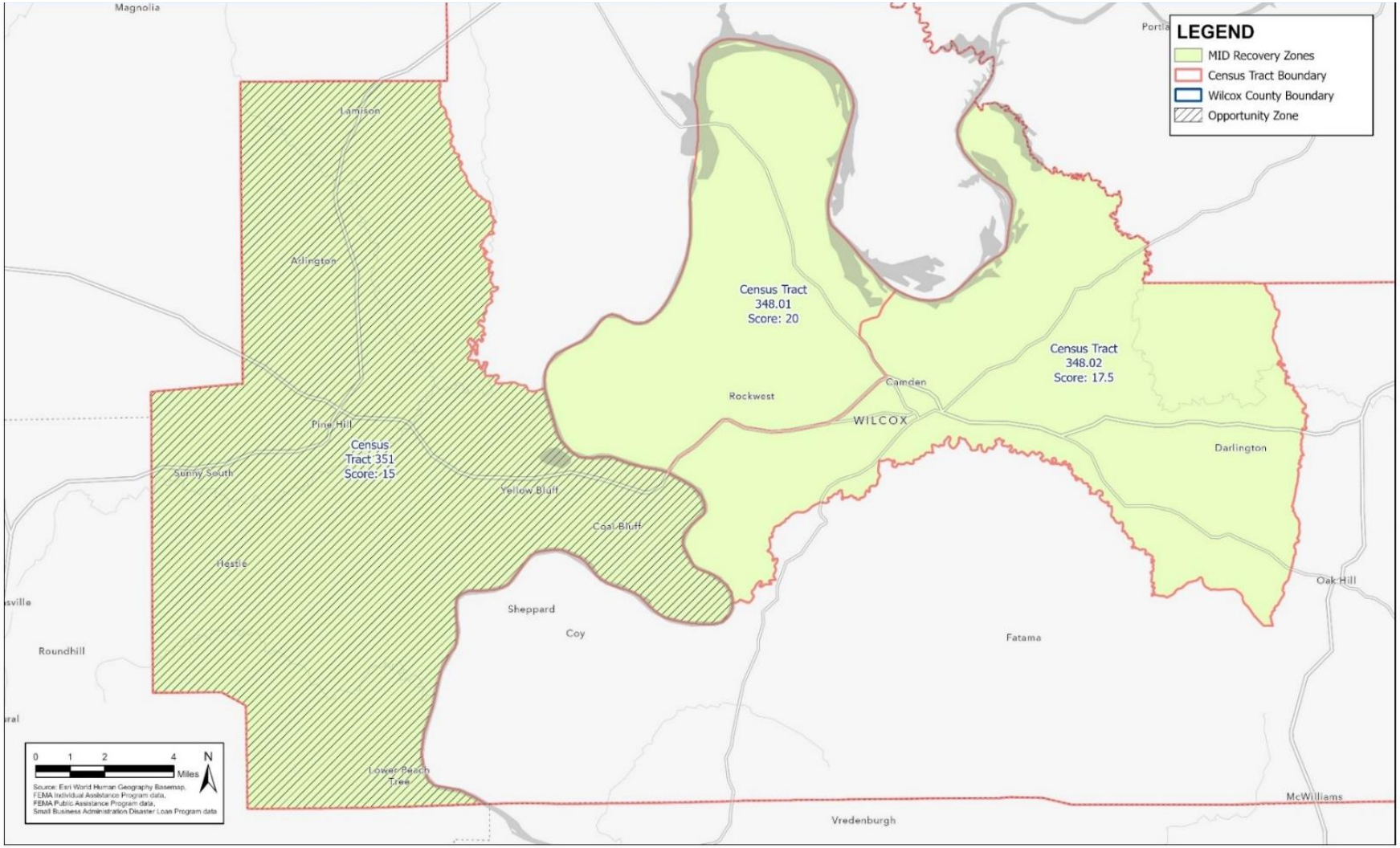


## 2. MID Recovery Zones

The MRZ were identified at the census tract level using two key criteria: areas with vulnerable populations and zip codes with the highest unmet needs. This LRP determined vulnerable populations by reviewing census tracts with R/ECAP and/or Opportunity Zones, and the SVI ratings. Where R/ECAP and/or Opportunity Zones areas are located, the census tract received the highest possible vulnerability score (10 points). In census tracts without R/ECAP and/or Opportunity Zones areas, the SVI vulnerability rating was used for vulnerability score. Refer to section VI MID Recovery Zones Identification Methodology for the complete methodology of determine the MRZ.

By looking at unmet needs and vulnerable populations within a county, the county can ensure they are mitigating against future disasters for the most impacted, distressed, and vulnerable populations within their jurisdictions. By prioritizing equity in the recovery process, this plan ensures that vulnerable communities receive the resources and support they need to recover and thrive. The MRZ identified for Wilcox County are shown in Figure 68. See Appendix B for the scores of each census tract in determining the MRZ.

**Figure 67 MID Recovery Zone Map for Wilcox County**




**Identified MID Recovery Zones**: Census tracts 351, 348.01, 348.02

## E. Mitigation Needs Assessment

In accordance with the LRRP guidance, the county completed the following Mitigation Needs Assessment. Alabama's 2023 State Hazard Mitigation Plan, 2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan, data from the National Oceanic Atmospheric Administration (NOAA) and FEMA, and stakeholder input was used to assess the mitigation needs. This assessment informs and provides a substantive basis for programs proposed in this Local Recovery Plan, with a focus on addressing and analyzing all significant current and future hazard risks.

### 1. Historic Overview of Hazards

Since 1973, there have been 12 disaster declarations for Wilcox County. The most common natural disasters that cause damage to an extent that results in a federal disaster declaration are hurricanes and severe storms/tornadoes. This historical pattern of extreme weather is expected to continue which means mitigation measures to reduce impacts caused by these types of hazards is critical.

**Table 214 Declared Disasters since 1973 and the Associated Total Obligated PA Amount to Date for Wilcox County**

| Declaration | Year Declared | Incident Type | Declaration Title | Total Obligated PA Amount |
|---|---|---|---|---|
| **DR-4573-AL** | 2021 | Hurricane | Hurricane Zeta | $1,053,707 |
| **DR-4546-AL** | 2020 | Severe Storm | Severe Storms and Flooding | $141,031 |
| **DR-4503-AL** | 2020 | Biological | Covid-19 Pandemic | No Data |
| **DR-1971-AL** | 2011 | Severe Storm | Severe Storms, Tornadoes, Straight-Line Winds, And Flooding | No Data |
| **DR-1835-AL** | 2009 | Severe Storm | Severe Storms, Flooding, Tornadoes & Straight-Line | $23,014 |
| **DR-1687-AL** | 2007 | Severe Storm | Severe Storms and Tornadoes | $199,918 |
| **DR-1605-AL** | 2005 | Hurricane | Hurricane Katrina | $17,406 |
| **DR-1593-AL** | 2005 | Hurricane | Hurricane Dennis | $67,536 |
| **DR-1549-AL** | 2004 | Hurricane | Hurricane Ivan | $4,672,953 |
| **DR-861-AL** | 1990 | Severe Storm | Severe Storms, Tornadoes & Flooding | No Data |
| **DR-458-AL** | 1975 | Flood | Severe Storms & Flooding | No Data |
| **DR-369-AL** | 1973 | Tornado | Tornadoes & Flooding | No Data |

Source: Open FEMA Data Sets, Disaster Declaration Summary[98] and Public Assistance Funded Project Details[99]

Historic weather patterns can be determined for Wilcox County from NOAA's National Centers for Environmental Information (NCEI) Storm Events Database. Table 215 provides an outline of the number of recorded storm events from January 1950 to June 2023 for Wilcox County. If the same event type occurred on the same date, only one event was recorded; however, the number of

[98] https://www.fema.gov/openfema-data-page/disaster-declarations-summaries-v2

[99] https://www.fema.gov/openfema-data-page/public-assistance-funded-projects-details-v1

fatalities, injuries and damages were summed across the multiple events for a single day and event type.

**Table 215 NCEI Storm Events Summary (1950 - 2023)**

| Event Type | Number of Events | Number of Fatalities | Number of Injuries | Property Damage ($) | Crop Damage ($) |
|---|---|---|---|---|---|
| **Drought** | 2 | 0 | 0 | $0 | $0 |
| **Flash Flood** | 11 | 0 | 0 | $127,000 | $0 |
| **Hail** | 29 | 0 | 0 | $3,000 | $0 |
| **Heat** | 2 | 0 | 0 | $0 | $0 |
| **Heavy Snow** | 2 | 0 | 0 | $0 | $0 |
| **Hurricane (Typhoon)** | 2 | 0 | 0 | $0 | $0 |
| **Lightning** | 1 | 0 | 0 | $25,000 | $0 |
| **Sleet** | 1 | 0 | 0 | $0 | $0 |
| **Thunderstorm Wind** | 68 | 0 | 0 | $493,500 | $0 |
| **Tornado** | 10 | 1 | 4 | $2,312,500 | $0 |
| **Tropical Storm** | 5 | 0 | 0 | $0 | $0 |
| **Winter Storm** | 5 | 0 | 0 | $0 | $0 |
| **Grand Total** | **138** | **1** | **4** | **$2,961,000** | **$0** |

Source: NOAA's National Centers for Environmental Information (NCEI) Storm Events Database[100]

## 2. Greatest Risk Hazards

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified risks by studying historical events and susceptibility and gathering information and input from local stakeholders. Each hazard was categorized as High, Medium, Low, or Very Low based on the historical trends of the hazards and also the probability of future occurrence and estimated loss. These categories are defined below:

- High: Probable major damage in a 1-10 Year Period
- Medium: Probable major damage in a 10-50 Year Period
- Low: Probable major damage in a 100 Year Period
- Very Low: No probable major damage in a 100 Year Period

The *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* identified high winds from strong severe storms and tornadoes, and flooding as the most significant risks; however, extreme temperatures including drought, wildfires and Hurricanes were also identified as great risks.

[100] https://www.ncdc.noaa.gov/stormevents/choosedates.jsp?statefips=1%2CALABAMA

Table 216 Greatest Risk Hazards for Wilcox County

| Hazard | Risk Rating | Locations Impacted | Associated risk |
|---|---|---|---|
| **Flooding** | High | Areas along creeks and rivers, and low-lying areas with poor drainage are most at risk. If enough rain falls every area is at risk of flash flooding. Urban areas are especially prone to flash floods but may occur in other areas where there is inadequate, damaged or non-existent drainage infrastructure. Flooding in Meadowbrook and Camden are reoccurring events. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Tornadoes** | High | County-wide, Tornadoes can occur throughout the year but most likely to occur in the spring (March - May) and fall (November to December). The northwestern half of the county is more vulnerable and susceptible to Tornadic activity and associated impacts. | Can cause crop, property and infrastructure damage, injury, and loss of life |
| **Severe Storms** | High | County-wide, Severe storms can occur throughout the year. | Can cause crop, property damage, injury, and loss of life |
| **Extreme Heat and Droughts** | Medium | County-wide, the area is especially susceptible to these events during the summer months. | Can cause crop loss, water quality and quantity issues, threaten health (heat stroke, etc.) of people living and working in the area |
| **Wildfires** | Medium to High | Urban, more densely populated areas have a higher | Can cause crop and property and infrastructure damage, threated health due to poor air quality and result in injury and loss of life |

While extreme cold temperatures are uncommon due to Alabama's mild winter climate and therefore it is not classified as a Medium or High Risk in Wilcox County, residents are unaccustomed to and less prepared for the severe cold weather, putting residents at a greater risk for dealing with the extreme cold compared to more northern climates. Most crop species in Alabama do not have a tolerance for cold temperatures, making them more susceptible to the impacts of cold weather. Cold weather may also be accompanied by winter weather, and ice storms which can cause downed trees or result in vehicle accidents. Since 1950, 7 cold weather-related events have been recorded in Wilcox County. There is a lack of infrastructure in the county to offer dedicated warming stations for residents, especially populations that are the most vulnerable to extreme cold.

### a. Extreme Heat and Drought

Extreme heat is often associated with droughts which can lead to greater impacts on communities. Extreme heat is very common to Wilcox County, as Alabama has a humid subtropical climate, and summers in Alabama are among the hottest in the United States, with high temperatures averaging over 90 °F throughout the state. The risk for negative impacts from heat waves across the majority of county is Relatively Moderate, as shown in Figure 3 Heat Wave Risk in MID

Counties by Census Tract. In general, there is a lack of infrastructure in the county to offer dedicated cooling stations for residents, especially populations that are the most vulnerable to extreme heat.

Prolonged extreme heat periods play a vital role when it comes to droughts, especially when coupled with lack of precipitation resulting in a lack of moisture in agricultural soil. This can lead to negative economic impacts in the county as crops losses occur. Agricultural losses from droughts are estimated to cost the state annually in damages. As a result, the past events and future probability of heat and droughts are classified county-wide as medium risk according to the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan.*

## b. Flooding

Flooding is a problem for many people across the United States. The county experiences flooding from riverine floods, which range from minor to major flooding levels, and flash floods. Tropical storms can cause flooding each spring through fall with tropical cyclones and flooding occurring outside of hurricane season with heavy rains. Enduring the consequences of repetitive flooding can put a strain on residents and on state and local resources. When the water rises, communities face the disruption of life, damaged belongings, and the high cost of rebuilding. FEMA administers the National Flood Insurance Program (NFIP), which pays flood claims. According to the NFIP data, as of April 2024, there is 1 Repetitive Loss Property and 0 Severe Repetitive Loss Properties in Wilcox County.

While repetitive loss flooding is uncommon in Wilcox County, Wilcox County does have flood events. According to the *2023 Alabama State Hazard Mitigation Plan*, the most common type of flooding event in Wilcox County is a flash flood as depicted in the table below.

| Flash Flood | Flood | Coastal Flood or Storm Surge | All Flood Events |
|---|---|---|---|
| 10 | 0 | 0 | 10 |

Data Source: 2023 Alabama State Hazard Mitigation Plan

Localized flooding is a significant issue in Wilcox County, particularly in low-lying areas like Meadowbrook, where drainage and sewage problems persist. Additionally, Camden's storm water system is unable to handle the capacity during intense rain events. Areas in the county lack proper sewage treatment infrastructure. Homes may have septic systems that get backed up during storms, or they have what is called straight pipes outside of their homes, which sends raw sewage straight into yards. When flooding happens, there is a high risk for health concerns due to raw sewage contaminating the landscape and homes.

