

Davidson Randolph Hazard Mitigation Plan

2025



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SECTION 1: INTRODUCTION

1.1 Introduction

This section provides a general introduction to the *Davidson Randolph Regional Hazard Mitigation Plan*. It consists of the following five subsections:

- ◆ 1.2 Background;
- ◆ 1.3 Purpose;
- ◆ 1.4 Scope;
- ◆ 1.5 Authority;
- ◆ 1.6. Summary of Plan Comments

1.2 Background

Natural hazards, such as floods, hurricanes, and fires, are a part of the world around us. In some cases, their occurrence is natural and inevitable, and there is little we can do to control their force and intensity. In others, we have more power to control the intensity and probability but can never truly eliminate the threat entirely. In either case, we must consider these hazards to be legitimate and significant threats to human life, safety, and property.

Davidson County is in the western portion of the Piedmont area of North Carolina. The County includes the Town of Denton, Town of Lexington, Town of Midway, City of Thomasville, Town Wallburg and all unincorporated areas within the county. This area is vulnerable to a wide range of natural hazards such as hurricanes, floods, severe thunderstorms, and tornadoes. It is also vulnerable to human-caused hazards, including nuclear accidents and hazardous material spills. These hazards threaten the life and safety of residents in Davidson County and have the potential to damage or destroy both public and private property, disrupt the local economy, and impact the overall quality of life of individuals who live, work, and vacation in Davidson County.

Randolph County is in the Piedmont area of North Carolina. The County encompasses the City of Archdale, City of Asheboro, Town of Franklinville, Town of Liberty, Town of Ramseur, City of Randleman, Town of Seagrove, Town of Staley, City of Trinity, and all unincorporated areas within the County. This area is vulnerable to a wide range of natural hazards such as hurricanes, floods, severe thunderstorms, winter storms, and tornados. It is also vulnerable to man-made hazards, including nuclear accidents. These hazards threaten the life and safety of residents in Randolph County and have the potential to damage or destroy both public and private property, disrupt the local economy, and impact the overall quality of life of individuals who live, work, and vacation in Randolph County.

While the threat from hazardous events may never be fully eliminated, there is much we can do to lessen their potential impact upon our community and our citizens. By minimizing the impact of hazards upon our built environment, we can prevent such events from resulting in disasters. The concept and practice of reducing risks to people and property from known hazards is referred to as *hazard mitigation*. Changes in development are included in Section 3: Community Profile and the potential impacts from changes in development are discussed throughout Section 5: Hazard Profile.



FEMA Definition of Hazard Mitigation:

"Any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards."

Hazard mitigation techniques include both structural measures (such as strengthening or protecting buildings and infrastructure from the destructive forces of potential hazards) and non-structural measures (such as the adoption of sound land use policies and the creation of public awareness programs). It is widely accepted that the most effective mitigation measures are implemented at the local government level, where decisions on the regulation and control of development are made. A comprehensive mitigation approach addresses hazard vulnerabilities that exist today and in the near future. Therefore, it is essential that projected patterns of future development are evaluated and considered in terms of how that growth will increase or decrease a community's overall hazard vulnerability.

A key component in the formulation of a comprehensive approach to hazard mitigation is to develop, adopt, and update a local hazard mitigation plan as needed. A hazard mitigation plan establishes the broad community vision and guiding principles for reducing hazard risk and, further, proposes specific mitigation actions to eliminate or reduce identified vulnerabilities.

In 2019 the decision was made to create one regional mitigation plan to accomplish the following planning goals:

- Support a more holistic regional planning effort, considering shared concerns and shareable resources.
- Conform to North Carolina Emergency Management's (NCEM) preference for regional hazard mitigation planning in the state; and
- Leverage available funding and resources for mitigation planning.

Although each participating jurisdiction had already developed a plan in the past, the combination of the two plans into one regional plan still required the making of some plan update revisions.

The Counties and sixteen municipalities participating in the *Davidson Randolph Regional Hazard Mitigation Plan*, also referred to as the *Plan*, have existing hazard mitigation plans that evolved over the years, as described in Section 2: *Planning Process*. This update of the *Plan* draws from the previous plans to document the efforts of each jurisdiction to incorporate hazard mitigation principles and practices into routine government activities and functions. At its core, the *Plan* recommends specific actions to minimize hazard vulnerability and protect residents from losses to those hazards that pose the greatest risk. These mitigation actions go beyond simply recommending structural solutions to reduce existing vulnerability, such as elevation, retrofitting, and acquisition projects. Local policies on community growth and development, incentives for natural resource protection, and public awareness and outreach activities are examples of other actions considered to reduce the Region's vulnerability to identified hazards. The *Plan* remains a living document with implementation and evaluation procedures established to help achieve meaningful objectives and successful outcomes over time.

1.2.1 The Disaster Mitigation Act and the Flood Insurance Reform Acts

In an effort to reduce the Nation's mounting natural disaster losses, the U.S. Congress passed the Disaster Mitigation Act of 2000¹ (DMA 2000) in order to amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act.² Section 322 of DMA 2000 emphasizes the need for state, local, and Tribal government entities to closely coordinate on mitigation planning activities and makes the development of a hazard mitigation plan a specific eligibility requirement for any local or Tribal government applying for federal mitigation grant funds. In short, if a jurisdiction is not covered by an approved mitigation plan, it will not be eligible for mitigation grant funds. These funds include the Hazard Mitigation Grant Program (HMGP) and the Pre-Disaster Mitigation (PDM) program, both of which are administered by the Federal Emergency Management Agency (FEMA) under the Department of Homeland Security. Communities with an adopted and federally approved hazard mitigation plan thereby become pre-positioned and more apt to receive available mitigation funds before and after the next disaster strikes. This includes conformance with FEMA's latest Local Mitigation Planning Handbook (released May 2023) and Local Mitigation Planning Policy Guide (released April 2022, effective April 2023). A Local Hazard Mitigation Plan Update Checklist, found in Appendix E, has been incorporated to ensure comprehensive compliance.

In addition to federal requirements for hazard mitigation planning, the State of North Carolina also requires a hazard mitigation plan be in place for jurisdictions to receive mitigation and public assistance funds after a State-declared disaster. This requirement is codified in NC Senate Bill 300,³ which lays out the need for mitigation planning and ties it to disaster funding at the State level.

Additionally, the Flood Insurance Reform Act of 2004⁴ (P.L. 108-264) created two new grant programs, Severe Repetitive Loss (SRL) and Repetitive Flood Claim (RFC), and modified the existing Flood Mitigation Assistance (FMA) program. One of the requirements of the Flood Insurance Reform Act of 2004 is that a FEMA-approved Hazard Mitigation Plan is now required if communities wish to be eligible for these FEMA mitigation programs. However, as of 2014, these programs have been folded into a single FMA program.

This change was brought on by new, major federal flood insurance legislation that was passed in 2012 under the Biggert-Waters Flood Insurance Reform Act (P.L. 112-141)⁵ and the subsequent Homeowner Flood Insurance Affordability Act in 2014 that revised Biggert-Waters.⁶ These acts made several changes to the way the National Flood Insurance Program is to be run, including raises in rates to reflect true flood risk and changes in how Flood Insurance Rate Map (FIRM) updates impact policyholders. These acts further emphasize Congress' focus on mitigating vulnerable structures.

¹ Disaster Mitigation Act of 2000. U.S. Code. Title 42. Chapter 68. § 5121.

² The Robert T. Stafford Disaster Relief and Emergency Assistance Act. U.S. Code. Title 42. Chapter 68. §§ 5121 – 5208.

³ Senate Bill 300. N.C. General Statute. § 166-A.

⁴ Flood Insurance Reform Act of 2004. U.S. Code. Title 42. Chapter 50. § 4001.

⁵ Biggert-Waters Flood Insurance Reform Act of 2012. U.S. Code. Title 42. Chapter 50. § 4004.

⁶ Homeowner Flood Insurance Affordability Act of 2014. U.S. Code. Title 42. Chapter 50. § 4005.

The *Plan* has been prepared in coordination with FEMA Region IV and the North Carolina Division of Emergency Management (NCEM) to ensure that the *Plan* meets all applicable FEMA and State requirements for hazard mitigation plans. A Local Mitigation Plan Review Tool in Appendix C provides a summary of federal and State minimum standards and notes the location where each requirement is met within the Plan.

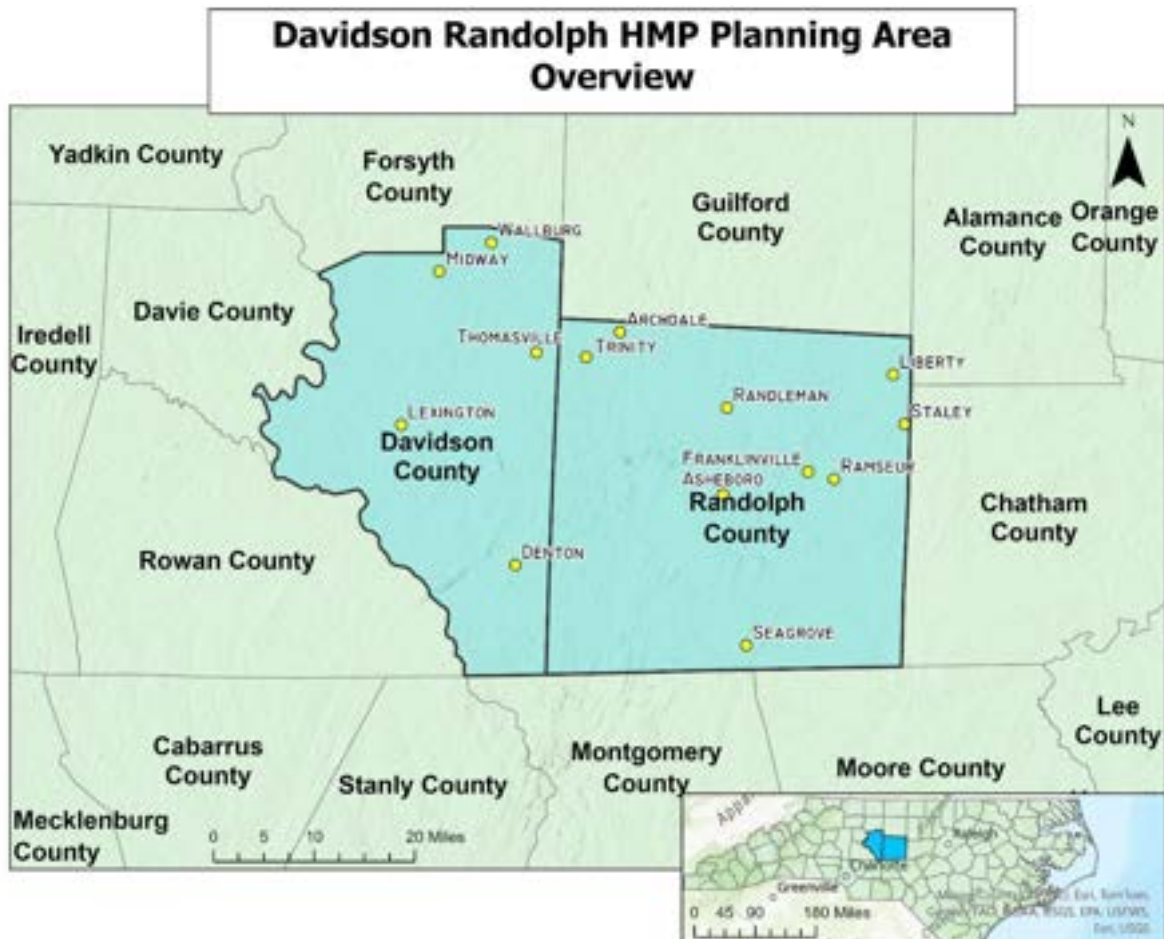


Figure 1- 1: Davidson Randolph Planning area overview

1.3 Purpose

The purpose of the *Plan* is to:

- Reduce risk to people, property, and the critical infrastructure.
- Increase public awareness and education about the plan and the planning process.
- Maintain grant eligibility for participating jurisdictions.
- Maintain compliance with State and federal legislative requirements for local hazard mitigation plans.

1.4 Scope

The focus of the *Plan* is on those hazards determined to be “high” or “moderate” risks to the Region, as determined through a detailed hazard risk assessment. Other hazards that pose a “low” or “negligible” risk will continue to be evaluated during future updates to the *Plan*, but they may not be fully addressed until they are determined to be of high or moderate risk. This enables the participating jurisdictions to prioritize mitigation actions based on those hazards which are understood to present the greatest risk to lives and property. Hazards are categorized as having a National Risk Index (NRI) average risk score of Very Low, Relatively Low, Relatively Moderate, Relatively High, and Very High. The NRI and the risk scores are further explained in Section 5.

The geographic scope (i.e., the planning area) for the *Plan* includes all of Davidson and Randolph Counties including all their incorporated jurisdictions (see below) and unincorporated areas.

Although a portion of the City of High Point is located within Davidson County, the city is not covered by the Davidson County Hazard Mitigation Plan. Instead, the City of High Point is included in the Guilford County Hazard Mitigation Plan. Table 1- 1 indicates the participating jurisdictions.

Table 1- 1: Participating Jurisdictions in the Regional Hazard Mitigation Plan

Davidson County	
Town of Denton	City of Thomasville
Town of Lexington	Town of Wallburg
Town of Midway	
Randolph County	
City of Archdale	City of Randleman
City of Asheboro	Town of Seagrove
Town of Franklinville	Town of Staley
Town of Liberty	City of Trinity
Town of Ramseur	

1.5 Authority

This Hazard Mitigation Plan has been/will be adopted by all participating counties in accordance with the authority and police powers granted to counties as defined by the State of North Carolina. This Hazard Mitigation Plan has also been/will be adopted by all participating incorporated municipal jurisdictions under the authority granted to cities and towns as defined by the State of North Carolina. Copies of all local resolutions to adopt the Plan are included in Appendix F. This plan has been prepared in compliance with Section 322 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act or the Act), 42 United States Code (U.S.C.) 5165, enacted under Section 104 of the Disaster Mitigation Act of 2000,

(DMA 2000) Public Law 106-390 of October 30, 2000, as implemented at Code of Federal Regulations (CFR) 201.6 and 201.7 dated October 2007.

1.6 Summary of Plan Contents

The contents of this *Plan* are designed and organized to be as reader-friendly and functional as possible. To ensure that all acronyms and provide a guide for readers, Appendix E contains a guide to all acronyms and are described in full at the first occurrence within the plan, while the acronym is used thereafter. While significant background information is included on the processes used and studies completed (i.e., risk assessment, capability assessment), this information is separated from the more meaningful planning outcomes or actions (i.e., mitigation strategy, mitigation action plan).

Section 2, **Planning Process**, provides a complete narrative description of the process used to prepare the *Plan*. This includes the identification of participants on the planning team and describes how the public and other stakeholders were involved. It also includes a detailed summary for each of the key meetings held, along with any associated outcomes.

The **Community Profile**, located in Section 3, provides a general overview of the Region, including prevalent geographic, demographic, and economic characteristics. In addition, building characteristics and land use patterns are discussed. This baseline information provides a snapshot of the planning area and helps local officials recognize those social, environmental, and economic factors that ultimately play a role in determining the County's vulnerability to hazards.

The Risk Assessment is presented in two sections: Section 4, **Hazard Identification** and Section 5, **Hazard Profiles**; Together, these sections serve to identify, analyze, and assess hazards that pose a threat to the Region. The risk assessment also attempts to define any hazard risks that may uniquely or exclusively affect specific areas of the Region.

The Risk Assessment begins by identifying hazards that threaten the Region. Next, detailed profiles are established for each hazard, building on available historical data from past hazard occurrences, spatial extent, and probability of future occurrence. This section culminates in a hazard risk ranking based on conclusions regarding the frequency of occurrence, spatial extent, and potential impact highlighted in each of the hazard profiles. In the vulnerability assessment, Geographic Information System (GIS) analysis to evaluate known hazard risks by their relative long-term cost in expected damages. The information generated through the risk assessment serves a critical function as the participating jurisdictions in the Region seek to determine the most appropriate mitigation actions to pursue and implement—enabling them to prioritize and focus their efforts on those hazards of greatest concern and those structures or planning areas facing the greatest risk(s).

The **Capability Assessment**, found in Section 6, provides a comprehensive examination of the Region's capacity to implement meaningful mitigation strategies and identifies opportunities to increase and enhance that capacity. Specific capabilities addressed in this section include planning and regulatory capability, staff and organizational (administrative) capability, technical capability, fiscal capability, and political capability. Information was obtained using a detailed survey questionnaire and an inventory and analysis of existing plans, ordinances, and relevant

documents. The purpose of this assessment is to identify any existing gaps, weaknesses, or conflicts in programs or activities that may hinder mitigation efforts and to identify those activities that should be built upon in establishing a successful and sustainable local hazard mitigation program.

The *Risk Assessment* and *Capability Assessment* collectively serve as a basis for determining the goals for the *Plan*, each contributing to the development, adoption, and implementation of a meaningful and manageable *Mitigation Strategy* that is based on accurate background information.

The ***Mitigation Strategy***, found in Section 7, consists of broad goal statements as well as an analysis of hazard mitigation techniques for the jurisdictions participating in the *Plan* to consider in reducing hazard vulnerabilities. The strategy provides the foundation for a detailed ***Mitigation Action Plan***, found in Section 8, which links specific mitigation actions for each jurisdiction to locally assigned implementation mechanisms and target completion dates. Together, these sections are designed to make the *Plan* both strategic, through the identification of long-term goals, and functional, through the identification of immediate and short-term actions that will guide day-to-day decision-making and project implementation.

In addition to the identification and prioritization of possible mitigation projects, emphasis is placed on the use of program and policy alternatives to help make the Region less vulnerable to the damaging forces of hazards while improving the economic, social, and environmental health of the community. The concept of multi-objective planning was emphasized throughout the planning process, particularly in identifying ways to link, where possible, hazard mitigation policies and programs with complimentary community goals related to disaster recovery, housing, economic development, recreational opportunities, transportation improvements, environmental quality, land development, and public health and safety.

Plan Maintenance, found in Section 9, includes the measures that the jurisdictions participating in the *Plan* will take to ensure the *Plan's* continuous long-term implementation. The procedures also include the how the *Plan* will be regularly evaluated and updated to remain a current and meaningful planning document.