According to Alabama Public Health[101], sewage contains germs like bacteria and viruses as well as parasites and worms that can cause stomach and intestine or liver illness such as:

- Germs and parasites may cause diarrhea, fever, cramps, nausea, vomiting, headache, weakness, or loss of appetite.
- Hepatitis A can cause liver disease; symptoms may include feeling tired, having pale poop, and having yellow eyes and skin.
- Roundworms cause coughing, trouble breathing, or pain in your belly and blocked intestines.

[101] https://www.alabamapublichealth.gov/onsite/assets/sewage-exposure-flyer.pdf

- Hookworms can cause a rash, stomach pain, diarrhea, loss of appetite, tiredness, and anemia.

### c. Severe Storms

Severe storms may include lightning, hail, strong winds, intense rainfall, and flooding. Severe storms can happen county-wide which can lead to property and crop damage and at times injuries. Since 1950, NCEI has recorded 103 hail, heavy rain, lightning, thunderstorm windstorm, and tropical storm events resulting in over $500,000 in property and crop damages, as shown in Table 215. Since this event type has occurred regularly over the years which has resulted in damage, and severe storms are expected to continue regularly, Wilcox County has identified this event type as a high-risk hazard. The risk for negative impacts from hail across the majority of the county is relatively low, as shown in *Figure 7 Hail Risk in MID Counties by Census Tract*. For strong winds, the majority of the county has a relatively moderate risk, with a relatively high risk occurring in the central part of the county, as shown in *Figure 8 Strong Winds Risk in MID Counties by Census Tract.*

**Hurricanes and Coastal Storms**

As shown in Tables 214 and 215, hurricanes have historically made landfall in the region and have impacted Wilcox County. Due to the county's proximity to the Gulf of Mexico, hurricanes and coastal storms continue to be a high risk for the county. *Figure 4 Hurricane Risk in MID Counties by Census Tract,* in section VII.D, indicates that the majority of Wilcox County has a relatively moderate hurricane risk. Additionally, analysis performed by Florida State University's Meteorology Department, indicates that the probability of a hurricane of any intensity passing over Alabama is between 60% and 80%[102]. Any increased intensities in the future are likely to exacerbate the county's future vulnerability, given that intense hurricanes and coastal storms have enormous potential to devastate the physical, agricultural, economic, and sociocultural infrastructure of the county.

### d. Tornadoes

Tornadoes are Wilcox County's most significant loss-producing natural hazards according to the NCEI Storm Events Database. Between 1950 and 2022, Tornadoes caused 4 injuries, 1 death and more than $2.9 million in property and crop losses.

According to *Figure 9 Tornado Risk in MID Counties by Census Tract,* the majority of Wilcox County has a relatively moderate to relatively high Tornado Risk rating. Generally speaking, the northwestern half of the county is more vulnerable and susceptible to tornadic activity and associated impacts.

### e. Wildfires

According to the Alabama Forestry Commission Current Wildfire Totals summary[103], between 2000 and June 19, 2024, there were 612 total wildfires in Wilcox County. Those fires burned 5,303 acres. That translates to a yearly average of 26 fires and 225 acres burned per year. The largest

[102] https://moe.met.fsu.edu/tcprob/al.php
[103] https://forestry.alabama.gov/pages/fire/totals.aspx

fire recorded in the county between these years was 300 acres and occurred in 2016. Based on past occurrences, every area of the county has a degree of risk.

According to *Figure 10 Wildfire Risk in MID Counties by Census Tract*, Wilcox County has a relatively low risk for wildfire compared to the rest of the country. However, according to the 2023 Alabama State Hazard Mitigation Plan, as the climate changes, Alabama is projected to become more prone to wildfire occurrences between now and 2050. It is projected that by 2050 the average number of days with high wildfire will double from 25 to 50 days a year.

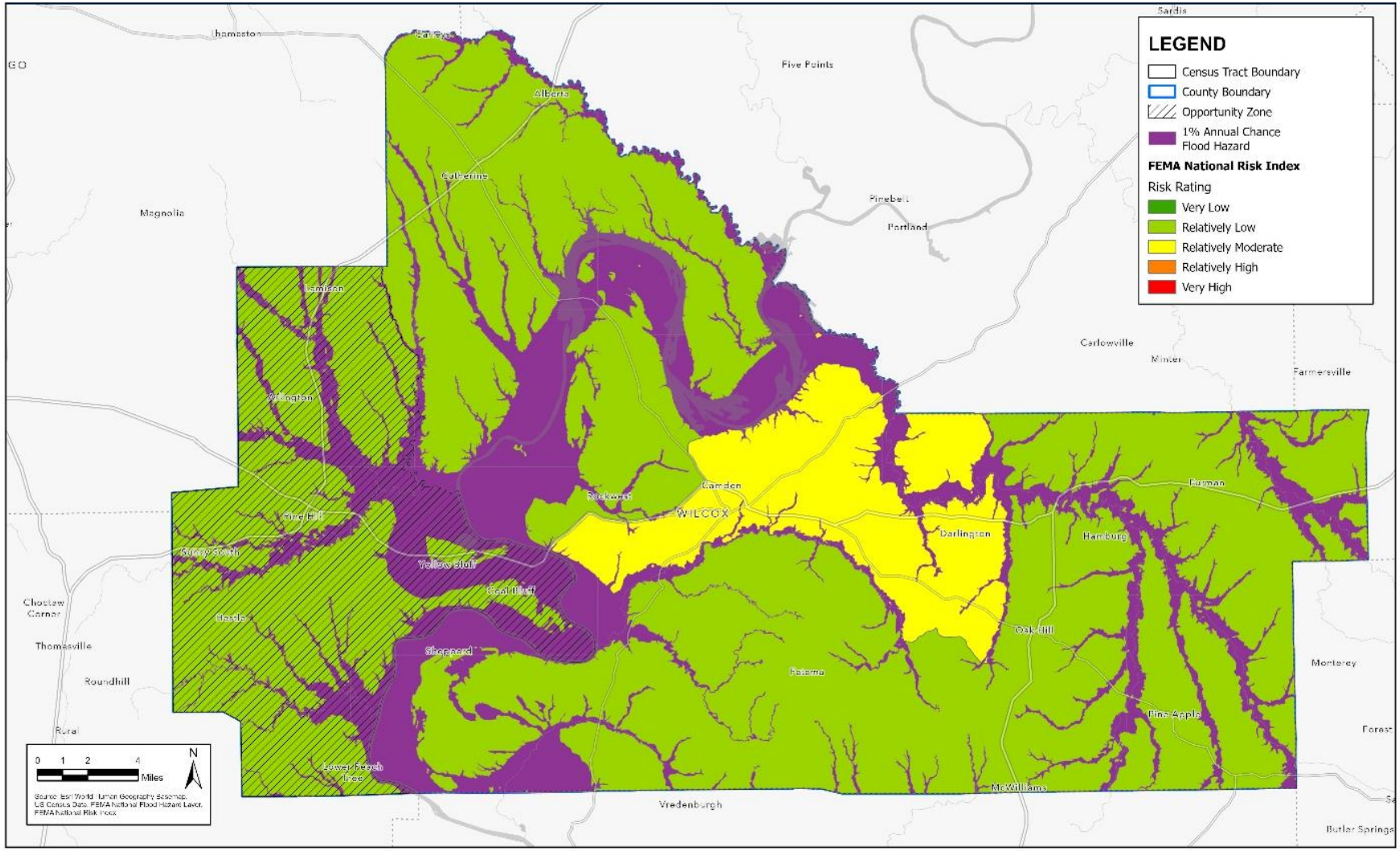
## 3. Hazard Risk Analysis

It has long been recognized that risk often corresponds with a high level of social vulnerability, compounding the impact of hazard and storm events. Using the FEMA National Risk index, we can evaluate the potential for negative impacts resulting from natural disasters by combining the expected annual loss due to natural hazards, social vulnerability and community resilience.

**Risk Index = Expected Annual Loss x Social Vulnerability ÷ Community Resilience**

Based on the composite Risk Index Score provided, we can see that there are parts of the county that have a Relatively Moderate risk score as shown in Figure 69. This area includes Camden and areas east of Camden. Hazard specific risk indices for the greatest regional and county risks can be found in the maps in Section VII.D of this plan.

**Figure 68 FEMA National Risk Index Map for Wilcox County**



### Vulnerability Overview

An overview of the greatest hazards and their risk impact from the *2021-2026 Division C Regional Multi-Jurisdictional Hazard Mitigation Plan* is shown below. To quantify the risk classifications of the greatest risk hazard, risk factors (probability, impact, location extent, duration) were evaluated.

| Hazard | Probability | Impact | Location Extent | Duration |
|---|---|---|---|---|
| **Flooding** | High | Critical | Moderate | Less than one week |
| **Tornadoes** | High | Critical | Small | Less than 6 hours |
| **Severe Storms** | Medium | Minor | Moderate | Less than 6 hours |
| **Extreme Heat and Droughts** | Medium | Minor | Small | More than one week |
| **Wildfires** | High | Minor | Small | Less than one week |

**Probability defined:**

- **Very Low:** Less than 1% annual probability
- **Low**: Between 1% and 10% annual probability
- **Medium**: Between 10% and 100% annual probability
- **High**: 100% annual probability

**Impact defined:**

- **Minor**: Very few injuries, if any occur. Only minor property damage and minimal disruption of quality of life. Temporary shutdown of critical facilities.
- **Limited**: Minor injuries only. More than 10% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one day.
- **Critical**: Multiple deaths/injuries possible. More than 25% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for more than one week.
- **Catastrophic**: High number of deaths/injuries possible. More than 50% of property in the affected area was damaged or destroyed. Complete shutdown of critical facilities for one month or more.

**Location Extent defined:**

- **Negligible**: Less than 1% of the area affected.
- **Small**: Between 1% and 10% of the area affected.
- **Moderate**: Between 10% and 50% of the area affected.
- **Large**: Between 50% and 100% of the area affected.

### Community Lifelines

Community Lifelines are critical business and government functions that are critical in the event of a disaster and are essential to human health, safety, or economic security. The greatest risks identified by the county could disrupt any number of the community lifelines which could impact emergency response and vulnerable populations and communities. Mitigation efforts should address any vulnerabilities across the 7 community lifelines to decrease the impact from the hazards identified in this plan. Maps of the lifeline assets in the county as well as the greatest risks can be found in Section VII.

# F. Recovery Strategies & Activity Identification

## 1. Recovery Strategies Overview

The 2020 disasters exposed, and exacerbated housing, infrastructure, economic, and mitigation needs in many communities that remain at risk following these events. The post-disaster recovery process presents an opportunity to address these long-standing gaps while supporting the communities' efforts to recover and represent a lasting investment in local capacity and resilience. Programs proposed in this Local Recovery Plan are designed to promote long-term mitigation and resiliency standards with a focus on serving the most vulnerable populations.

In order to address these needs, the State of Alabama identified the following project activity types to be considered by each MID County as part of this planning process:

- Affordable Multifamily Housing
- Homeowner Buyouts
- Homebuyer Assistance
- Mitigation
- Economic Resilience
- Infrastructure & Public Facility Improvements
- Public Services

ACCA and the Planning team met with County and City officials, stakeholder groups and the general public to receive feedback on damages from Hurricanes Sally and Zeta, unmet needs, and potential project typologies to address either unmet needs or mitigation needs. The result from these meetings informs this section of the plan.

Surveys were distributed at the public meetings and 25 responses were received. Of those respondents the majority were homeowners of stick-built homes (11), and owners of mobile homes (14). Respondents said that they experienced a moderate amount of damage from Hurricanes Saly and Zeta with the vast majority of those impacts resulting from wind damage and secondarily flooding. They stated that this resulted in electricity outages, and damage to streets. The subsequent project type priorities identified by stakeholders and residents are based on their assessment of incurred damage, and the degree of recovery that they have witnessed to date.

Below is an outline of the identified housing, infrastructure and economic projects identified and their associated project descriptions and details.

## 2. Housing Recovery Strategies

As identified in the unmet needs analysis, 89% of the impacted population were homeowners at the time of the Hurricanes. While the State recovery program, HRAP, was already created to benefit single-family (1-4 units) homeowners with clear title, there is still a remaining need for renters. Of the renter households that applied for FEMA IA, about 53% occupied mobile homes or travel trailers at the time of the disaster. Mobile homes are more vulnerable to natural disasters than stick-built homes because they are typically less securely anchored to the ground and are constructed with lighter materials, making them more susceptible to damage from high winds, flooding, and other extreme weather conditions. Additionally, 80% of the renter population that applied for FEMA assistance reported making less than $30,000 a year.

From the Planning Charette, the stakeholders in attendance noted that generally areas with concentrations of mobile homes are often experiencing vulnerabilities to natural disasters including tornadoes and severe storms. This is supported by the fact that 68% of households who applied for FEMA IA assistance lived in mobile homes at the time of the Hurricanes.