SECTION 2: PLANNING PROCESS

This section describes the planning process undertaken to develop the *Plan*. It consists of the following eight subsections:

- 2.1 Overview of Hazard Mitigation Planning;
- 2.2 History of Hazard Mitigation Planning in ;
- 2.3 Preparing the Plan;
- 2.4 Hazard Mitigation ;
- 2.5 Community Meetings and Workshops;
- 2.6 Involving the Public;
- 2.7 Involving the Stakeholders; and
- 2.8 Documentation of Plan Progress.

44 CFR Requirement

44 CFR Part 201.6(c)(1): The plan shall include documentation of the planning process used to develop the plan, including how it was prepared, who was involved in the process and how the public was involved.

2.1 Overview of Hazard Mitigation Planning

Local hazard mitigation planning is the process of organizing community resources, identifying and assessing hazard risks, and determining how to best minimize or manage those risks. This process culminates in a hazard mitigation plan that identifies specific mitigation actions, each designed to achieve both short-term planning objectives and a long-term community vision.

To ensure the functionality of a hazard mitigation plan, responsibility is assigned for each proposed mitigation action to a specific individual, department, or agency along with a schedule or target completion date for its implementation (see Section 9: *Plan Maintenance*). Plan maintenance procedures are established for the routine monitoring of implementation progress as well as the evaluation and enhancement of the mitigation plan itself. These plan maintenance procedures ensure that the *Plan* remains a current, dynamic, and effective planning document over time that becomes integrated into the routine local decision-making process.

Communities that participate in hazard mitigation planning have the potential to accomplish many benefits, including:

- Saving lives and property.
- Saving money.
- Speeding recovery following disasters.
- Reducing future vulnerability through wise development and post-disaster recovery and reconstruction.
- Expediting the receipt of pre-disaster and post-disaster grant funding; and
- Demonstrating a firm commitment to improving community health and safety.

Typically, communities that participate in mitigation planning can produce long-term and recurring benefits by breaking the repetitive cycle of disaster loss. A core assumption of hazard mitigation is that the investments made before a hazard event will significantly reduce the demand for post-disaster assistance by lessening the need for emergency response, repair, recovery, and reconstruction. Furthermore, mitigation practices will enable residents, businesses, and industries to re-establish themselves in the wake of a disaster, getting the community economy back on track sooner and with less interruption.

The benefits of mitigation planning go beyond solely reducing hazard vulnerability. Mitigation measures such as the acquisition or regulation of land in known hazard areas can help achieve multiple community goals, such as preserving open space, maintaining environmental health, and enhancing recreational opportunities. Thus, it is vitally important that any local mitigation planning process be integrated with other concurrent local planning efforts, and any proposed mitigation strategies must consider other existing community goals or initiatives that will help complement or hinder their future implementation.

2.2 History of Hazard Mitigation Planning in the Region

Each of the sixteen participating jurisdictions had a previously adopted hazard mitigation plan.

- **Davidson County**
 - Town of Denton
 - Town of Lexington
 - Town of Midway
 - City of Thomasville
 - Town of Wallburg
 - Unincorporated Davidson County.
- **Randolph County**
 - City of Archdale
 - City of Asheboro
 - Town of Franklinville
 - Town of Liberty
 - Town of Ramseur
 - City of Randleman
 - Town of Seagrove
 - Town of Staley
 - City of Trinity
 - Unincorporated Randolph County.

The *Plan* was developed using the multi-jurisdictional planning process recommended by FEMA.

2.3 Preparing the Plan

Hazard mitigation plans must be updated every five years to remain eligible for federal mitigation funding. To simplify planning efforts, the jurisdictions in Davidson and Randolph

Counties joined to create the Regional Hazard Mitigation Plan. This allows resources to be shared amongst the participating jurisdictions and eases the administrative duties of all the participants.

To prepare the *Plan*, a team led by the consulting firm AECOM was hired to provide professional mitigation planning services. The Region ensured that the planning process was facilitated by a professional planner. Kelly Keefe from AECOM served as the lead planner for this project.

Per the contractual scope of work, the consultant team followed the mitigation planning process recommended by FEMA (Publication Series 386¹ and Local Mitigation Plan Review Guide²) and recommendations provided by North Carolina Division of Emergency Management (NCEM) mitigation planning staff. The Local Mitigation Plan Review Tool, found in Appendix C, provides a detailed summary of FEMA's current minimum standards of acceptability for compliance with the Disaster Mitigation Act of 2000 (DMA 2000) and notes the location where each requirement is met within this Plan. These standards are based upon FEMA's Final Rule as published in the Federal Register in Part 201 of the Code of Federal Regulations (CFR).³ The Planning Committee used FEMA's Local Mitigation Plan Review Guide (October 2011)² for reference as they completed the *Plan*.

Additionally, the Planning Committee determined that it was important to include and analyze some man-made hazards in the *Plan* to provide a more comprehensive approach to hazard management within the Region. Although this is not a requirement as per regulations regarding hazard mitigation planning at the State or Federal level, it is a noteworthy step in the direction of an all-hazards approach to risk analysis and management.

Key elements from the previously approved plan are referenced throughout the document (e.g., existing actions) and required a discussion of changes made. For example, all the Risk Assessment, Section 5, elements needed to be updated to include the most recent information. It was also necessary to review the goals for the Region. The Capability Assessment, Section 6, includes updated information for all participating jurisdictions, and the Mitigation Action Plan provides implementation status updates for all actions identified in the previous plans.

The process used to prepare this Plan included twelve major steps completed over about twelve months beginning in March 2024. Each of these planning steps (illustrated in Figure 2- 1) resulted in critical work products and outcomes that collectively make up the *Plan*. Specific plan sections are further described in Section 1: *Introduction*.

¹ Federal Emergency Management Agency (2002). *State and Local Mitigation Planning How-To Series*.

² Federal Emergency Management Agency (2011). *Local Mitigation Plan Review Guide*.

³ Mitigation Planning, Code of Federal Regulations. Title 44. Part 201.

Over the past five years, each participating jurisdiction has been actively working to implement the existing *Plan*. This is documented in the *Mitigation Action Plan* through the implementation status updates for each of the Mitigation Actions. The *Capability Assessment* also documents changes and improvements in the capabilities of each participating jurisdiction to implement the *Mitigation Strategy*.

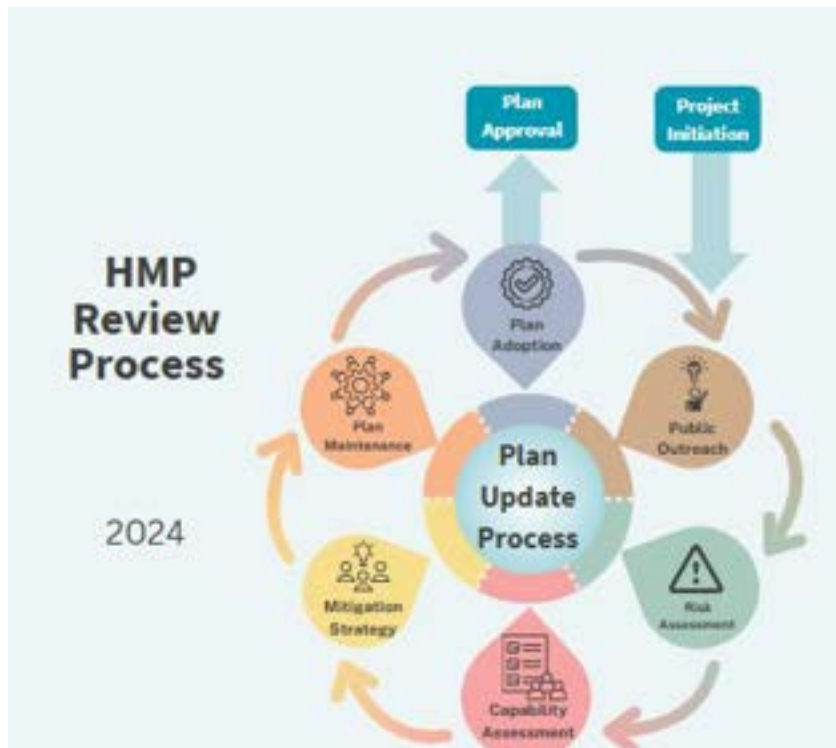


Figure 2- 1: Mitigation Planning Process

Further detailed below, the planning process was conducted through Hazard Mitigation Planning Committee meetings comprised of local government staff from each participating jurisdiction and advisory stakeholders.

Throughout the planning process, all jurisdictions were invited to participate through email invitations to designated representatives and HMPC members listed in Table 2- 2 to virtual, in-person, and hybrid HMPC meetings described below. All jurisdictions in Table 2- 1 and in the planning area were invited by email and contributed to the plan update process by attending scheduled meetings and were involved in the planning process by engaging and actively participating in the development of the plan. For individuals who preferred one-on-one communication to provide input and edit plan content as the representative of the participating jurisdictions, one-on-one communications via emails and Committees virtual meetings with AECOM planners were arranged, which is also referred to as **Alternate Participation** throughout this plan. **Alternate Participation** was the preferred method of participation in the planning process for the jurisdictions indicated in Table 2- 1 and where otherwise indicated throughout the plan.