Surveys were distributed at Wilcox County's public meetings. The results of the surveys are as follows:

- 14 respondents stated interest in development of Affordable Multi-family housing, 4 of whom ranked it as top priority.
- 12 respondents stated interest in a First Time Homeownership Assistance Program, 3 of whom ranked it as their top priority.
- 11 respondents stated interest in a program that addresses Rehabilitation/Repairs to existing Multi-family Housing, 3 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

Below is an outline of the associated project descriptions and details.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Rehabilitation and Construction of Affordable Multifamily Units** | **Strategy** | Housing Recovery | • The need to rehabilitate apartments including Summerwood, Threadgill-Weatherspoon, Pinewood and Country Squares, following damage from Hurricane Zeta resulting minor to moderate damage was identified.<br>• Construction of new affordable multifamily units to serve households who lost their homes to the Hurricane and that are still unhoused was also an identified need.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Affordable Multifamily Housing, HCDA Section 105(a) 4 | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | MID | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Homeownership Assistance** | **Strategy** | Housing Recovery | • Provide opportunities for vulnerable mobile home renters and owners to purchase more secure housing, with an emphasis on supporting first-time homebuyers located within a MID Recovery Zone.<br>• Homeownership assistance programs typically subsidize down payments, interest rates, or mortgage principal amounts to LMI households to assist in purchasing a home.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households. | HIGH |
| | **Eligible Activity** | Homebuyer Assistance, HCDA Section 105(a) 24 | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |

## 3. Infrastructure Recovery Activities

The infrastructure unmet needs analysis and feedback from the county revealed that the most significant infrastructure damage and impact from the hurricanes was from winds downing trees that created large amount of debris to be cleaned up, damaged electric utilities which then in turn left communities without power for an extended period of time. Flooding also occurred during the events leading to flooded and washed-out roadways that cut off communities from community lifelines. Additionally, flooding is one of the county's greatest risk hazards identified in the mitigation needs assessment and can occur during rainstorms, severe storms or during hurricanes/coastal storms making it a constant threat for disrupting communities. Based on feedback received from the County, it is unlikely that all PA related damages did not request FEMA funding due to the lack of resources in the county to submit therefore the reported infrastructure values performed in the analysis may underestimate the true scale of impact and remaining unmet infrastructure needs.

During the planning process and mitigation unmet needs assessment, that there is a lack of infrastructure in the county to offer dedicated heating and cooling stations, or a place to gather for resources following a storm such a community center or a homeless shelter which may also be able to provide sheltering to residents who lost their housing following disasters. An additional major health threat was flagged in the mitigation unmet needs assessment that many homes and mobile homes across the county do not have adequate sewer infrastructure. Homes may have septic systems that get backed up during storms, or they have what is called straight pipes outside of their homes, which send raw sewage straight into yards. This poses a significant health hazard not only to residents who live in those homes but can also contaminate groundwater and creeks and rivers due to runoff.

Surveys were distributed at Wilcox County's public meetings. The top results of the surveys are as follows:

- 13 respondents stated interest in development of public utilities, such as energy and water infrastructure, repairs and improvements, 1 of whom ranked it as top priority.
- 12 respondents stated interest in Drainage improvements, 1 of whom ranked it as their top priority.
- 12 respondents stated interest in a Residential Solar Backup Generator Program, 5 of whom ranked it as their top priority.
- 10 respondents stated interest in a public service, such as, but not limited to, public safety services, educational and recreational programming, 0 of whom ranked it as their top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Sewer Improvements** | **Strategy** | Mitigation | • Many homes and mobile homes across the county do not have adequate sewer infrastructure. Homes may have septic systems that get backed up during storms, or they have what is called straight pipes outside of their homes, which send raw sewage straight into yards.<br>• When flooding happens, there is a high risk of health concerns due to raw sewage overflowing and contaminating the landscape and homes. This project would fund providing necessary sewer infrastructure.<br>• The county has already received $400,000 in CDBG funding to complete a sewer improvement project in the Meadowbrook community; however, after bidding the project out for work the project cost came in almost double what was projected due to an increase in labor and material prices due to supply and demand of labor and materials as a result of the ARPA highway funding, the COVID-19 pandemic, and the rural nature of the county. The county would like to use funding under this LRP to complete the much-needed sewer improvement project.<br>• Unmet Need – addresses sanitary concerns for providing working and available sewer infrastructure | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a) 2 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County - Mitigation | | |
| | **Administering Entity Identified** | Identified under previous CDBG Funding | | |
| | **Project Amount Identified** | $400,000- 600,000 | | |
| | **Other Funding Sources Identified** | Yes, $400,000 in CDBG Funding | | |
| | **Project Readiness** | HIGH | | |
| | **Operations and Maintenance Feasibility Identified** | Identified under previous CDBG Funding | | |
| **Flood Mitigation** | **Strategy** | Mitigation | • Reoccurring flooding from creeks overflowing onto roads, bridges and residential properties is a significant issue throughout Wilcox County. To assist in managing some of these issues, the county would like to fund a flood mitigation program.<br>• One identified use of this project would be to make improvements to bridges to | HIGH |
| | **Eligible Activity** | Mitigation, HCDA Section 105(a) 2 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County - Mitigation | | |
| | **Administering Entity Identified** | No, conceptual phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Project Amount Identified** | No, conceptual phase | raise the bridge height to prevent the likelihood of it being washed out or flooded in future storm events.<br><br>• Unmet/Mitigation needs - Addresses risk of and resulting damages from flooding. | |
| | **Other Funding Sources Identified** | No, conceptual phase | | |
| | **Project Readiness** | Low | | |
| | **Operations and Maintenance Feasibility Identified** | No, conceptual phase | | |
| **Residential Solar and Generator Program** | **Strategy** | Mitigation | • Provide households with the possibility of installing a renewable solar energy equipment, or a generator to allow for a self-sustaining installation that could persist and thrive through physical, economic, and social challenges after a hazard event.<br><br>• Unmet/Mitigation needs – Addresses issues with electricity outages in disaster events, resulting from high winds, such as what was experienced during Hurricanes Sally and Zeta | HIGH |
| | **Eligible** | Mitigation, HCDA Section 105(a) 4 | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID County - Mitigation | | |
| | **Administering Entity Identified** | No, conceptual phase | | |
| | **Project Amount Identified** | No, conceptual phase | | |
| | **Other Funding Sources Identified** | No, conceptual phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Community Resilience Center** | **Strategy** | Recovery & Mitigation | • Develop a community resilience center that provides year-round programming to build overall community resilience, while also being augmented to provide critical services during extreme and disaster events. During a steady state the Center may provide health services, job and workforce training, microenterprise incubation, workshops, and meeting space, among other uses. During or following a disaster event, this center may serve as a cooling or warming center and would be designed with back up solar generators to enable the center to provide critical services to residents when needed, such | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zones | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | as energy, water, shelter, food, resources, communication infrastructure, health services, and other post-disaster services.<br>• Unmet/mitigation needs – addresses need for greater community resilience in the face of increased damage from wind, rain, tornado, and flooding events that impede access to critical lifelines. Also, can be a lifeline to key public services. | |
| **Homeless Shelter** | **Strategy** | Recovery | • Wilcox County does not have a homeless shelter to serve vulnerable populations pre- and post-disaster. The county would like to propose creating a new homeless shelter as a project of this LRP which may also be doubled to be used as a community resilience center if the right conditions are met.<br>• Unmet Need – addresses the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families. A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | LOW |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Stormwater Infrastructure Repair & Improvement** | **Strategy** | Recovery | • The stormwater infrastructure in Camden is unable to handle the capacity of intense rainfalls and several stormwater drains were damaged during Hurricane Zeta and are in still need of repair. Wilcox County would like to use funds from this LRP to repair the damaged stormwater drains and make additional improvements throughout the city to ensure there is no roadway flooding. | HIGH |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| | **Other Funding Sources Identified** | No, Conceptual Phase | • Unmet/Mitigation needs - addresses risk of and resulting damages from flooding | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| **Bridge Replacement** | **Strategy** | Recovery | • The county has identified bridge improvement projects as a need. Bridges across the county were damaged because of Hurricane Zeta and require repair to bring them back to pre-disaster condition.<br>• Unmet/Mitigation needs - mitigate against future flooding, roadways also need to be improved (raised or additional culverts added). | LOW |
| | **Eligible Activity** | Infrastructure & Public Facility Improvements, HCDA Section 105(a)(2) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | HIGH | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

## 4. Economic Recovery Activities

With 60% of the County's residents considered LMI, providing additional staff for the recently reformed PHA would allow the county to provide and manage more affordable housing options to better support their LMI and vulnerable residents. By ensuring vulnerable populations have access to safe and affordable housing, a PHA reduces the burden of housing insecurity, allowing residents to allocate more of their income toward other needs and local spending. Stable housing also supports workforce participation, as people are more likely to maintain employment when they have a secure place to live. Additionally, a PHA can attract federal funding and investments that support local development projects, creating jobs and stimulating economic growth in the community.

Surveys were distributed at Wilcox County's public meetings. The top results of the surveys are as follows:

- 15 respondents stated interest in Job Creation, 3 of whom ranked it as their top priority.
- 7 respondents stated interest in a Small Business Loan and Grant Program, 2 of whom ranked it as top priority.
- 7 respondents stated interest in Improvements to Commercial Areas, including streetscapes, lighting, sidewalks, and other improvements, 0 of whom ranked it as top priority.

Based on the unmet needs analysis, feedback received from the County and the public, along with mitigation needs and eligible project types; the following projects were identified as priority for consideration. However, development of top priority projects into applications via the Local Recovery Program is ultimately dependent on project-readiness, feasibility, and local capacity to administer and implement the projects.

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Expand PHA Staffing** | **Strategy** | Recovery | • Wilcox County recently re-activated its PHA; however, there is not adequate staffing to be able to properly restart and run a PHA to access more funding and vouchers for vulnerable and LMI populations within their county. This project would be to expand the Public Housing Authority for the county by funding additional staff for the first several years of this new division.<br>• Unmet Need – positions needed to assist in addressing the need for safe, sanitary, and secure housing for renters, homeowners without clear title, and housing insecure individuals and families A program has not yet been developed via the Hurricane Sally and Zeta allocation that addresses the needs of these households | HIGH |
| | **Eligible Activity** | Public Service, HCDA Section 105(a)(8) | | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | HIGH | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| **Workforce training and development** | **Strategy** | Recovery or Mitigation | • Addresses public desire for workforce training and development.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the job impacts or may address a mitigation need to minimize risk with development of a more economically stable economy. | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a) 21 | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |
| | **Strategy** | Recovery or Mitigation | | LOW |

| Project Name | Eligibility Criteria | | Project Description | Project Rank |
|---|---|---|---|---|
| **Small Business Grants and Loans program** | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)8, 15,17, 21, and 22 | • Business owners recovering from disasters are often in need of capital, via grants or loans, to be able to bounce back or expand their businesses. The county will bolster the grant and loan resources and strengthen the small business community by creating via said program.<br>• Addresses public desire for small business loan and grant programs, as well as job creation.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | |
| | **National Objective** | LMI, UN | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, Conceptual Phase | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | N/A | | |
| | | | | |
| **Improvements to Commercial Areas** | **Strategy** | Recovery or Mitigation | • Rehabilitation and improvements to public infrastructure, businesses, and facades in commercial districts to stimulate economic growth and investment for areas that experienced an economic impact from Hurricanes Sally and Zeta<br>• Addresses public desire for investment in commercial areas.<br>• Unmet/Mitigation needs – there is no evidence of a large economic unmet need; therefore, this may address some of the small business impacts or may address a mitigation need to minimize risk with development of a more economically stable economy | LOW |
| | **Eligible Activity** | Economic Resilience, HCDA Section 105(a)(14), 105(a)(15) | | |
| | **National Objective** | LMI | | |
| | **Benefits vulnerable populations** | Yes | | |
| | **SVI Score** | High | | |
| | **Geographic Eligibility** | MID Recovery Zone | | |
| | **Administering Entity Identified** | No, potentially Coastal Alabama CC | | |
| | **Project Amount Identified** | No, Conceptual Phase | | |
| | **Other Funding Sources Identified** | No, Conceptual Phase | | |
| | **Project Readiness** | LOW | | |
| | **Operations and Maintenance Feasibility Identified** | No, Conceptual Phase | | |

# XV. Appendix A: Local Recovery Outreach Plan

## 1. Background

The Local Recovery Planning Program (LRPP) was established to provide Community Development Block Grant – Disaster Recovery (CDBG-DR) funding to support local governments in identifying unmet needs within their communities in collaboration with partners and the public to establish a Local Recovery Plan (LRP). This community outreach plan will inform ACCA what participating jurisdictions feel are continuing unmet needs.

## 2. Public Outreach Plan

This Public Outreach Plan is intended to guide and coordinate all organizations working together to conduct a robust community engagement process. Goals of the Community Outreach are:

- Communicate the Local Recovery Plan objectives.
- Identify stakeholders.
- Solicit unmet needs data and information.
- Solicit feedback on identified MID Recovery Zones
- Identify project typologies and scenarios.
- Solicit feedback on project scenarios.

## 3. Method

Community engagement for the Local Recovery Plan is designed to achieve the following goals:

- Meet with the County and City stakeholders to understand their goals and objectives.
- Engage the public to understand their priorities, goals, and concerns, and to gain their input on priority projects.
- Provide digital and in-person opportunities for feedback and input.
- Ensure that all internal staff and consultants are aligned in messaging.
- Compile feedback and incorporate into Plan.