Table 2- 1: Participation Details of Davidson Randolph HMP Update Process

Jurisdiction	Meeting Attendance	Alternate Participation	Capabilities Assessment Update	Mitigation Actions Update	Details of Participation
Davidson County	Yes	--	Yes	Yes	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024, 1/31/2025
Town of Denton	Yes	--	Yes	No updates	Meeting Attendance: 11/06/2024, 12/11/2024
Town of Lexington	Yes	--	No updates	No updates	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024, 1/31/2025
Town of Midway	No	Alternate participation	No updates	No updates	Alternate participation via email correspondence and confirmation of draft plan review
City of Thomasville	Yes	--	Yes	Yes	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024
Town of Wallburg	No	Alternate participation	No updates	Yes	Participation via mitigation action updates
Randolph County	Yes	--	Yes	Yes	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024, 1/31/2025
City of Archdale	Yes	--	Yes	Yes	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024
City of Asheboro	Yes	--	Yes	Yes	Meeting Attendance: 9/25/2024, 10/9/2024, 11/06/2024, 12/11/2024
Town of Franklinville	Yes	--	Yes	Yes	Meeting Attendance: 1/31/2025
Town of Liberty	Yes	--	Yes	Yes	Meeting Attendance: 11/06/2024,

Jurisdiction	Meeting Attendance	Alternate Participation	Capabilities Assessment Update	Mitigation Actions Update	Details of Participation
					12/11/2024, 1/31/2025
Town of Ramseur	Yes	--	No updates	No updates	Meeting Attendance: 10/9/2024
City of Randleman	No	Alternate participation	Yes	Yes	Participation via mitigation action updates and capabilities assessment update
Town of Seagrove	No	Yes	Yes	Yes	One-on-One Meeting
Town of Staley	No	Alternate participation	Yes	Yes	Participation via mitigation action updates and capabilities assessment update
City of Trinity	No	Alternate participation	Yes	Yes	Participation via mitigation action updates and capabilities assessment update

2.4 Hazard Mitigation Planning Committee

To guide the development of this *Plan*, Davidson and Randolph Counties and their jurisdictions created the Hazard Mitigation Planning Committee (Planning Committee). The Planning Committee represents a community-based planning group comprised of representatives from various County and municipal departments and other key stakeholders identified to serve as critical partners in the planning process.

Beginning in September 2024, the Planning Committee members engaged in regular discussions and local meetings and planning workshops to discuss and complete tasks associated with preparing the Plan. This working group coordinated all aspects of plan preparation and provided valuable input to the process. In addition to regular meetings, team members routinely communicated and were kept informed through an e-mail distribution list.

Specifically, the tasks assigned to the Planning Committee members included:

- Participating in Planning Committee meetings and workshops
- Provide best available data as required for the *Risk Assessment* portion of the *Plan*
- Provide information that will help complete the *Capability Assessment* section of the *Plan* and provide copies of any mitigation or hazard-related documents for review and incorporation into the *Plan*

- Support the development of the *Mitigation Strategy*, including the design and adoption of Countywide goal statements
- Help design and propose appropriate mitigation actions for their department/agency for incorporation into the *Mitigation Action Plan*
- Review and provide timely comments on all study findings and draft plan deliverables;
- Support the adoption of the *Plan*.

Table 2- 2 lists the members of the Planning Committee who were responsible for participating in the development of the *Plan*.

Table 2- 2 Members of the Mitigation Planning Committee with County Leads indicated in Bold

NAME	POSITION	DEPARTMENT/AGENCY
Blake Lanning	Emergency Management Coordinator	Davidson County
David Rickard	Register of Deed	Davidson County
Johnnie Taylor	Lexington Manager	Town of Lexington
Laura Ryggs	Fire Marshal	Town of Lexington
Michael Tofano	Fire Chief	Town of Lexington
Rebekah Gainey	Risk Safety Manager	Town of Lexington
Dwayne Childress	Director of Purchasing	Davidson County
Robin Lorenzen	NCEM Area Coordinator	NC Department of Public Safety
Robin Brown	Area 10 Coordinator	NC Department of Public Safety
Angel Jenkins	Town Clerk	Town of Denton
Mark Swain	Town Manager	Town of Wallburg
Sam Olshinski	Division Chief of Emergency Management	City of Thomasville
Nick Smith	Town Manager	Town of Midway
Christie McCorquodale	Major	Randolph County Emergency Management
Yesenia Rincon	Administrative Support Unit Supervisor	Randolph County Social Services
Jared Byrd	Deputy Chief	Emergency Services
John Ogburn	City Manager	City of Asheboro
DJ Seneres	City of Archdale Engineering	City of Archdale
Shain Sexton	Chief of Police	Randleman Police Department
Scott Kidd	Town Manager	Town of Liberty

NAME	POSITION	DEPARTMENT/AGENCY
Stevie Cox	City Manager	City of Trinity
Darien Comer	City Clerk/Office Manager	City of Trinity
JC Parrish	Commissioner of Public Works	Town of Ramseur
Hampton Spivey	Mayor	Town of Ramseur
Jason Helton	Utilities Director	Town of Ramseur
Arnold Allred	Public Work Director	Town of Franklinville
AC Hurley	Mayor	Town of Franklinville
David Fernandez	Mayor	Town of Seagrove
Jesse Lynn	Town Clerk / Finance Officer	Town of Seagrove
Karen Scotton	Mayor	Town of Staley
Amanda Dawkins	GIS Specialist	Randolph County
Kayla Brown	Addressing Coordinator	Randolph County
Tim Mangum	GIS Planner	Randolph County

Table 2- 2 lists points of contact for municipalities who elected to designate their respective County officials to represent their jurisdiction on the Planning Committee, generally because they did not have the time or staff to be able to attend on their own. Moreover, County officials noted early in the planning process that it would be much more effective to engage the smaller municipalities that are present throughout the Region through municipal-level meetings. Although these representatives were not present at all the meetings, each was involved throughout the planning process and participated by providing suggestions and comments on the plan via municipal-level review meetings, email, and phone conversations.

2.4.1 Multi-Jurisdictional Participation

The *Plan* includes Davidson and Randolph Counties and its sixteen incorporated municipalities. To satisfy multi-jurisdictional participation requirements, the Counties and their participating jurisdictions were required to perform the following tasks:

- Participating in mitigation planning workshops
- Identify completed mitigation projects, if applicable
- Develop and adopt (or update) their local *Mitigation Action Plan*

Each jurisdiction participated in the planning process and has developed a local *Mitigation Action Plan* unique to their jurisdiction. Each jurisdiction will adopt the Plan, which includes the individual Mitigation Action Plan, which provides the means for jurisdictions to monitor and update the Plan regularly.

2.5 Community Meetings and Workshops

The preparation of this Plan required a series of meetings and workshops for facilitating discussion, gaining consensus, and initiating data collection efforts with local government staff, community officials, neighboring communities, and other identified stakeholders. More importantly, the meetings and workshops prompted continuous input and feedback from relevant participants throughout the drafting stages of the Plan. The following is a summary of the key meetings and community workshops held during the plan update's development. In many cases, routine discussions and additional meetings were held by local staff to accomplish planning tasks specific to their department or agency, such as the approval of specific mitigation actions for their department or agency to undertake and include in the Mitigation Action Plan. Please see Appendix D for sign-in sheets and flyers for meetings and workshops throughout the planning process.

2.5.1 HMPC Kickoff Meeting (September 25, 2024)

On September 25, 2024, starting at 11:00am, the Davidson Randolph Hazard Mitigation Plan (HMP) kickoff meeting brought together a diverse group of stakeholders, including representatives from Davidson and Randolph County, as well as the AECOM Planning Committee, which consisted of Kelly Keefe, McKenzie Houston, Kelsey Peterson, and Peyton Campbell. Held virtually, the meeting began with introductions, allowing attendees to share their backgrounds and roles.

The meeting began with a brief welcome and opportunity for each of the attendees to introduce themselves to the group. Emphasis was placed on identifying what jurisdiction or organization each participant was there to represent, as there were representatives from the 16 participating jurisdictions, other state and local stakeholders, and AECOM. As part of this recognition process, a spreadsheet was passed around for representatives to designate one "Designated Local Jurisdiction Lead" to serve as a primary point of contact for each participating jurisdiction for the duration of the project.

A word cloud activity kicked off the discussion, inviting participants to identify the most significant hazards impacting their jurisdictions. This interactive element sets the stage for a deeper conversation about hazard mitigation.