## 4. Public Agencies and Officials

Staff members and officials representing public agencies participate as part of their job or official responsibilities. When agency leaders believe the decision-making process is valuable to their agency, they attend themselves or assign staff to attend, which we will encourage via email invitations.

| Participation Method | Communication Strategies |
|---|---|
| • Virtual Meeting<br>• Online survey tool<br>• In-person meeting | • Email invitations |

**Dates of Events:**

| Date | Title | Medium | Location | Goal of meeting |
|---|---|---|---|---|
| **February 27, 2024** | Introduction and Data Request | Email request for information | Email sent by ACCA | Obtain local data sets |
| **March 6, 2024** | Local Recovery Planning Program Kick-off meeting | Virtual meeting | Zoom meeting conducted via Tidal Basin | to introduce County Staff and Commissioners to the LRP planning process and what to expect |
| **March 12, 2024** | Stakeholders contact information request | Email request for information | Email sent by ACCA | Obtain contact information for consultant identified local stakeholder groups |
| **April 5, 2024** | Local Recovery Plan Risk and Vulnerability Maps | In-person meeting | Held by ACCA - Gees Bend Ferry Terminal - 1001 Earl Hilliard R., Camden, AL | To provide Commissioners with an update on Plan status and development of the unmet needs analysis |
| **April 8, 2024** | Public Housing Authority Unmet Needs and Language Access Survey | Survey | Survey Monkey survey; Email sent via Tidal Basin | To obtain information on any PHA unmet needs and to obtain language access information |
| **April 8, 2024** | Farm Service Agency Unmet Needs Survey | Survey | Survey Monkey survey; Email sent via Tidal Basin | To obtain information on any Agricultural unmet needs, of which local FSAs may be aware |
| **April 12, 2024** | City and County infrastructure unmet needs | Survey | MS Forms survey: Email sent via ACCA | To obtain data sets or information on county unmet infrastructure needs |

## 5. Stakeholders

A stakeholder is a person or a group of people who are likely to be affected by or to affect change. Often stakeholder identification is limited to formally organized interest groups.

| Participation Opportunities | Communication Strategies |
|---|---|
| • Virtual Stakeholder Meeting<br>• Online survey tool<br>• In-person Meeting | • Email invitations<br>• Newspaper publication |

**Dates of Events:**

| Date | Title | Medium | Location | Goal of meeting |
|---|---|---|---|---|
| **May 20, 2024** | Local Recovery Planning Program Stakeholder Charette – Escambia County | In-person | Flomaton Library – 436 Dr Van Ave., Flomaton, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 20, 2024** | Local Recovery Planning Program Stakeholder Charette – Clarke County | In-person | Grove Hill Senior Center – 113 Clark St., Grove Hill, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 21, 2024** | Local Recovery Planning Program Stakeholder Charette – Washington County | In-person | Washington County Sherrif Training Center – 17256 Jordan St., Chatom, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 21, 2024** | Local Recovery Planning Program Stakeholder Charette – Marengo County | In-person | National Guard Armory – 2400 E. Coats Ave., Linden, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 22, 2024** | Local Recovery Planning Program Stakeholder Charette – Perry County | In-person | Marion Military Institute – 1101 Washington St., Marion, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 22, 2024** | Local Recovery Planning Program Stakeholder Charette – Dallas County | In-person | Dallas County Public Library – 1103 Selma Ave., Selma, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |
| **May 23, 2024** | Local Recovery Planning Program Stakeholder Charette – Wilcox County | In-person | Gees Bend Ferry Terminal - 1001 Earl Hilliard R., Camden, AL | Receive feedback from on unmet needs analysis, MID Recovery zones, and identified hazards; review and identify project typologies/scenarios for use of funds |

## 6. Public

Residents tend to be the most challenging stakeholder group to engage in the planning process. Residents and property owners fall into different groups based on gender, age, employment, income, cultural heritage, etc., which influences their level of interest and willingness to participate in decision-making processes. We have been provided the cities within the Counties that need to be targeted for Community Engagement Meetings.

| Participation Opportunities | Communication Strategies |
|---|---|
| • In-person meeting with virtual option | • Email invitations<br>• Newspaper publications<br>• Mail invitations |

**Dates of Events:**

| Date | Title | Medium | Location | Goal of meeting |
|---|---|---|---|---|
| **July 15, 2024** | Local Recovery Plan Public Meeting - Washington County | In-person, 1 PM and 6 PM options | Washington County Sherrif Training Center – 17256 Jordan St, Chatom, AL | To present plan to the public and solicit input on project typologies/scenarios |
| **July 16, 2024** | Local Recovery Plan Public Meeting - Clarke County | In-person, 1 PM and 6 PM options | Clarke County Courthouse, 114 Court St., Grove Hill, AL | To present plan to the public and solicit input on project typologies/scenarios |
| **July 17, 2024** | Local Recovery Plan Public Meeting - Wilcox County | In-person, 1 PM and 6 PM options | Gees Bend Ferry Terminal 1001 E Hilliard Rd. Camden, AL 36726 | To present plan to the public and solicit input on project typologies/scenarios |
| **July 18, 2024** | Local Recovery Plan Public Meeting - Marengo County | In-person, 1 PM and 6 PM options | Marengo County Courthouse 101 E Coats Ave. Linden, AL 36748 | To present plan to the public and solicit input on project typologies/scenarios |
| **July 22, 2024** | Local Recovery Plan Public Meeting - Escambia County | In-person, 1 PM and 6 PM options | Flomaton City Hall 436 Houston St., Flomaton, AL 36441 | To present plan to the public and solicit input on project typologies/scenarios |
| **July 23, 2024** | Local Recovery Plan Public Meeting - Dallas County | In-person, 1 PM and 6 PM options | J.L. Chestnut, Jr. and Bruce C. Boynton Judicial Building, Commission Courtroom, 1st floor. 102 Church St Selma, AL 36702 | To present plan to the public and solicit input on project typologies/scenarios |
| **July 24, 2024** | Local Recovery Plan Public Meeting - Perry County | In-person, 1 PM and 6 PM options | Marion Military Institute Dining hall by airplane 1101 Washington St. Marion, AL 36756 | To present plan to the public and solicit input on project typologies/scenarios |

## 7. Outreach Plan Tasks

**FEBARUARY 2024**

Task 1: Create a draft engagement plan

- Date: 02/28/24

Task 2: Email introduction to project, project team, and outlining additional information needed.

- Date: 02/27/24
- Method: Email
- Email sent from: ACCA
- To: County Commissioner contact list
- Goal: Obtain unmet need data sets and Identification of additional stakeholders

**March 2024**

Task 3: Develop Materials for ACCA's LRP Introduction meeting

- Date: 03/05/24
- Materials to develop: (1) 1 page flyer of LRP Program; (2) PowerPoint presentation.
- Who: Tidal Basin

Task 4: Conduct a virtual meeting for County and City officials introducing the project, the team, and outlining the information that is needed

- Date: 03/06/24
- Method: Zoom
- Advertising method: Email
- Advanced notice: 2 days
- Email sent from: ACCA
- Who: County Commissioner and City contact list
- Goal: Obtain unmet need data sets and Identification of additional stakeholders

Task 5: Email communication with County officials to obtain key stakeholder contact information

- Date: 03/12/24
- Method: Email
- Email sent from: ACCA
- To: County commissioners contact list
- Goal: Obtain key stakeholder contact information

**April 2024**

Task 6: Develop Materials for ACCA's LRP Update In-Person meeting

- Date: 04/04/24
- Materials to develop: (1) PowerPoint presentation of current stage of plan – Unmet Needs Analysis and development of MID Recovery Zones; (2) Maps per County that show preliminary vulnerability assessments.
- Who: Tidal Basin

Task 7: Local Recovery Plan Update Meeting

- Date: 04/05/24
- Method: In-person meeting
- Advertising method: Email
- Advance notice:
- Email sent from: ACCA
- To:
- Goal: To provide Commissioners with an update on Plan status and development of unmet needs analysis and identification of MID Recovery Zones

Task 8: Send Survey to Public Housing Authorities to obtain information on unmet needs

- Date: 04/08/24
- Method: Survey Monkey
- Email sent from: Tidal Basin
- To: Public Housing Authority Contact list
- Goal: Obtain information regarding any unmet needs at PHA's

Task 9: Send Survey to Farm Service Agencies to obtain information on unmet needs

- Date: 04/08/24
- Method: Survey Monkey
- Email sent from: Tidal Basin
- To: Farm Service Agency Contact list
- Goal: Obtain information regarding any agricultural unmet needs

Task 10: Send Survey to Counties and Cities to obtain unmet infrastructure information

- Date: 04/12/24
- Method: MS Forms survey
- Email sent from: ACCA
- To: County commissioner and City contact list
- Goal: Obtain additional information regarding unmet needs; obtain additional data

Task 11: Develop Project Guidelines flyer for distribution to Counties

- Date: 04/24/24
- Method: PDF sent via email
- Email sent from: ACCA
- To: County commissioner and City contact list
- Goal: Provide guidelines on project typologies and eligible activities

**May 2024**

Task 12: Arrange Stakeholder Charettes

- Date: 04/26/24 (begin)
- Method: phone calls and emails
- Arrangement conducted by: ACCA

- To: County Commission contacts

Task 13: Develop materials for Stakeholder Charettes

- Date: 05/15/24
- Materials to develop: (1) Power Presentation for each of the seven counties; (2) Workbook for each of the seven counties; (3) Reference guides for each of the seven counties; (4) Tabletop maps for each of the seven counties
- Method: Print all materials except PPT; Post PDFs in Client shared drive for viewing
- Who: Tidal Basin

Task 14: Conduct Stakeholder Charettes

- Date: 05/20/24 – 05/23/24
- Method: In-person meeting
- Advertising method: Email and publication in newspapers
- Advance notice: 7 days
- Email sent from: ACCA
- To: County, City, and Stakeholder contact lists
- Newspaper publication done by: County Commissions
- Goal: To obtain input from County stakeholders on Unmet Needs analysis, MID Recovery Zones, Identified hazards, and project typologies/scenarios

**June 2024**

Task 15: Send follow up document to Charette participants

- Date: 06/05/24
- Materials to develop: (1) Power Presentation for each of the seven counties; (2) Reference guides for each of the seven counties; () Online survey that replicates workbook that will be live for 2 weeks.
- Method: PDFs and MS Forms survey sent via email
- Email sent from: Tidal Basin
- Email sent to: Charette participants.
- Goal: To allow participants to forward the material to other stakeholders, potentially get feedback from people unable to attend; or allow attendees to provide additional feedback

Task 16: Arrange Public Meeting series

- Date: 06/27/24 (begin)
- Method: phone calls and emails
- Arrangement conducted by: ACCA
- To: County Commission contacts

**July 2024**

Task 17: Develop mailer for public meetings

- Date: 06/26/24

- Materials to develop: Flyer advertising meeting for each county.
- Method: PDF and print
- Who: Tidal Basin

Task 18: Mail flyer for public meetings

- Date: 06/28/24
- Materials to develop: Flyer advertising meeting for each county.
- Method: send flyers via mail
- To: Stakeholder list
- Who: Tidal Basin

Task 19: Post notification for public meetings in newspapers

- Date: 07/02/24
- Method: begin posting in county newspapers of record; 14 days in advance of meetings
- Who: County Commissions

Task 20: Email notification of public meetings

- Date: 07/02/24
- Method: email
- To: County, City, and Stakeholder Lists
- Who: ACCA

Task 21: Develop materials for Stakeholder Charettes

- Date: 07/10/24
- Materials to develop: (1) Power Presentation for each of the seven counties; (2) Interactive posters to hang in each of the seven counties to collect comments and obtain additional information on project typologies/scenarios.
- Method: Print all materials except PPT; Post PDFs in Client shared drive for viewing
- Who: Tidal Basin

Task 22: Conduct Public Meetings

- Date: 07/15/24 – 07/24/24
- Method: In-person meeting
- Advertising method: Email, Mail and publication in newspapers
- Advance notice: 14 days
- Goal: To present plan to counties and receive additional feedback

## 8. Language Assistance Plan Four-Factor Analysis

### Factor 1: Number/Proportion of Limited English Proficiency (LEP) Persons in Service Area

| County | Population* | Speak English at home** | Language other than English spoken at home** | Speak Spanish at home** | Number of Persons |
|---|---|---|---|---|---|
| Clarke | 23,087 | 98.8% | 1.2% | .7% | 161 |
| Dallas | 38,462 | 98.8% | 1.2% | .4% | 154 |
| Escambia | 36,757 | 987% | 1.3% | .8% | 294 |
| Marengo | 19,323 | 97.7% | 2.3% | 1.3% | 251 |
| Perry | 8,511 | 99.1% | .9% | .7% | 60 |
| Washington | 15,388 | 98.9% | 1.1% | .2% | 31 |
| Wilcox | 10,600 | 97.6% | 2.4% | .5% | 254 |
| **TOTAL** | **152,128** | | **1.4%** | **.8%** | **1205** |

*2020 Decennial United States Census Data
** 2022 American Community Survey 5-year Estimates

Within the 7 counties represented in this plan approximately 1.4% of the population speak a language at home other than English, the majority of that percentage are persons that speak Spanish at home. There are approximately 1205 people within the 7-county region that speak Spanish at home. This meets the Safe Harbor Threshold of 1000 persons; therefore, documents related to this plan will be available in Spanish upon request.

### Factor 2: Frequency of Contact with LEP Persons

According to discussions with the agencies involved in this plan; they do not commonly come into direct contact with individuals of Limited English Proficiency (LEP).

### Factor 3: Nature and Importance of the Service to LEP persons?

The Local Recovery Plan uses data analysis and outreach to key stakeholders to identify unmet recovery needs from Hurricanes Sally and Zeta; most vulnerable census tracts; hazard mitigation needs and potential project typologies to address these needs.

Considering that this planning effort is largely a data exercise, in which damage, risks, and socially vulnerable areas are identified that require additional recovery or mitigation resources/projects. It is assumed that those individuals who speak Spanish and are also considered to be vulnerable, they will be accounted for in the data. This planning service is not inclusive of any vital documents for residents is not considered to be of high importance to LEP persons.

### Factor 4: Resources Available and Overall Costs

The consultant's budget for development of the plan is $229,167. This budget includes mapping, data analysis, development of strategies, drafting of plan, and outreach activities. There is not a budget line item for translation of the plan, and it is not considered critical. However, if at any time Spanish assistance or translation is required Tidal Basin has the capabilities. The Project Manager is proficient in Spanish, Tidal Basin has fully bilingual staff available, and Tidal Basin has access to advanced translation software for accurate translation of documents.

# XVI. Appendix B: MID Recovery Zone Analysis

## A. Methodology

The MID Recovery Zones were identified at the census tract level based on two categories; areas with vulnerable populations and zip codes with the most unmet need and where these areas overlap with census tracts. A ranked approach was taken to rate the census tracts in each county based on a score from 0 to 20, with a total possible score of 10 for each category. Census tracts with scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

1. **Unmet Needs Score** – Unmet needs scores were developed through the process of using the total unmet need dollar amounts, which were available only by zip code, and applying a score from 1-10 to the associated census tract the zip code fell in. The unmet needs dollar amounts were derived from combining the total unmet housing, infrastructure, and economic needs and yielded a total dollar amount. To translate these unmet needs into scores, the three zip codes with the highest unmet need dollar amounts were identified and given a score based on the following methodology. Ceilings to scores were established based on zip code highest need position in the top three identified zip codes (first, second, third). The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated. For example, if the zip code that was identified to have the highest need in the county fell inside of a census tract and covered the entire area, meaning the zip code was larger than that census tract, that census tract would get a score of 10 since 100% of that census tract is part of the larger zip code. In some instances, some zip codes only covered part of a census tract and were given scores based on the associated geographic coverage. For example, if the second-highest zip code in a county fell inside of a census tract but only covered 50% or half of that census tract, a score of 4 was given (half of the maximum score of 8 for the zip code with the second highest unmet need). Furthermore, census tracts that did not include a zip code identified with the top three highest unmet need; it was given a score of 0.
2. **Vulnerability Score –** Disadvantaged areas which consists of Racially or Ethnically Concentrated Areas of Poverty (R/ECAP) and/or Opportunity Zones for the seven counties in Alabama, and the 2020 CDC Social Vulnerability Index (SVI) were used to provide a vulnerability score for each census tract. Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score. The scoring for the 5 SVI categories is as follows: Very Low = 2; Relatively Low = 4; Relatively Moderate = 6; Relatively High = 8; and Very High = 10. The CDC/ATSDR Social Vulnerability Index 2020 State Database was used in this plan and was accessed April 2024[104].

The following section provides a detailed overview of each census tracts scoring followed by maps of the census tract ranking for each county.

[104] CDC/ATSDR SVI: https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

# B. Calculations

## 1. Clarke County

### a. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36545** | $5,748,298 | 10 |
| **36784** | $1,371,996 | 8 |
| **36451** | $1,065,828 | 6 |
| **36540** | $415,753 | 0 |
| **36482** | $295,931 | 0 |
| **36524** | $204,089 | 0 |
| **36436** | $36,382 | 0 |
| **36727** | $13,660 | 0 |
| **36751** | $12,829 | 0 |

### b. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 9575 | 36436 | 0 | n/a | 0 | 4 |
| | 36784 | 8 | 50% | 4 | |
| | 36754 | 0 | n/a | 0 | |
| | 36751 | 0 | n/a | 0 | |
| | 36451 | 6 | 0% | 0 | |
| 9576.01 | 36784 | 8 | 100% | 8 | 8 |
| | 36524 | 0 | n/a | 0 | |
| 9576.03 | 36784 | 8 | 100% | 8 | 8 |
| 9576.04 | 36784 | 8 | 100% | 8 | 8 |
| 9577 | 36524 | 0 | n/a | 0 | 3.5 |
| | 36545 | 10 | 5% | 1.5 | |
| | 36784 | 8 | 25% | 2 | |
| | 36727 | 0 | n/a | 0 | |
| 9578 | 36482 | 0 | n/a | 0 | 3.5 |
| | 36451 | 6 | 50% | 3 | |

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| | 36436 | 0 | n/a | 0 | |
| | 36751 | 0 | n/a | 0 | |
| | 36540 | 0 | n/a | 0 | |
| | 36545 | 10 | 1% | 0.5 | |
| 9579.01 | 36545 | 10 | 99% | 10 | 10 |
| | 36451 | 6 | 0% | 0 | |
| 9579.02 | 36545 | 10 | 100% | 10 | 10 |
| 9580.03 | 36545 | 10 | 95% | 9.5 | 9.5 |
| | 36540 | 0 | n/a | 0 | |

## c. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **9575** | No | 0 | Very Low | 2 | 2 |
| **9576.01** | No | 0 | Very Low | 2 | 2 |
| **9576.03** | No | 0 | Relatively Low | 4 | 4 |
| **9576.04** | No | 0 | Relatively Low | 4 | 4 |
| **9577** | No | 0 | Relatively High | 8 | 8 |
| **9578** | No | 0 | Very High | 10 | 10 |
| **9579.01** | No | 0 | Relatively Moderate | 6 | 6 |
| **9579.02** | Yes | 10 | Very High | 10 | 10 |
| **9580.03** | Yes | 10 | Very High | 10 | 10 |

## d. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone Score | Identified as MRZ |
|---|---|---|---|---|
| **9575** | 4 | 2 | 6 | No |
| **9576.01** | 8 | 2 | 10 | No |
| **9576.03** | 8 | 4 | 12 | No |
| **9576.04** | 8 | 4 | 12 | No |
| **9577** | 3.5 | 8 | 11.5 | No |
| **9578** | 3 | 10 | 13 | No |

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone Score | Identified as MRZ |
|---|---|---|---|---|
| **9579.01** | 10 | 6 | 16 | Yes |
| **9579.02** | 10 | 10 | 20 | Yes |
| **9580.03** | 9.5 | 10 | 19.5 | Yes |

## 2. Dallas County

### a. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36703** | $4,036,181 | 10 |
| **36701** | $2,858,195 | 8 |
| **36767** | $481,690 | 6 |
| **36773** | $151,806 | 0 |
| **36758** | $121,632 | 0 |
| **36775** | $112,362 | 0 |
| **36759** | $47,794 | 0 |
| **36761** | $43,728 | 0 |
| **36749** | $43,364 | 0 |
| **36785** | $16,367 | 0 |

### b. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 9561.01 | 36701 | 8 | 5% | 0.5 | 9.5 |
| | 36703 | 10 | 90% | 9 | |
| | 36749 | 0 | n/a | 0 | |
| | 36758 | 0 | n/a | 0 | |
| 9561.02 | 36701 | 8 | 30% | 2.5 | 5 |
| | 36703 | 10 | 25% | 2.5 | |
| | 36758 | 0 | n/a | 0 | |
| 9562.01 | 36701 | 8 | 65% | 5.25 | 6 |
| | 36759 | 0 | n/a | 0 | |
| | 36767 | 6 | 15% | 0.75 | |

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 9562.02 | 36701<br>36758 | 8<br>0 | 70%<br>n/a | 5.5<br>0 | 5.5 |
| 9563 | 36701 | 8 | 100% | 8 | 8 |
| 9564 | 36703 | 10 | 80% | 8 | 8 |
| 9565 | 36703 | 10 | 80% | 10 | 10 |
| 9566 | 36701 | 8 | 100% | 8 | 8 |
| 9567.01 | 36701 | 8 | 100% | 8 | 8 |
| 9567.02 | 36701 | 8 | 100% | 8 | 8 |
| 9568 | 36701 | 8 | 100% | 8 | 8 |
| 9569 | 36759<br>36767 | 0<br>6 | n/a<br>67% | 0<br>4 | 4 |
| 9570 | 36759<br>36773<br>36767<br>36761<br>36775 | 0<br>0<br>6<br>0<br>0 | n/a<br>n/a<br>15%<br>n/a<br>n/a | 0<br>0<br>1<br>0<br>0 | 1 |
| 9571 | 36775<br>36701 | 0<br>8 | n/a<br>30% | 0<br>2.5 | 2.5 |
| 9572 | 36703 | 10 | 60% | 6 | 6 |
| 9573.01 | 36701<br>36703 | 8<br>10 | 66%<br>33% | 5.25<br>3.25 | 8.5 |
| 9573.02 | 36785<br>36703 | 0<br>10 | n/a<br>25% | 0<br>2.5 | 2.5 |

## c. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **9561.01** | No | 0 | Relatively Low | 4 | 4 |
| **9561.02** | No | 0 | Very Low | 2 | 2 |
| **9562.01** | No | 0 | Very Low | 2 | 2 |
| **9562.02** | No | 0 | Relatively Low | 4 | 4 |
| **9563** | No | 0 | Relatively High | 8 | 8 |
| **9564** | Yes | 10 | Very High | 10 | 10 |
| **9565** | Yes | 10 | Very High | 10 | 10 |
| **9566** | Yes | 10 | Relatively High | 8 | 10 |
| **9567.01** | No | 0 | Very Low | 2 | 2 |

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **9567.02** | No | 0 | Relatively Moderate | 6 | 6 |
| **9568** | No | 0 | Relatively High | 8 | 8 |
| **9569** | Yes | 5 | Relatively High | 8 | 10 |
| **9570** | Yes | 10 | Very High | 10 | 10 |
| **9571** | No | 0 | Relatively High | 8 | 8 |
| **9572** | No | 0 | Relatively Moderate | 6 | 6 |
| **9573.01** | No | 0 | Relatively High | 8 | 8 |
| **9573.02** | No | 0 | Very Low | 2 | 2 |

### d. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **9565** | 10 | 10 | 20 | Yes |
| **9564** | 8 | 10 | 18 | Yes |
| **9566** | 8 | 10 | 18 | Yes |
| **9573.01** | 8.5 | 8 | 16.5 | Yes |
| **9563** | 8 | 8 | 16 | Yes |
| **9568** | 8 | 8 | 16 | Yes |
| **9567.02** | 8 | 6 | 14 | No |
| **9569** | 4 | 10 | 14 | No |
| **9561.01** | 9.5 | 4 | 13.5 | No |
| **9572** | 6 | 6 | 12 | No |
| **9570** | 1 | 10 | 11 | No |
| **9571** | 2.5 | 8 | 10.5 | No |
| **9567.01** | 8 | 2 | 10 | No |
| **9562.02** | 5.5 | 4 | 9.5 | No |
| **9562.01** | 6 | 2 | 8 | No |
| **9561.02** | 5 | 2 | 7 | No |
| **9573.02** | 2.5 | 2 | 4.5 | No |

## 3. Escambia County

### a. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36502** | $5,873,689 | 10 |
| **36426** | $4,226,634 | 8 |
| **36441** | $684,521 | 6 |
| **36562** | $55,825 | 0 |
| **36483** | $14,165 | 0 |
| **36401** | $12,639 | 0 |
| **36432** | $4,611 | 0 |
| **36420** | $1,864 | 0 |

## b. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 9698.01 | 36420 | 0 | n/a | 0 | 8 |
| | 36483 | 0 | n/a | 0 | |
| | 36426 | 8 | 50% | 4 | |
| 9698.02 | 36426 | 8 | 100% | 8 | 8 |
| 9699 | 36426 | 8 | 85% | 6.75 | 8 |
| | 36441 | 6 | 15% | 1.25 | |
| | 36432 | 0 | n/a | 0 | |
| 9701 | 36426 | 8 | 100% | 8 | 8 |
| | 36432 | 0 | n/a | 0 | |
| 9702 | 36426 | 8 | 100% | 8 | 8 |
| 9703 | 36426 | 8 | 15% | 1.25 | 6 |
| | 36441 | 6 | 85% | 3.75 | |
| 9704 | 36502 | 10 | 100% | 10 | 10 |
| 9705 | 36502 | 10 | 97% | 10 | 10 |
| | 36562 | 0 | n/a | 0 | |
| 9706 | 36502 | 10 | 100% | 10 | 10 |
| 9707 | 36502 | 10 | 100% | 10 | 10 |

## c. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **9698.01** | No | 0 | Relatively Low | 4 | 4 |
| **9698.02** | No | 0 | Relatively Moderate | 6 | 6 |
| **9699** | No | 0 | Very Low | 2 | 2 |
| **9701** | No | 0 | Relatively High | 8 | 8 |
| **9702** | No | 0 | Relatively Moderate | 6 | 6 |
| **9703** | No | 0 | Relatively Moderate | 6 | 6 |
| **9704** | Yes | 10 | Relatively High | 8 | 10 |
| **9705** | No | 0 | Very High | 10 | 10 |
| **9706** | No | 0 | Relatively High | 8 | 8 |
| **9707** | No | 0 | Very High | 10 | 10 |

### d. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **9698.01** | 8 | 4 | 12 | No |
| **9698.02** | 8 | 6 | 14 | No |
| **9699** | 8 | 2 | 10 | No |
| **9701** | 8 | 8 | 16 | Yes |
| **9702** | 8 | 6 | 14 | No |
| **9703** | 6 | 6 | 12 | No |
| **9704** | 10 | 10 | 20 | Yes |
| **9705** | 10 | 10 | 20 | Yes |
| **9706** | 10 | 8 | 18 | No |
| **9707** | 10 | 10 | 20 | Yes |

## 4. Marengo County

### a. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36782** | $459,656 | 10 |
| **36736** | $374,883 | 8 |
| **36732** | $371,080 | 6 |
| **36748** | $367,274 | 0 |
| **36784** | $116,240 | 0 |

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36738** | $114,356 | 0 |
| **36783** | $100,706 | 0 |
| **36769** | $99,489 | 0 |
| **36742** | $86,151 | 0 |
| **36754** | $85,929 | 0 |
| **36728** | $44,826 | 0 |
| **36773** | $29,930 | 0 |
| **36786** | $11,144 | 0 |
| **36722** | $8,138 | 0 |

## b. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 9729.01 | 36732 | 6 | 100% | 6 | 6 |
| 9729.02 | 36742 | 0 | n/a | 0 | 2 |
| | 36732 | 6 | 33% | 2 | |
| 9730.01 | 36748 | 10 | 100% | 10 | 10 |
| | 36754 | 0 | n/a | 0 | |
| 9730.02 | 36742 | 0 | n/a | 0 | 4 |
| | 36748 | 0 | n/a | 0 | |
| | 36782 | 10 | 40% | 4 | |
| 9731 | 36783 | 0 | n/a | 0 | 0 |
| | 36738 | 0 | n/a | 0 | |
| | 36786 | 0 | n/a | 0 | |
| | 36728 | 0 | n/a | 0 | |
| | 36773 | 0 | n/a | 0 | |
| | 36754 | 0 | n/a | 0 | |
| | 36742 | 0 | n/a | 0 | |
| 9732 | 36754 | 0 | n/a | 0 | 5 |
| | 36722 | 0 | n/a | 0 | |
| | 36769 | 0 | n/a | 0 | |
| | 36736 | 8 | 60% | 5 | |
| | 36784 | 0 | n/a | 0 | |
| 9733 | 36782 | 10 | 80% | 8 | 8 |
| | 36784 | 0 | n/a | 0 | |
| 9734 | 36782 | 10 | 100% | 10 | 10 |
| | 36748 | 0 | n/a | 0 | |

### c. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **9729.01** | Yes | 10 | Relatively Moderate | 6 | 10 |
| **9729.02** | Yes | 10 | Very High | 10 | 10 |
| **9730.01** | No | 0 | Relatively High | 8 | 8 |
| **9730.02** | No | 0 | Relatively High | 8 | 8 |
| **9731** | No | 0 | Relatively High | 8 | 8 |
| **9732** | No | 0 | Very Low | 2 | 2 |
| **9733** | No | 0 | Very Low | 2 | 2 |
| **9734** | No | 0 | Relatively Low | 4 | 4 |