The project overview explained the purpose of the planning process. It also covered the geographic scope of the project, the proposed schedule for the project, and a detailed breakdown of the key project tasks. The roles and responsibilities for AECOM, Davidson County as the lead local agency, and for all participating jurisdictions were also covered. These roles and responsibilities were presented as follows:

- AECOM
 - Oversee, manage, and document the completion of all key project tasks
- Davidson County
 - Serving as lead coordinating agency
 - Assistance with the collection of documents, data, and other information

- Coordination for project meetings
- Responding to frequent questions or inquiries from the public or stakeholders
- Coordinating with participating jurisdictions
- All participating jurisdictions
 - Designate local jurisdiction lead
 - Attend Hazard Mitigation Planning Committee (HMPC) meetings
 - Coordination between counties, municipalities, and local stakeholders
 - Data collection and information sharing
 - Mitigation strategy development (Mitigation Action Plans)
 - Assist with public outreach
 - Review and comment on draft plan materials

The presentation continued by leading the group through new FEMA stakeholder requirements, emphasizing the importance of including neighboring communities, businesses, academia, and non-profit organizations in the planning process. This highlighted a collaborative approach to understanding and addressing hazards. The scope of hazard mitigation planning was clarified, stating that only natural hazards would be reviewed by FEMA. While non-natural hazards, such as solar flares and nuclear threats, can be mentioned in the plan, they will not qualify for FEMA grants. This distinction was

crucial for participants to understand as they framed their strategies. The various funding sources available for hazard mitigation were outlined, including Flood Mitigation Assistance (FMA), Hazard Mitigation Grant Program (HMGP), Building Resilient Infrastructure and Communities (BRIC), and DMA 2000. Importantly, it was emphasized that HMPs are not regulatory documents and do not impose binding commitments on participating communities.



Figure 2- 2: Word cloud from the September 25, 2024, meeting

The goal of hazard mitigation was articulated: to make communities more resilient to risks and to identify local policies that could help reduce future losses. An overview of the planning process, including FEMA's approval and adoption steps, provided clarity on the path ahead. Communication was a key focus, encouraging each jurisdiction to ensure that their points of contact were receiving updates from the AECOM team. Potential email issues were reviewed, including the potential for emails from the Planning Committee to be marked as spam and left unread. The meeting also confirmed that all relevant jurisdictions were included in the HMP

update process. Data needs were discussed, critical facilities, repetitive loss properties, dam inundation zones, hazard-specific data, and the history of hazards in their areas.

Next steps were outlined, emphasizing public outreach strategies. Attendees were asked for their input on effective ways to engage the public and were invited to review a draft public survey. They also edited the mitigation goals established in the 2020 HMP and were invited to continue providing input about them throughout the planning process. As the meeting concluded, the importance of addressing barriers to effective outreach was underscored. A social equity questionnaire was introduced, with a QR code that would be sent to participants after the meeting. Overall, the kickoff meeting set a collaborative tone for the Davidson Randolph HMP update, reinforcing the significance of community involvement and strategic planning in enhancing local resilience against hazards.

2.5.2 HMPC Capabilities Assessment Meeting (October 9, 2024)

The capabilities assessment meeting was held virtually for the HMPC to review the sections of capabilities assessment worksheets which were distributed to the members of the HMPC. This provided an opportunity to review the National Floodplain Insurance Program (NFIP) information about each community that must be included in the HMP update to maintain compliance with HMP guidelines. This includes information about NFIP Participation activities, adoption of NFIP minimum criteria, adoption of the latest Flood Insurance Risk Map (FIRM), enforcement of the local floodplain regulations to manage development in the floodplain, staff capabilities to implement NFIP and local floodplain regulations, and how NFIP communities use the NFIP to reduce risk after a disaster through substantial damage and substantial improvement provisions. This meeting was also utilized to review the NFIP Current Effective Map Date and the most recent losses reported in each community in the planning area that participates in the NFIP.

2.5.3 HMPC Mitigation Actions Meeting (November 6, 2024)

This meeting was held to review the mitigation actions update process and provide instructions on how to access mitigation actions, edit mitigation actions, and how to ensure that changes to mitigation actions are documented in the HMP update.

This meeting included an overview of communities that have or have not participated in planning meetings or communities who had not yet completed a capabilities assessment survey. This ensures that communities are informed about which jurisdictions have not participated in planning meetings or have not completed a capabilities assessment, both of which are requirements in the HMP update process.

This meeting also provided an opportunity to review the stakeholder involvement requirements to allow the HMPC the opportunity to invite different stakeholder groups to public meetings and to provide feedback throughout the planning process. The stakeholders that were included in the previous HMP update were shared to provide examples of stakeholder groups to invite to participate in the planning process.

The HMPC were given the opportunity to review and respond to the Social Equity Questionnaire (See Section 2.6 or Section 7.3 for more information about the Social Equity Questionnaire and the results of the questionnaire) to help inform how the planning process can be improved.

Finally, the HMPC were given instructions on how to access and update their mitigation actions that were included in the previous HMPC update. The mitigation action verification requires each participant to update the status of each mitigation action to indicate whether the action was completed, is ongoing, is to be continued, is deferred, or is deleted. This includes updating details of each mitigation action including status barriers, implementation requirements, or any other details which help track the status of each mitigation action. The next steps in the HMP process were outlined which included HMPC Office Hours and a workshop for mitigation actions. The dates for the next meetings and the due date for mitigation action updates were provided.

2.5.4 HMPC Mitigation Actions Workshop (December 11, 2024)

This meeting was an optional, virtual workshop to help communities that had not yet submitted their mitigation action updates or who needed assistance with completing their mitigation actions updates. Before the meeting started the attendees were given the opportunity to fill out the Social Equity Questionnaire if they had not yet done so. Following the introduction to the meeting, the attendees were given the opportunity to receive assistance with completing their mitigation action updates. The attendees were also given the opportunity to provide any feedback about the plan update and planning process.

2.5.5 HMPC Draft Review Meeting and Public Draft Review Meeting (January 31, 2025)

The HMP draft review meeting was held both in person at the Randolph County Emergency Services Headquarters in Asheboro and online for those who were not able to attend in person. The meeting started off with the HMP draft process introduction and the next steps in the HMP process, including the draft review process and the purpose of gathering public input and feedback. The meeting was held to discuss the HMP draft process including the link to access the draft plan, link to submit comments about the draft plan, and the time frame for public comments, which includes the deadline for public comments for the HMP. Attendees were given the opportunity to ask questions, provide comments, and sign in to receive future communications regarding the HMP update process.

2.6 Involving the Public

44 CFR Requirement

44 CFR Part 201.6(b)(1): The planning process shall include an opportunity for the public to comment on the plan during the drafting stage and prior to plan approval.

A vital component of the mitigation planning process involved public participation. Individual citizen and community-based input provides the entire Planning Committee with a greater understanding of local concerns and increases the likelihood of successfully implementing mitigation actions by developing community investment from those directly affected by the decisions of public officials. As citizens become more involved in decisions that affect their safety, they are more likely to gain a greater appreciation of the hazards present in their

community and take the steps necessary to reduce their impact. Public awareness is a key component of any community's overall mitigation strategy aimed at making a home, neighborhood, school, business, or entire city safer from the potential effects of hazards.

The public was given the opportunity to be involved in the planning process via social media invitations to public meetings, public feedback surveys, and review of the draft plan.

Each participating jurisdiction will hold public meetings before the final plan is adopted by their respective local governing bodies. These meetings will occur at various times after the State and/or FEMA have granted conditional approval of the *Plan*. Adoption resolutions will be included in Appendix A.

2.6.1 Public Survey

The Planning Committee successfully got citizens to provide input to the mitigation planning process through the Public Participation Survey. The Public Participation Survey was designed to capture data and information from residents of the Region that might not be able to attend public meetings or participate through other means in the mitigation planning process. The questions from the Public Participation Survey are summarized below and are based on the 75 responses received.

1. **Have you ever experienced or been impacted by a natural disaster?**
 - **Yes:** 70.67%
 - **No:** 29.3%
2. **If yes, which of these natural hazards have you experienced or been impacted by? (Check all that apply):** out of the total number of responses, the following percentages represent the portion of respondents who have experienced the natural hazard
 - **Dam or Levee Failure:** 3.64%
 - **Drought:** 14.55%
 - **Earthquake:** 10.91%
 - **Flood:** 20%
 - **Hurricane:** 52.73%
 - **Severe Weather (Thunderstorm, lightning, hail):** 74.55%
 - **Wildfire:** 9.09%
 - **Winter Weather:** 58.18%
 - **Extreme Heat:** 18.18%
3. **What was the most difficult part for you in recovering from past disasters that you have experienced? (1 being the most difficult and 6 being the least difficult):** the following percentage of respondents said that this was the most difficult part of recovery
 - **Financial:** 37.50%
 - **Emotional:** 15.63%
 - **Direct damage to property:** 32.81%
 - **Loss of possessions:** 1.56%
 - **Long recovery time:** 4.69%