### d. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **9729.01** | 6 | 10 | 16 | Yes |
| **9729.02** | 2 | 10 | 12 | No |
| **9730.01** | 10 | 8 | 18 | Yes |
| **9730.02** | 4 | 8 | 12 | No |
| **9731** | 0 | 8 | 8 | No |
| **9732** | 5 | 2 | 7 | No |
| **9733** | 8 | 2 | 10 | No |
| **9734** | 10 | 4 | 14 | No |

## 5. Perry County

### a. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36756** | $924,552 | 10 |
| **36786** | $614,517 | 8 |
| **36765** | $40,985 | 6 |
| **36701** | $40,559 | 0 |

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36759** | $39,726 | 0 |
| **36773** | $16,222 | 0 |
| **35042** | $1,864 | 0 |
| **36783** | $1,864 | 0 |

## b. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 6868 | 36756 | 10 | 40% | 4 | 4 |
| | 35042 | 0 | n/a | 0 | |
| | 36793 | 0 | n/a | 0 | |
| | 36701 | 0 | n/a | 0 | |
| 6870.01 | 36756 | 10 | 100% | 10 | 10 |
| | 35034 | 0 | n/a | 0 | |
| 6870.02 | 36756 | 10 | 70% | 7 | 8 |
| | 36765 | 6 | 15% | 1 | |
| 6871 | 36786 | 8 | 60% | 5 | 7 |
| | 36765 | 6 | 10% | 0.5 | |
| | 36759 | 0 | n/a | 0 | |
| | 36756 | 10 | 15% | 1.5 | |

## c. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **6868** | No | 0 | Very Low | 2 | 2 |
| **6870.01** | Yes | 10 | Relatively Moderate | 6 | 10 |
| **6870.02** | Yes | 10 | Relatively Moderate | 6 | 10 |
| **6871** | No | 0 | Relatively High | 8 | 8 |

## d. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **6870.01** | 10 | 10 | 20 | Yes |
| **6870.02** | 8 | 10 | 18 | Yes |
| **6871** | 7 | 8 | 15 | Yes |
| **6868** | 4 | 2 | 6 | No |

## 6. Washington County

### e. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36553** | $1,297,474 | 10 |
| **36585** | $808,457 | 8 |
| **36558** | $299,821 | 6 |
| **36518** | $171,008 | 0 |
| **36548** | $144,369 | 0 |
| **36529** | $121,380 | 0 |
| **36569** | $121,258 | 0 |
| **36539** | $100,553 | 0 |
| **36583** | $91,373 | 0 |
| **36584** | $67,330 | 0 |
| **36538** | $60,490 | 0 |
| **36522** | $57,925 | 0 |
| **36581** | $32,386 | 0 |
| **36560** | -$17,036 | 0 |

### f. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 439 | 36558 | 6 | 85% | 5 | 5 |
| | 36538 | 0 | n/a | 0 | |
| 440 | 36518 | 0 | n/a | 0 | 2 |
| | 36558 | 6 | 30% | 2 | |
| | 36538 | 0 | n/a | 0 | |
| | 36569 | 0 | n/a | 0 | |

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 441 | 36585 | 8 | 30% | 2.5 | 2.5 |
| | 36583 | 0 | n/a | 0 | |
| | 36569 | 0 | n/a | 0 | |
| | 36548 | 0 | n/a | 0 | |
| | 36581 | 0 | n/a | 0 | |
| 442 | 36553 | 10 | 90% | 9 | 9 |
| | 36522 | 0 | n/a | 0 | |
| 443 | 36529 | 0 | n/a | 0 | 1 |
| | 36584 | 0 | n/a | 0 | |
| | 36539 | 0 | n/a | 0 | |
| | 36522 | 0 | n/a | 0 | |
| | 36553 | 10 | 10% | 1 | |

## g. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **439** | No | 0 | Relatively Low | 4 | 4 |
| **440** | No | 0 | Relatively Moderate | 6 | 6 |
| **441** | No | 0 | Relatively Low | 4 | 4 |
| **442** | Yes | 10 | Very Low | 2 | 10 |
| **443** | No | 0 | Relatively Moderate | 6 | 6 |

## h. MID Recovery Zone Score

Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **442** | 9 | 10 | 19 | Yes |
| **439** | 5 | 6 | 11 | No |
| **440** | 2 | 6 | 8 | No |
| **441** | 2.5 | 4 | 6.5 | No |
| **443** | 1 | 4 | 5 | No |

## 7. Wilcox County

### i. Zip Code Unmet Need Score

The zip code with the highest need could get up to 10 points, the zip code with the second highest need could get up to 8 points, and the zip code with the third highest need could get up to 6 points. All remaining zip codes did not get a score.

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36726** | $964,433 | 10 |
| **36769** | $800,299 | 8 |
| **36720** | $313,081 | 6 |
| **36768** | $232,116 | 0 |
| **36751** | $218,725 | 0 |
| **36728** | $200,792 | 0 |
| **36435** | $177,282 | 0 |
| **36722** | $129,084 | 0 |
| **36784** | $101,232 | 0 |
| **36761** | $1,864 | 0 |
| **36773** | $1,864 | 0 |
| **36783** | $1,864 | 0 |

| Zip Code | Total Unmet Need | Zip Code Unmet Need Score |
|---|---|---|
| **36553** | $1,297,474 | 10 |
| **36585** | $808,457 | 8 |
| **36558** | $299,821 | 6 |
| **36518** | $171,008 | 0 |
| **36548** | $144,369 | 0 |
| **36529** | $121,380 | 0 |
| **36569** | $121,258 | 0 |
| **36539** | $100,553 | 0 |
| **36583** | $91,373 | 0 |
| **36584** | $67,330 | 0 |
| **36538** | $60,490 | 0 |
| **36522** | $57,925 | 0 |
| **36581** | $32,386 | 0 |
| **36560** | -$17,036 | 0 |

### j. Zip Code Score

After pairing a zip code with the appropriate census tract it was a part of, a score based on geographic coverage of the entire census tract was calculated.

| Census Tract | Overlapping Zip Code | Zip Code Unmet Need Score | % Census Tract in Zip Code | % multiplied by zip code unmet need score | Total Census Tract Unmet Need Score |
|---|---|---|---|---|---|
| 439 | 36558 | 6 | 85% | 5 | 5 |
| | 36538 | 0 | n/a | 0 | |
| 440 | 36518 | 0 | n/a | 0 | 2 |
| | 36558 | 6 | 30% | 2 | |
| | 36538 | 0 | n/a | 0 | |
| | 36569 | 0 | n/a | 0 | |
| 441 | 36585 | 8 | 30% | 2.5 | 2.5 |
| | 36583 | 0 | n/a | 0 | |
| | 36569 | 0 | n/a | 0 | |
| | 36548 | 0 | n/a | 0 | |
| | 36581 | 0 | n/a | 0 | |
| 442 | 36553 | 10 | 90% | 9 | 9 |
| | 36522 | 0 | n/a | 0 | |
| 443 | 36529 | 0 | n/a | 0 | 1 |
| | 36584 | 0 | n/a | 0 | |
| | 36539 | 0 | n/a | 0 | |
| | 36522 | 0 | n/a | 0 | |
| | 36553 | 10 | 10% | 1 | |
| 347 | 36728 | 0 | n/a | 0 | 3 |
| | 36720 | 6 | 45% | 2.5 | |
| | 36769 | 8 | 5% | 0.5 | |
| 348.01 | 36726 | 10 | 100% | 10 | 10 |
| 348.02 | 36726 | 10 | 85% | 8.5 | 9.5 |
| | 36768 | 10 | 15% | 1 | |
| 351 | 36769 | 8 | 63% | 5 | 5 |
| | 36722 | 0 | n/a | 0 | |
| | 36751 | 0 | n/a | 0 | |
| | 36783 | 0 | n/a | 0 | |
| | 36784 | 0 | n/a | 0 | |
| 352 | 36768 | 0 | n/a | 0 | 1 |
| | 36726 | 10 | 10% | 1 | |
| | 36435 | 0 | n/a | 0 | |

## k. Vulnerability Score

Where disadvantaged areas are located, the census tract received the highest possible score of 10 points. In census tracts without disadvantaged areas, the SVI vulnerability category was used to provide the vulnerability score.

| Census Tract | Disadvantaged Area? | Disadvantaged Area Score | SVI Rating | SVI Rating Score | Vulnerability Score |
|---|---|---|---|---|---|
| **347** | | | Very High | 10 | 10 |
| **439** | No | 0 | Relatively Low | 4 | 4 |

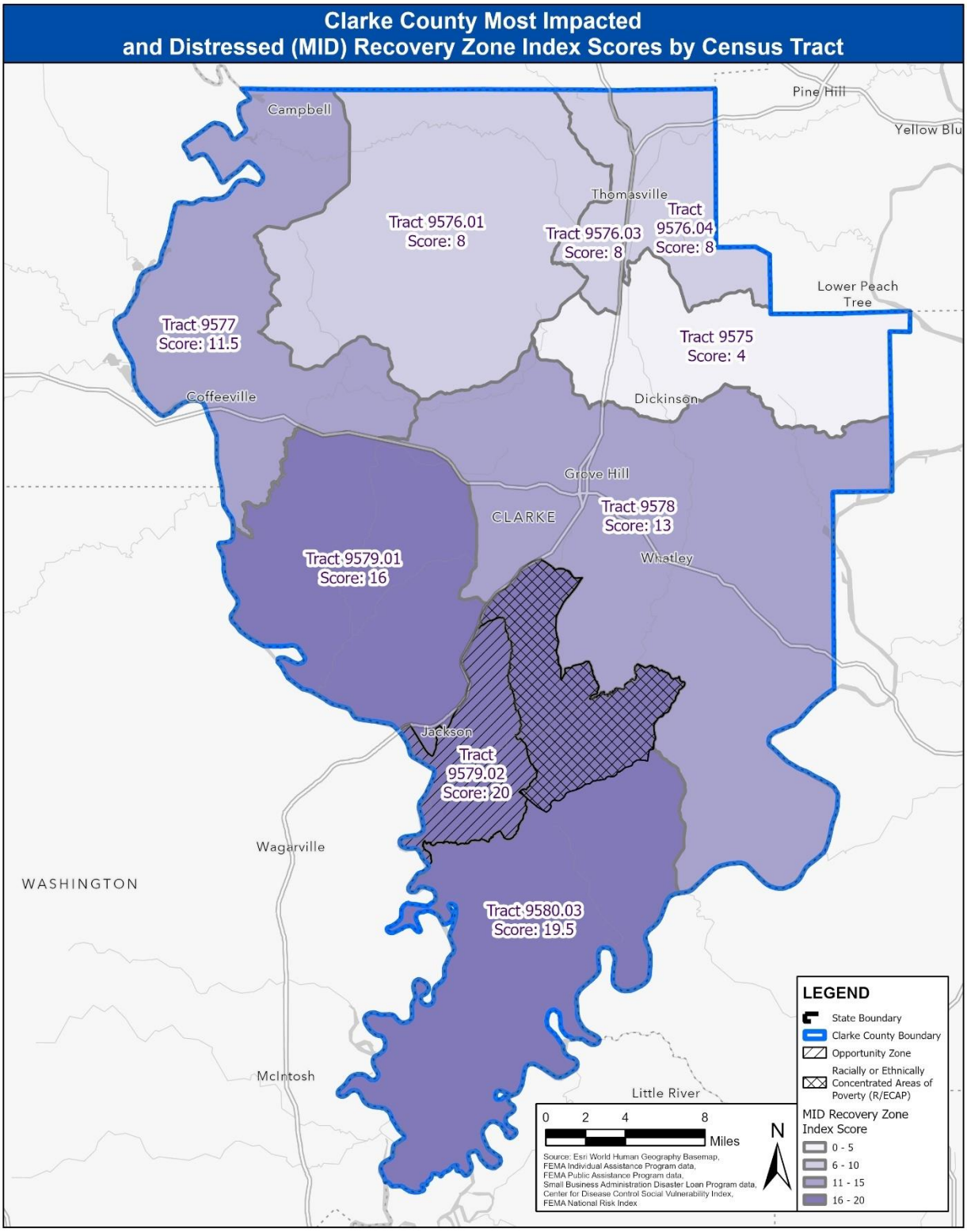
| | | | | | |
|---|---|---|---|---|---|
| **348.01** | | | Very High | 10 | 10 |
| **440** | No | 0 | Relatively Moderate | 6 | 6 |
| **348.02** | | | | 8 | 8 |
| **441** | No | 0 | Relatively High Low | 4 | 4 |
| **351** | | | Relatively Moderate | 6 | |
| **442** | Yes | 10 | Very Low | 2 | 10 |
| **352** | | | | | |
| **443** | No | 0 | Relatively Moderate | 6 | 6 |

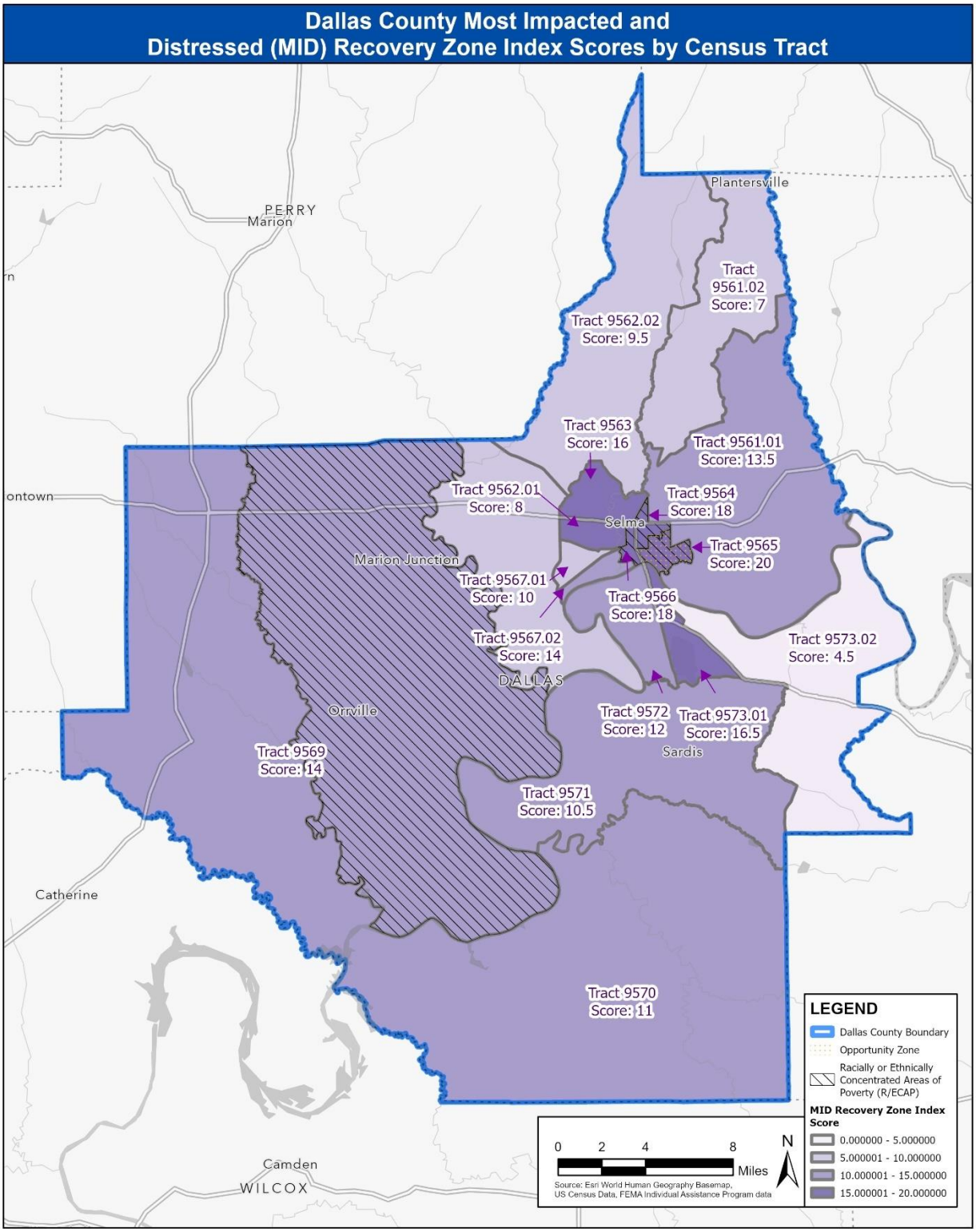
## I. MID Recovery Zone Score

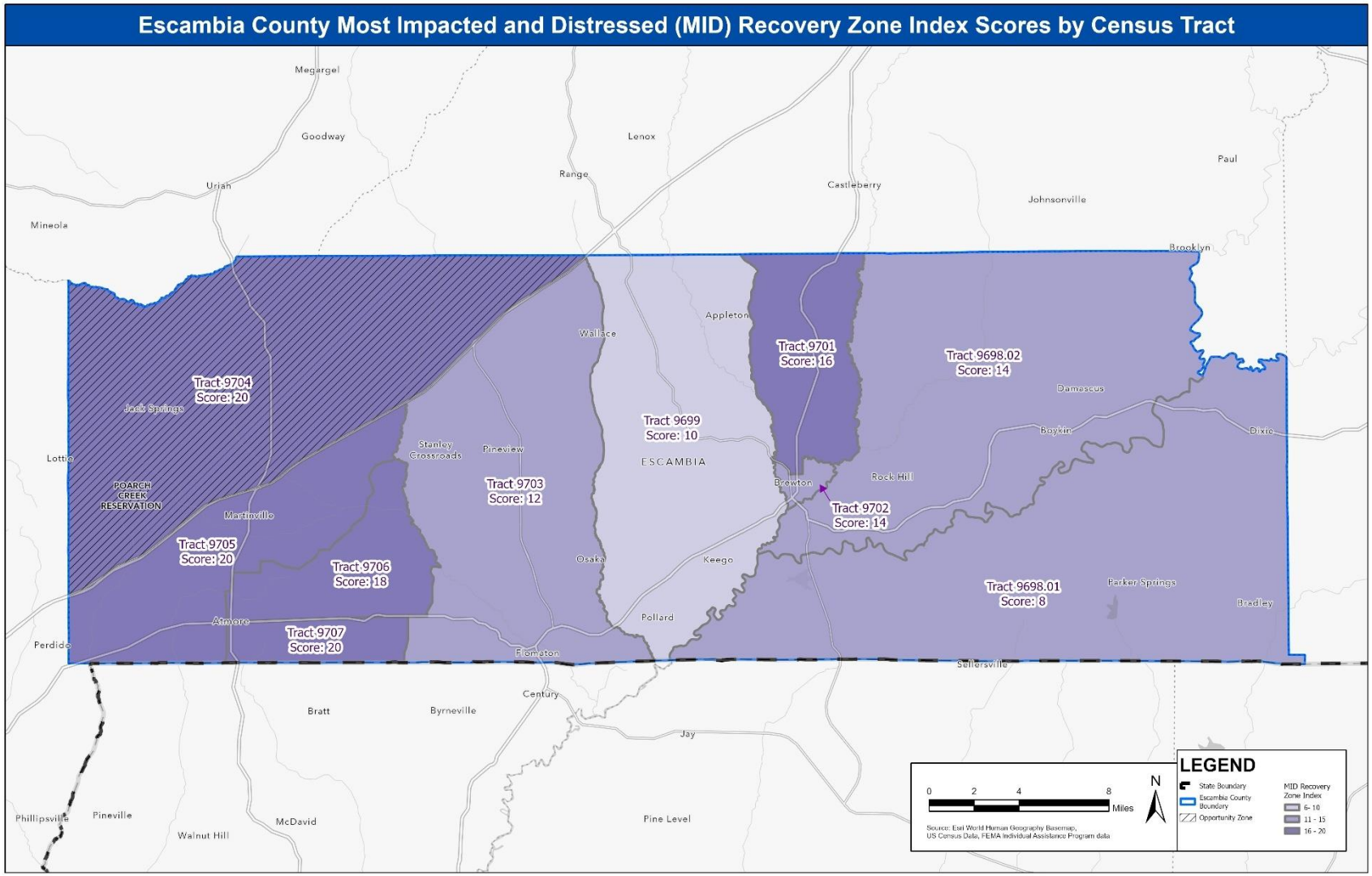
Census tracts with MRZ scores between 15 and 20 are considered a MID Recovery Zone. See details of how the ranking was calculated:

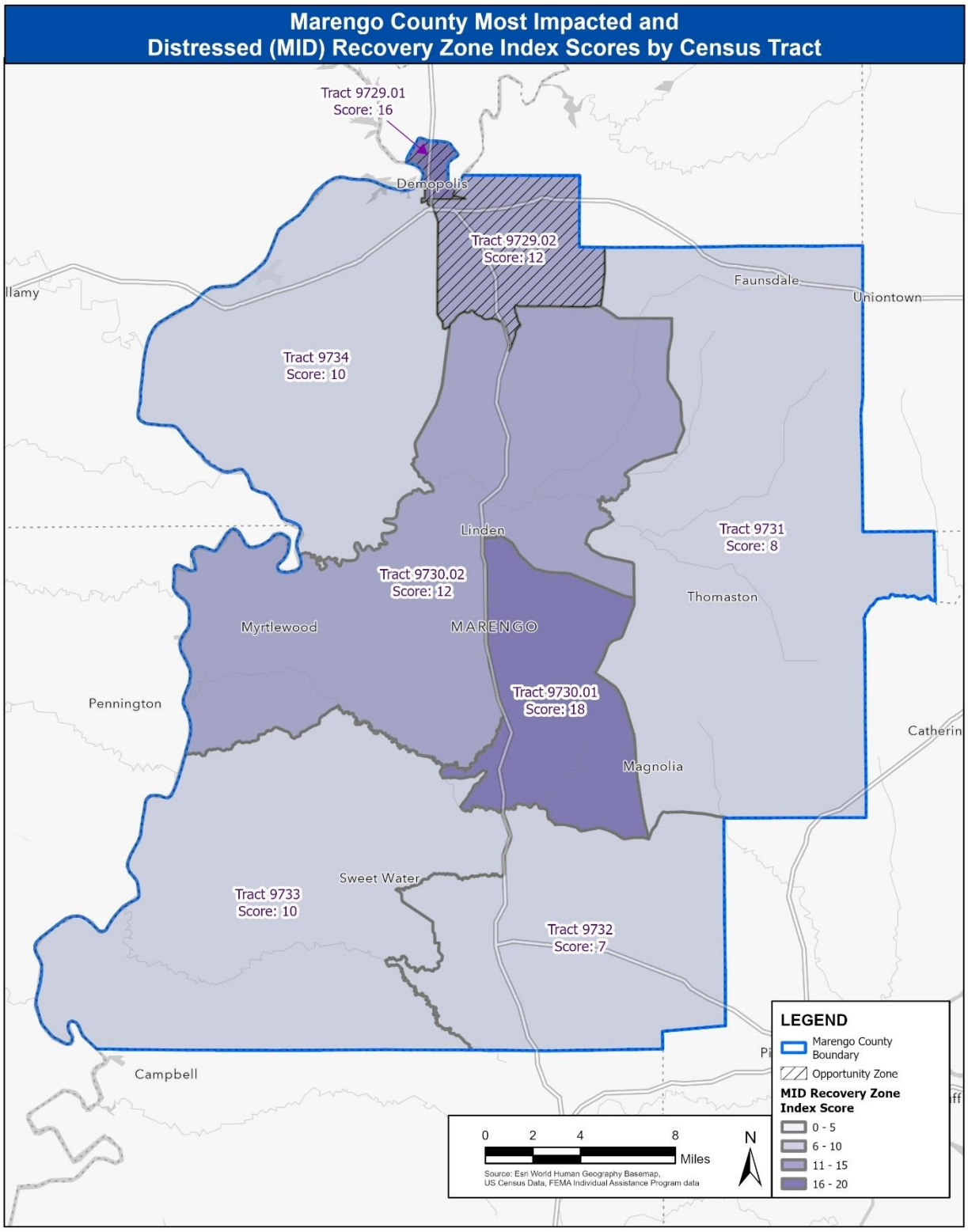
| Census Tract | Unmet Need Score | Vulnerability Score | MID Recovery Zone (MRZ) Score | Identified as MRZ |
|---|---|---|---|---|
| **348.01** | 10 | 10 | 20 | Yes |
| **348.02** | 9.5 | 8 | 17.5 | Yes |
| **351** | 5 | 10 | 15 | Yes |
| **347** | 3 | 10 | 13 | No |
| **352** | 1 | 6 | 7 | No |