- **Other:** 7.81%
4. **How concerned are you about the possibility of your community being impacted by each of these natural hazards?:** the majority of respondents reported this level of concern of the possibility of the hazard occurring in the community
- **Dam or Levee Failure:** Not concerned (70.27%)
 - **Drought:** Somewhat Concerned (53.72%)
 - **Earthquake:** Not Concerned (63.89%)
 - **Flood:** Somewhat Concerned (57.33%)
 - **Hurricane or Tropical Storm:** Somewhat Concerned (51.35%)
 - **Tornado:** Somewhat Concerned (54.67%)
 - **Wildfire:** Somewhat Concerned (51.39%)
 - **Winter Weather:** Somewhat Concerned (56.16%)
 - **Severe Weather (Thunderstorm, Lightning, Hail):** Somewhat Concerned (50.67%)
 - **Extreme Heat:** Somewhat Concerned (51.35%)
5. **In your opinion, which of the following categories are most susceptible to natural hazards in your community? (rank the community assets in order of vulnerability, 1 being the most vulnerable and 6 being least vulnerable):** the majority of respondents reported this level of vulnerability
- **Cultural/Historic (damage or loss of libraries, museums, historic properties, etc.):** 6/6 Vulnerability (50.67%)
 - **Economic (Business interruptions/closures, job losses, etc.):** 3/6 Vulnerability (30.67%)
 - **Environmental (damage, contamination or loss of forests, wetlands, waterways, etc.):** 5/6 Vulnerability (36%)
 - **Governance (ability to maintain order and/or provide public amenities and services):** 4/6 Vulnerability (26.67%)
 - **Infrastructure (damage/loss of roads, bridges, utilities, schools, etc.):** 2/6 Vulnerability (36%)
 - **People (loss of life and/or injuries):** 1/6 Vulnerability (64%)
6. **How important is each of the following specific community assets to you?:** the majority of respondents reported this level of importance
- **Airports:** Neutral (32%)
 - **Colleges/Universities:** Somewhat Important (33.78%)
 - **Day Care and Elder Care Facilities:** Very Important (48%)
 - **Emergency Operations Centers:** Very Important (77.33%)
 - **Fire, Police, and EMS Stations:** Very Important (89.33%)
 - **Historic Buildings:** Somewhat Important (40%)

- **Hospitals and Medical Facilities:** Very Important (84%)
- **Local Businesses:** Very Important (54.67%)
- **Major Roads and Bridges:** Very Important (85.33%)
- **Parks and Recreation:** Somewhat Important (41.33%)
- **Schools (K-12):** Very Important (42.67%)
- **Town Hall/ Courthouse:** Somewhat Important (32%)

7. **Natural hazard can have a significant impact on a community, but planning for these types of events can help lessen the impact. Please tell us how important each statement is to you by checking the appropriate circle for each:** the majority of respondents reported this level of importance

- **Protecting Private Property:** Very Important (69.33%)
- **Protecting Critical Facilities (for example hospitals, fire stations, and police stations, etc.):** Very Important (88%)
- **Preventing development in hazard areas:** Very Important (50.67%)
- **Enhancing the function of natural features (for example, wetlands or streams):** Somewhat Important (45.95%)
- **Protecting historical and cultural landmarks:** Neutral (33.33%)
- **Protecting and reducing damage to utilities:** Very Important (80%)
- **Strengthening emergency services:** Very Important (80%)
- **Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses:** Very Important (61.33%)

8. **What are some steps that you and or your local government could take to reduce or eliminate the risk of future natural hazard damage in your neighborhood?:** the following percentages are the percentage of respondents who agreed that the step could be taken to reduce or eliminate future natural hazard risks

- **Assist vulnerable populations:** 49.33%
- **Education and awareness activities:** 66.67%
- **Elevate your home or business:** 9.33%
- **Emergency preparedness kits:** 60%
- **Floodproof your home or business:** 25.33%
- **Keep storm drains clean:** 68%
- **Protect power lines:** 78.67%
- **Reduce stormwater runoff:** 36%
- **Restrict development in floodplain areas:** 54.67%
- **Other:** 5.33%

9. A number of community wide activities can reduce risk from natural hazards. Please tell us how important you think each one is for your community to consider pursuing: the majority of respondents reported this level of importance

- **Local Plans and Regulations (government policies or codes that influence the land, and buildings are developed and built):** Very Important (56%)
- **Structure and Infrastructure Projects (modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area):** Very Important (49.33%)
- **Natural Systems Protection (Actions that minimize damage and losses and also preserve or restore the functions of natural systems):** Very Important (57.33%)
- **Education and Awareness Programs (actions that inform and educate citizens, elected officials, and property owners about hazards and potential ways to mitigate them):** Very important (68%)
- **Other Types of Actions (actions that are related to mitigation in ways that make sense to the local government that do not fall into one of the categories above):** Neutral (48.65%)

10. What are the most effective ways for you to receive information about how to make your home and neighborhood more resistant to natural hazards?

- Local Government Cannel - 8%
- Internet (Social Media) - 78.67%
- Internet (Web Pages) - 50.67%
- Mail – 46.67%
- Mobile Messages/Alerts – 57.33%
- Newspaper – 13.33%
- Public Meetings / workshops – 29.33%
- Radio Programs – 8%
- Radio Ads – 5.33%
- Television News – 30.67%
- Television Ads - 12%
- Podcasts – 5.33%
- Other – 2.67%

11. Is your home located in the floodplain?

- Yes – 4%
- No – 78.67%
- I don't know – 17.33%

12. Do you have flood insurance?

- Yes – 8%
- No – 86.67%
- I don't know – 5.33%

13. If you do not have flood insurance, why?

- The house is not located in a floodplain – 71.01%
- Flood insurance is too expensive – 7.25%
- I don't think it's necessary because it never floods – 0%
- I don't think it's necessary because I'm elevated or otherwise protected – 8.7%
- I don't think it's necessary because I have homeowners' insurance – 0%
- I've never really considered it – 7.25%
- Other – 5.8%

14. In the following list, please check the activities that you have done in your household, plan to do soon, have not done, or are unable to do.

Activity	Have done	Plan to do	Not done	Unable to do
Attended Meetings or received written information on natural disasters or emergency preparedness	47.95%	8.22%	43.84%	0%
Talked with members in your household about what to do in case of a natural disaster or emergency	78.38%	12.16%	8.11%	1.35%
Developed a "Household/Family Emergency Plan" to decide what everyone would do in the event of a disaster?	67.57%	21.62%	9.46%	1.35%
Prepared a "disaster supply kit" (stored extra food, water, batteries, or other emergency supplies)?	59.46%	21.62%	17.57%	1.35%
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	47.3%	5.41%	44.59%	2.7%
Prepared your home by installing smoke detectors on each level of the house?	98.65%	1.35%	0%	0%
Discussed or created a utility shutoff procedure in the event of a natural disaster?	32.43%	17.57%	48.65%	1.35%

15. Which community do you live in?

Jurisdiction	% of respondents based on the county
Davidson County	

Jurisdiction	% of respondents based on the county
Unincorporated	75%
Denton	0%
Lexington	25%
Midway	0%
Thomasville	0%
Wallburg	0%
Randolph County	
Unincorporated	12.12%
Archdale	3.03%
Asheboro	51.52%
Franklinville	6.06%
Liberty	1.52%
Ramseur	4.55%
Randleman	15.15%

16. How long have you lived in the Davidson-Randolph region?

- **Less than one year** – 1.35%
- **1-5 years** – 10.81%
- **6-9 years** – 4.05%
- **10-19 years** – 6.76%
- **20 years or more** – 77.03%

17. What type of building do you live in?

- **Single-family home** – 89.19%
- **Duplex** – 1.35%
- **Apartment (3-4 units in the structure)** – 1.35%
- **Apartment (5 or more units in structure)** – 0%
- **Condominium** – 0%
- **Manufactured Home** – 5.41%
- **Other** – 2.7%

A copy of the survey and a detailed summary of the survey results are provided in Appendix H.

2.6.2 Social Equity Questionnaire

To consider social equity throughout the planning process and while reviewing the capabilities of each community, a Social Equity Questionnaire was distributed at various times throughout the planning process to HMPC members to understand how the HMP process could be adjusted or adapted to best suit the needs of the community. By reducing barriers for participation, the planning process can better support a community approach that best represents the wide range of perspectives, preferences, and



Figure 2- 3: Social equity questionnaire Quick Response (QR) Code

experiences of residents in the planning area.

For more information about the results of the Social Equity Questionnaire, see Section 7.3.

2.7 Involving the Stakeholders

At the beginning of the planning process for this plan's development, the project consultant worked with the HMPC to initiate outreach to stakeholders involved in it. The Planning Committee encouraged more open and widespread participation in the mitigation planning process by designing and distributing the *Public Participation Survey*. These opportunities were provided for local officials, residents, businesses, academia, and other private interests in the Region to be involved and offer input throughout the local mitigation planning process.

Moreover, the Planning Committee pushed to get input from stakeholders outside of the planning area including surrounding counties. Surrounding counties were contacted after a draft of the *Plan* was developed and were asked to review the *Plan* and provide suggestions/comments to the consultant's project manager. These suggestions and comments were vetted through the Planning Committee before they were implemented to ensure that they met the needs of the communities for whom the *Plan* was developed. Surrounding stakeholders and neighboring communities contacted included Alamance County, Chatham County, Davie County, Forsyth County, Guilford County, Montgomery County, Moore County, Rowan County, and Stanley County.

New stakeholder requirements have been implemented in the 2024 HMP review process and require the planning process to include the following stakeholder groups located within the planning area:

1. Local and regional agencies involved in hazard mitigation activities
2. Agencies that have the authority to regulate development
3. Neighboring communities
4. Representatives of businesses, academia, and other private organizations
5. Representatives of nonprofit organizations, including community-based organizations

Table 2- 3: Example list of stakeholders invited to participate in the HMP Planning Process. *When the email of specific individuals were not available general information emails were used, and these are indicated below where no name is provided.*

Name	Stakeholder Group	Title	County/Jurisdiction/ Affiliation
Aaron Saunders	Transportation	NC Department of Transportation (NCDOT) County Maintenance Engineer	Randolph County
Aaron Woody	Schools	Asheboro City Schools Superintendent	Asheboro
Dale Brinkley	Schools	Randolph County Schools Director of Operations	Randolph County

Name	Stakeholder Group	Title	County/Jurisdiction/ Affiliation
Dr. Stephen Gainey	Schools	Randolph Co. Schools - Superintendent	Randolph County
Matthew Needham	Schools	Randolph Community College Director of Safety	Randolph County
Paxton Arthur	Public Works	Randolph County Public Works Director	Randolph County
Amanda Dawkins	Geographic Information System (GIS) Specialist	Randolph County GIS Specialist	Randolph County Government
Erik Beard	Fire Department	Randolph County Fire Marshal	Randolph County
Brian Causey	Fire Department	Randleman Fire Department, Chief	Randleman
Darby Vereyken	Emergency Management	Randolph Health Hospital Emergency Management	Asheboro
Donovan Davis	Emergency Management	Randolph County Emergency Services Director	Randolph County Government
Evan Grady	Emergency Management	Randolph County Emergency Services Planner	Randolph County
Joe Crapster	Utilities	Duke Energy District Manager	----
Salvation Army	Non-Profit Organization	-----	Davidson County
Salvation Army	Non-Profit Organization	-----	Randolph County
Persida Montanez	Utilities	Dominion Energy	-----
Teresa Bush	Non-Profit Organization	Captain - Salvation Army	Salvation Army
Joseph Ashburn	Neighboring Community	Director of Emergency Services	Davie County
Jim Albright	Neighboring Community	Director of Emergency Services	Guilford County
Michael Halford	Neighboring Community	County Manager	Guilford County
Leslie Bell	Neighboring Community	Director of Planning and Development	Guilford County
Allyson Summitt	Neighboring Community	Emergency Services Planner	Rowan County

Name	Stakeholder Group	Title	County/Jurisdiction/ Affiliation
Kent Greene	Neighboring Community	Director of Fire Services & Emergency Management	Rowan County
Montgomery County Emergency Services	Neighboring Community	----	Montgomery County
Scot Brooks	Neighboring Community	Deputy Director / Emergency Manager	Moore County
Wayne Vest	Neighboring Community	Moore County Manager	Moore County
Steve Newton	Neighboring Community	Emergency Management Director	Chatham County
Bryan Thompson	Neighboring Community	Chatham County Manager	Chatham County
Christopher Saul	Neighboring Community	Director of Emergency Management	Alamance County
Jonathan Hodges	Neighboring Community	Planner/Healthcare Preparedness Coordinator	Alamance County
Heidi York	Neighboring Community	County Manager	Alamance County
Paxton Arthus	Public Works	Staff Engineer	Randolph County Public Works
Tracie Murphy	Social Services	Director of Social Services	Randolph County
Patricia Baker	Social Services	Director of Social Services	Davidson County
Randolph County Public Health Department	Health Services	Public Health Department	Randolph County
Randolph Hospital	Health Services	Hospital	Randolph County
Heather Egan	Health Services	Chief Philanthropy Officer	Novant Health Thomasville
Office of Campus Safety	Schools	----	Randolph County Community College
Donald Rowe	Schools	Coordinator of Emergency Response and Safety	Davidson-Davie Community College

For more information about stakeholders invited to participate in the planning process, see Appendix D.

2.8 Documentation of Plan Progress

Progress in hazard mitigation planning for the participating jurisdictions is documented in this plan update. Since hazard mitigation planning efforts officially began in most of the participating communities with the development of the initial Hazard Mitigation Plans in 2003, many

mitigation actions have been completed and implemented in the participating jurisdictions. These actions will help reduce the overall risk to natural hazards for the people and property in the Region. The completed actions are documented in the Mitigation Action Plan in Section 8.

In addition, community capability continues to improve with the implementation of new plans, policies, and programs that help to promote hazard mitigation at the local level. The current state of local capabilities for the participating jurisdictions is captured in Section 6. The participating jurisdictions continue to demonstrate their commitment to hazard mitigation and hazard mitigation planning and have proven this by developing the Planning Committee to update the Plan and by continuing to involve the public in the hazard mitigation planning process.

Coordination with other community planning efforts is also paramount to the success of this plan. Mitigation planning involves identifying existing policies, tools, and actions that will reduce a community's risk and vulnerability to hazards. Integrating existing planning efforts and mitigation policies and action strategies into this plan establishes a credible and comprehensive plan that ties into and supports other community programs. The development of this plan incorporated information from existing plans, studies, reports, technical information, and initiatives, such as hazard mitigation plans, local comprehensive plans, and flood insurance studies as well as other relevant data from neighboring communities and other jurisdictions.

SECTION 3: COMMUNITY PROFILE

This section of the *Plan* provides a general overview of Davidson and Randolph Counties and their participating municipalities. It consists of the following four subsections:

- 3.1 Geography and the Environment;
- 3.2 Population and Demographics;
- 3.3 Housing, Infrastructure, and Land Use
- 3.4 Employment and Industry
- 3.5 Critical Facilities

3.1 Geography and the Environment

Davidson County is in the Piedmont region of central North Carolina. For the purposes of this plan, Davidson County comprises the Town of Denton, Town of Lexington, Town of Midway, City of Thomasville, Town of Wallburg, and all unincorporated areas within the county. An orientation map is provided as Figure 3- 3 Davidson County consists of gently rolling terrain frequently broken by hills or shallow valleys formed by rivers and streams. An exception to this terrain is the Uwharrie Mountains located in the western and southwestern portions of the county. The Uwharrie are the oldest mountain range in North America, and at one time they rose to nearly 20,000 feet above sea level. However, over time, they have been worn down to high hills.

There are a wide variety of recreational activities for residents and tourists alike. These attractions include golfing, tennis, cycling, hunting, fishing, walking, hiking, and camping. One of the county's most famous attractions is the annual Lexington Barbecue Festival which brings over 100,000 visitors each October. Other local attractions include the Richard Childress Racing Museum, several vineyards, and "The Big Chair" located in Thomasville which is a symbol of Davidson County's furniture industry.

Randolph County is in the Piedmont area of North Carolina, containing the most central point in the State. For the purposes of this *Plan*, Randolph County includes the City of Archdale, City of Asheboro, Town of Franklinville, Town of Liberty, Town of Ramseur, City of Randleman, Town of Seagrove, Town of Staley, City of Trinity, and all unincorporated areas within the County. An orientation map is provided as **Table 3- 1**.

Randolph County contains rolling hills, woodlands, and mountains such as the Uwharrie Mountains and Caraway Mountains. The Uwharrie National Forest is in Randolph County covering over 34,000 acres. The North Carolina Zoological Park, the largest walk-through zoo in the world, is located near the City of Asheboro, attracting residents and tourists at various times throughout the year. Various National Association for Stock Car Auto Racing (NASCAR) influences are associated with Randolph County, including the birthplace of multiple NASCAR drivers, the location of Caraway Speedway, and site of the Richard Petty Museum. Additionally, the Town of Seagrove is considered the pottery capital of North Carolina due to the large number of potteries located within town as well as the North Carolina Pottery Center.

Randolph County is a part of the Piedmont Triad. The Piedmont Triad is located within the north-central region of North Carolina. The Triad consists of areas within Alamance, Davidson,

Forsyth, Guilford, Randolph, Rockingham, and Surry Counties. Areas within and surrounding the three major cities of Greensboro, High Point, and Winston-Salem make up the base of the Piedmont Triad. The Triad has an extensive freeway network consisting of four interstate highways and numerous secondary interstate routes and US routes. This allows the area to support a mixed economy consisting of industry and manufacturing along with technology and biotechnology. The area also contains prominent regional shopping facilities.

The total land area of each of the participating jurisdictions is presented in Table 3- 1.

Table 3- 1: Total Land Areas of Participating Jurisdictions

Jurisdiction	Total Land Area
Davidson County	552.7 square miles
Town of Denton	1.98 square miles
Town of Lexington	17.99 square miles
Town of Midway	7.71 square miles
City of Thomasville*	16.78 square miles
Town of Wallburg	5.58 square miles
* A small portion of land (0.3 square miles) that makes up Thomasville is in Davidson County. Source: United States Census Bureau	
Jurisdiction	Total Land Area
Randolph County	790 square miles
City of Archdale *	7.4 square miles
City of Asheboro	18.9 square miles
Town of Franklinville	1.6 square miles
Town of Liberty	3.1 square miles
Town of Ramseur	2.2 square miles
City of Randleman	4.1 square miles
Town of Seagrove	1.0 square miles
Town of Staley	1.2 square miles
City of Trinity	17.1 square miles
* A small portion of land that makes up Archdale is located in Guilford County. Note: this area is not included in the Randolph County total.	

According to the State Climate Office of North Carolina, Davidson County enjoys a moderate climate that is characterized by mild winters and hot, humid summers. In general, the spring months are marked by unpredictable weather and changes can occur rapidly with sunny skies yielding to severe thunderstorms in just a few hours. Precipitation is generally well distributed throughout the year and annual totals average 45 inches.

From December to February, the average high temperature ranges from the lower to mid-50s and low temperatures on average around 30°F. However, the temperature drops to 10°F or 12°F about once during an average winter over central North Carolina. The mountains also act as a barrier preventing most wintery precipitation from entering the region, and snow and sleet is usually light and occur on average once or twice per year.