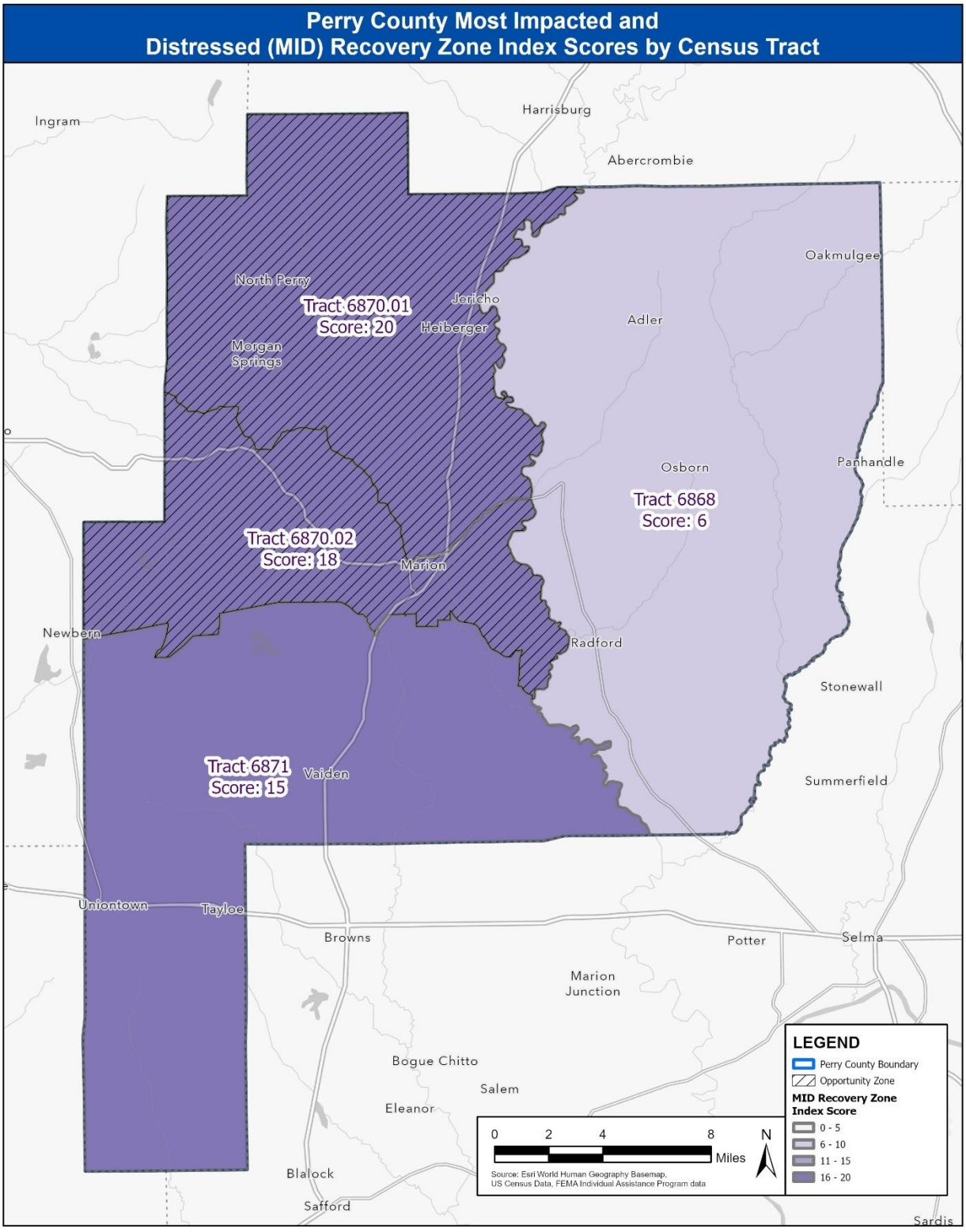
## 8. MRZ Score Maps

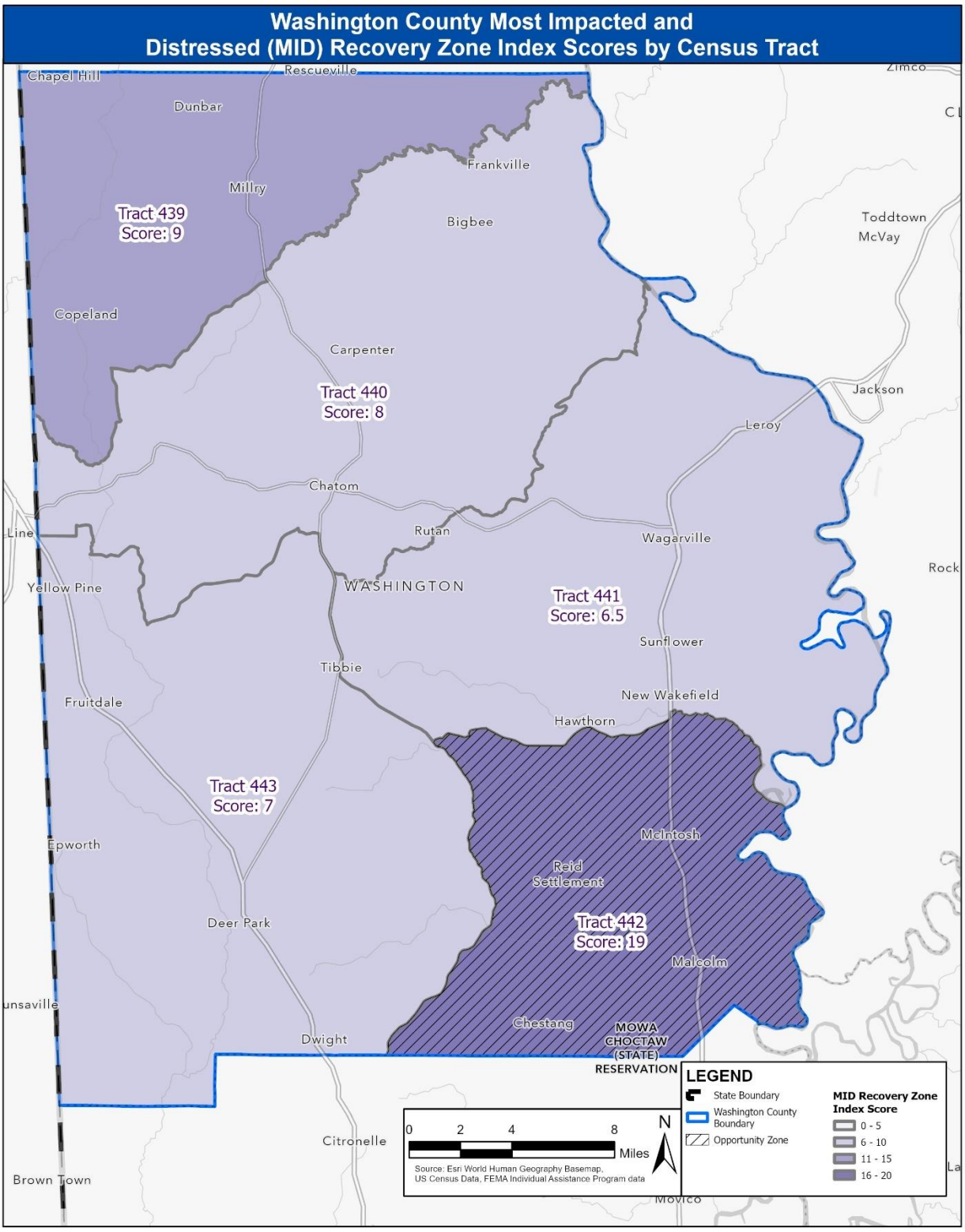


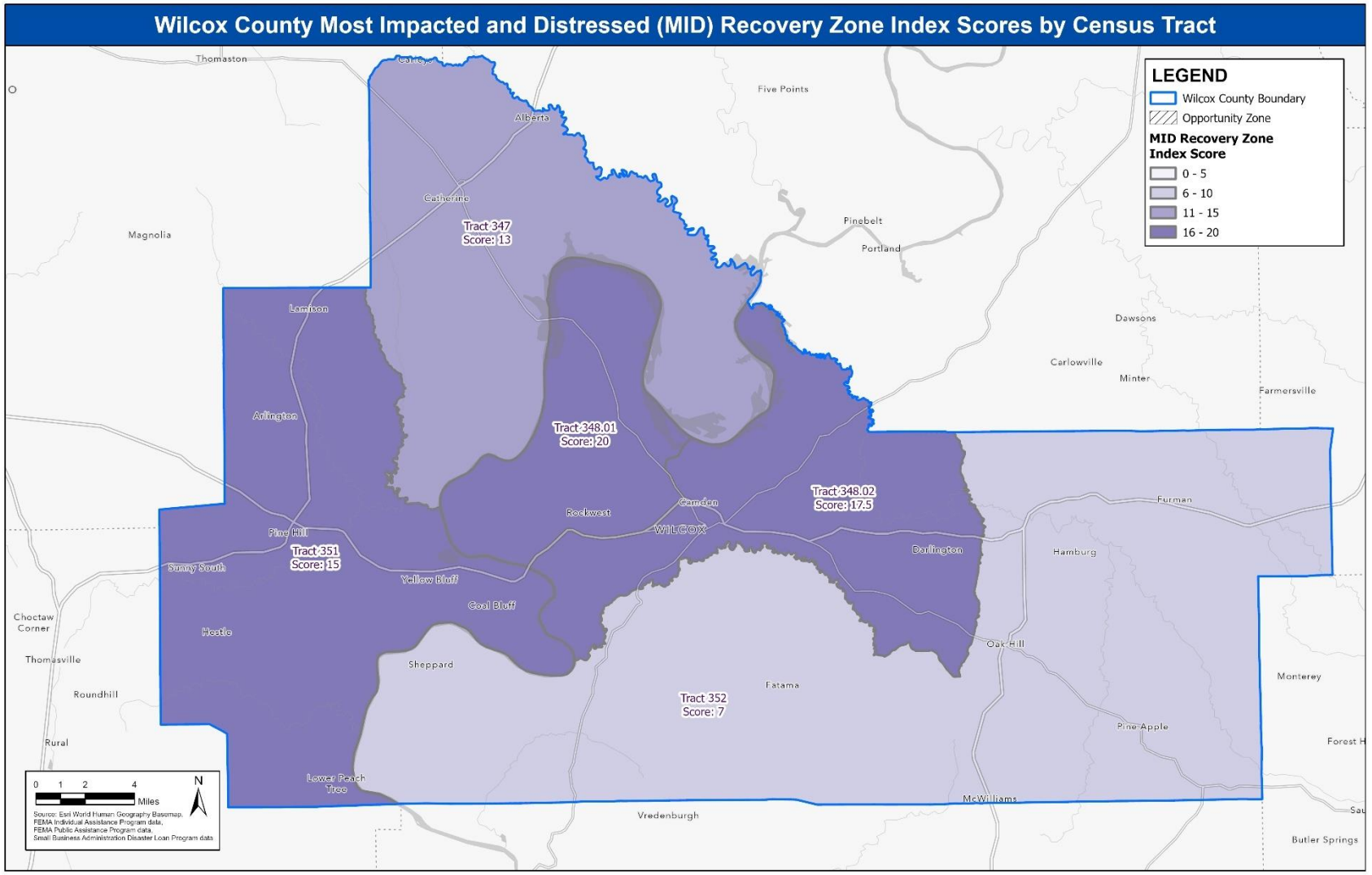

Dallas County Most Impacted and
Distressed (MID) Recovery Zone Index Scores by Census Tract
PERRY
Marion
Plantersville
Tract 9561.02 Score: 7
Tract 9562.02 Score: 9.5
Tract 9563 Score: 16
Tract 9561.01 Score: 13.5
Tract 9562.01 Score: 8
Tract 9564 Score: 18
Selma
Tract 9565 Score: 20
Marion Junction
Tract 9567.01 Score: 10
Tract 9566 Score: 18
Tract 9567.02 Score: 14
Tract 9573.02 Score: 4.5
DALLAS
Orrville
Tract 9572 Score: 12
Tract 9573.01 Score: 16.5
Sardis
Tract 9569 Score: 14
Tract 9571 Score: 10.5
Catherine
Tract 9570 Score: 11
Camden
WILCOX
LEGEND
Dallas County Boundary
Opportunity Zone
Racially or Ethnically Concentrated Areas of Poverty (R/ECAP)
MID Recovery Zone Index Score
0.000000 - 5.000000
5.000001 - 10.000000
10.000001 - 15.000000
15.000001 - 20.000000
0 2 4 8
Miles
N
Source: Esri World Human Geography Basemap, US Census Data, FEMA Individual Assistance Program data


Escambia County Most Impacted and Distressed (MID) Recovery Zone Index Scores by Census Tract
Megargel
Goodway
Lenox
Range
Castleberry
Paul
Johnsonville
Urian
Mineola
Brooklyn
Appleton
Wallace
Tract 9701
Score: 16
Tract 9698.02
Score: 14
Tract 9704
Score: 20
Jack Springs
Damascus
Boykin
Dixie
Tract 9699
Score: 10
Stanley
Crossroads
Pineview
ESCAMBIA
Lottie
POARCH
CREEK
RESERVATION
Tract 9703
Score: 12
Brewton
Rock Hill
Tract 9702
Score: 14
Martinville
Tract 9705
Score: 20
Tract 9706
Score: 18
Osaka
Keego
Tract 9698.01
Score: 8
Parker Springs
Bradley
Atmore
Pollard
Perdido
Tract 9707
Score: 20
Flomaton
Sellersville
Century
Bratt
Byrneville
Jay
Phillipsville
Pineville
Walnut Hill
McDavid
Pine Level
0 2 4 8
Miles
N
Source: Esri World Human Geography Basemap,
US Census Data, FEMA Individual Assistance Program data
LEGEND
State Boundary
Escambia County Boundary
Opportunity Zone
MID Recovery Zone Index
6 - 10
11 - 15
16 - 20


Marengo County Most Impacted and
Distressed (MID) Recovery Zone Index Scores by Census Tract
Tract 9729.01
Score: 16
Demopolis
Tract 9729.02
Score: 12
Faunsdale
Uniontown
Tract 9734
Score: 10
Linden
Tract 9731
Score: 8
Tract 9730.02
Score: 12
Thomaston
Myrtlewood
MARENGO
Tract 9730.01
Score: 18
Pennington
Magnolia
Sweet Water
Tract 9733
Score: 10
Tract 9732
Score: 7
Campbell
LEGEND
Marengo County Boundary
Opportunity Zone
MID Recovery Zone Index Score
0 - 5
6 - 10
11 - 15
16 - 20
0 2 4 8
Miles
N
Source: Esri World Human Geography Basemap, US Census Data, FEMA Individual Assistance Program data


Perry County Most Impacted and
Distressed (MID) Recovery Zone Index Scores by Census Tract
Ingram
Harrisburg
Abercrombie
Oakmulgee
North Perry
Tract 6870.01
Score: 20
Jericho
Heiberger
Morgan
Springs
Adler
Osborn
Panhandle
Tract 6868
Score: 6
Tract 6870.02
Score: 18
Marion
Newbern
Radford
Stonewall
Tract 6871
Score: 15
Vaiden
Summerfield
Uniontown
Tayloe
Browns
Potter
Selma
Marion
Junction
Bogue Chitto
Salem
Eleanor
Blalock
Safford
Sardis
LEGEND
Perry County Boundary
Opportunity Zone
MID Recovery Zone
Index Score
0 - 5
6 - 10
11 - 15
16 - 20
0
2
4
8
Miles
N
Source: Esri World Human Geography Basemap,
US Census Data, FEMA Individual Assistance Program data


Washington County Most Impacted and
Distressed (MID) Recovery Zone Index Scores by Census Tract
Chapel Hill
Rescueville
Dunbar
Frankville
Millry
Tract 439
Score: 9
Bigbee
Toddtown
McVay
Copeland
Carpenter
Tract 440
Score: 8
Jackson
Leroy
Chatom
Line
Rutan
Wagarville
Yellow Pine
WASHINGTON
Tract 441
Score: 6.5
Sunflower
Tibbie
Fruitdale
New Wakefield
Hawthorn
Tract 443
Score: 7
McIntosh
Epworth
Reid
Settlement
Deer Park
Tract 442
Score: 19
Malcolm
Chestang
MOWA
CHOCTAW
(STATE)
RESERVATION
Dwight
Citronelle
Brown Town
0 2 4 8
Miles
N
Source: Esri World Human Geography Basemap,
US Census Data, FEMA Individual Assistance Program data
LEGEND
State Boundary
Washington County Boundary
Opportunity Zone
MID Recovery Zone Index Score
0 - 5
6 - 10
11 - 15
16 - 20


Wilcox County Most Impacted and Distressed (MID) Recovery Zone Index Scores by Census Tract
LEGEND
Wilcox County Boundary
Opportunity Zone
MID Recovery Zone Index Score
0 - 5
6 - 10
11 - 15
16 - 20
Tract 347 Score: 13
Tract 348.01 Score: 20
Tract 348.02 Score: 17.5
Tract 351 Score: 15
Tract 352 Score: 7
Thomaston
Five Points
Alberta
Catherine
Magnolia
Pinebelt
Portland
Lamison
Dawsons
Carlowville
Minter
Farmersville
Arlington
Rockwest
Camden
WILCOX
Furman
Pine Hill
Darlington
Hamburg
Sunny South
Yellow Bluff
Coal Bluff
Choctaw Corner
Hostie
Thomasville
Sheppard
Oak Hill
Monterey
Roundhill
Fatama
Pine Apple
Rural
Lower Peach Tree
McWilliams
Vredenburgh
Butler Springs
0 1 2 4
Miles
N
Source: Esri World Human Geography Basemap,
FEMA Individual Assistance Program data,
FEMA Public Assistance Program data,
Small Business Administration Disaster Loan Program data