In spring, temperatures begin to rise and the increase in average temperature is greater in April than in any other month. In general, the days are warm, and the nights are cool during the spring months. Average high temperatures increase from 63°F in March to 79°F in May. There is a similar increase in average low temperatures, which are in the upper 30s in March and climb to the mid-50s in May. Additionally, tornadoes are most likely early in the spring; however, North Carolina is outside the principal tornado area of the United States.

Tropical air over central North Carolina brings warm temperatures and rather high humidity during the summer. Average high temperatures range from the mid to upper 80s and low temperatures average in the 60s. Summer rainfall is the most variable, and daily showers as well as periods of one to two weeks without rain are both common. Thunderstorms are also common events during the summer months.

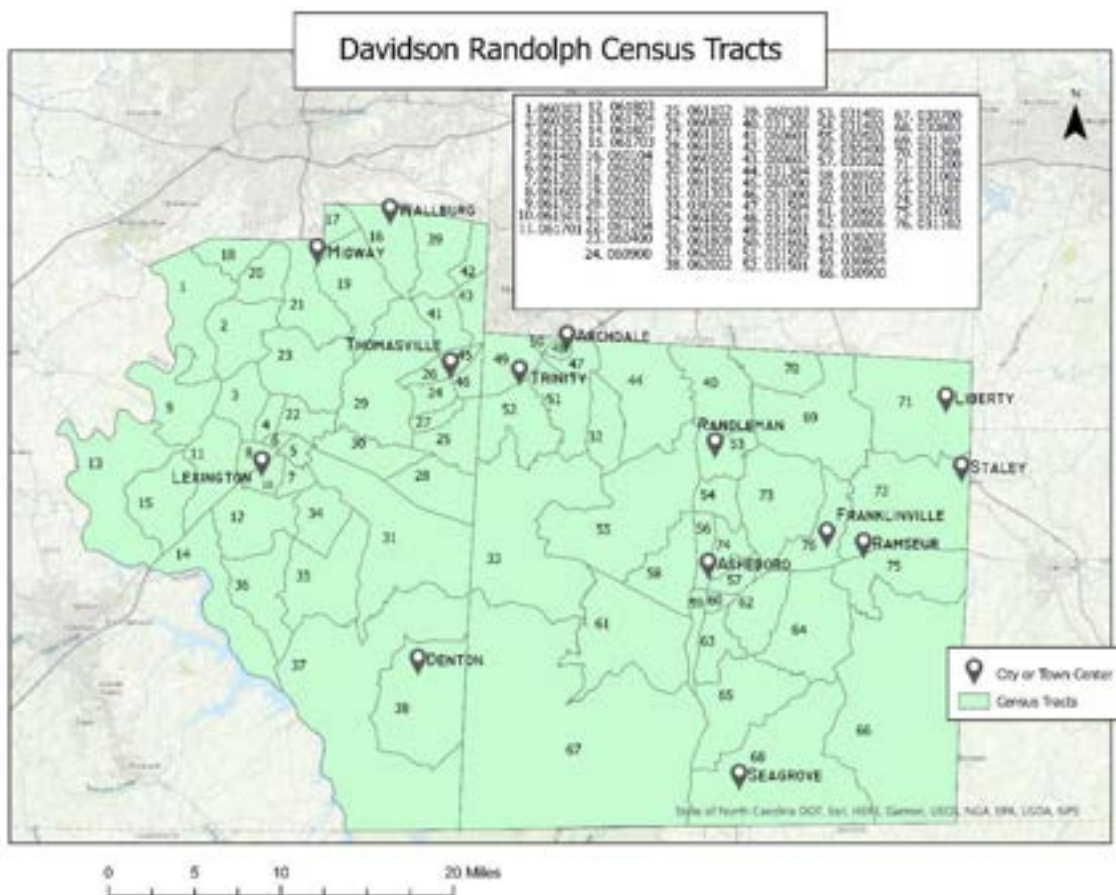


Figure 3- 1: Davidson Randolph Census Tracts

Autumn is the season typified by the most rapidly changing temperature. The drop-off is greatest in October and continues through November. Average high temperatures begin in the lower 80s in September and fall to the low 60s by November. Average lows also dropped significantly from 59°F to about 38°F from September to November.

Randolph County enjoys a moderate climate that is characterized by mild winters and hot, humid summers. In general, the spring months are marked by unpredictable weather and changes can occur rapidly with sunny skies yielding to severe thunderstorms in just a few hours.

From March through May, temperatures have an average high in the 70s with lows in the 40s. Typically, the weather is milder by late March and warm by late April.

In the summer, afternoon showers and thunderstorms are common, and average temperatures increase with afternoon highs reaching the upper 90s in July and August. September through mid-November is typified by clear skies and cooler weather that alternates between warm days and cool nights. Highs and lows are usually like those experienced in the spring. Winter in Randolph County is generally moderate, but extremes do occur. High temperatures are usually in the lower 50s and winter lows in the lower 30s. Snow and ice do tend to occur. The most snow that has occurred at one time in Randolph County was 24 inches in March 1927.

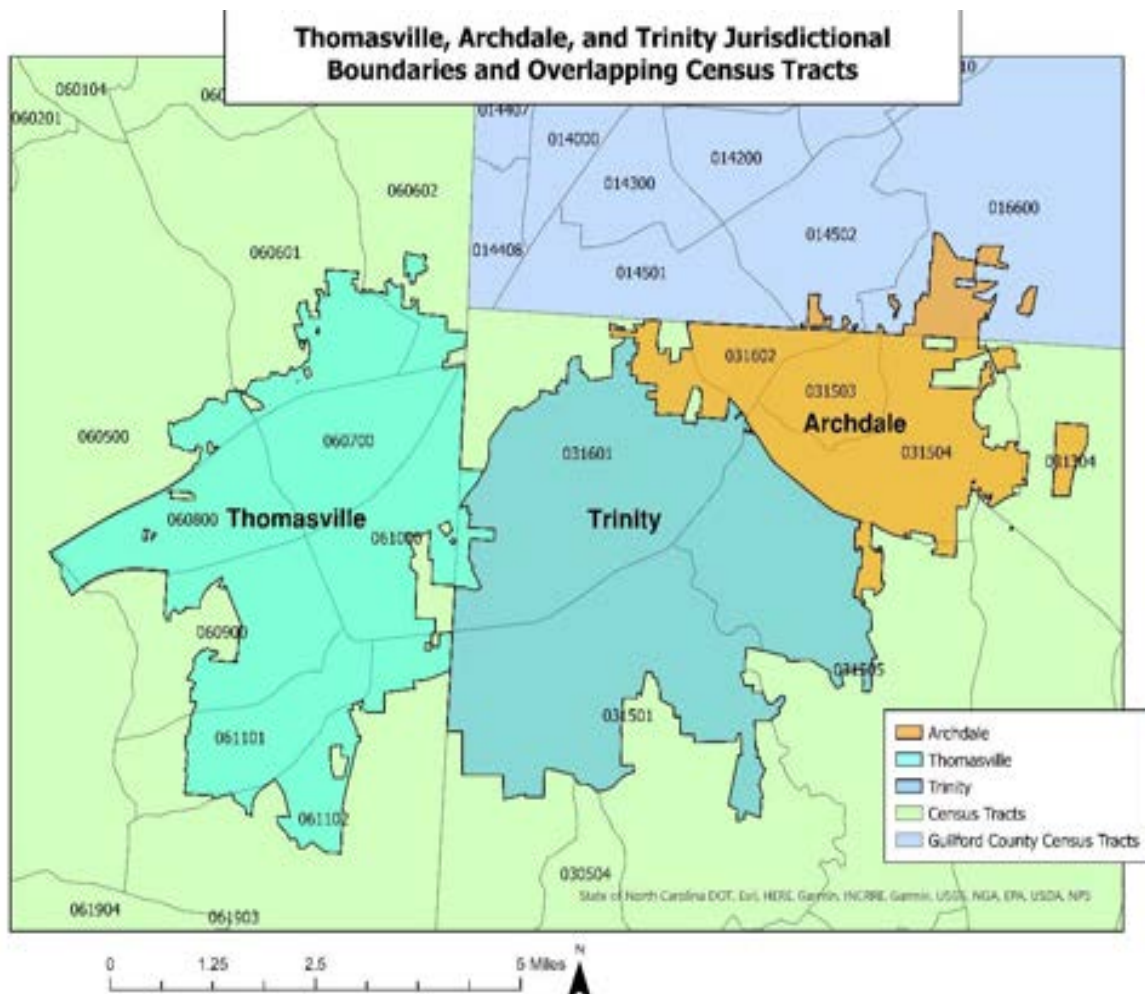


Figure 3- 2: Archdale, Thomasville, and Trinity Census Tracts and Jurisdictional Boundaries

To represent probability with National Risk Index (NRI), census tracts are utilized to represent the jurisdictional probability of natural hazards within Section 5. Jurisdictional boundaries are derived from the North Carolina Department of Transportation City Boundaries¹ and the census tracts that overlap are used to formulate average probability within those census tracts, as the NRI only offers county level or census tract level data to represent probability. The following maps are the detailed jurisdictional boundaries used to determine census tracts within the planning area.

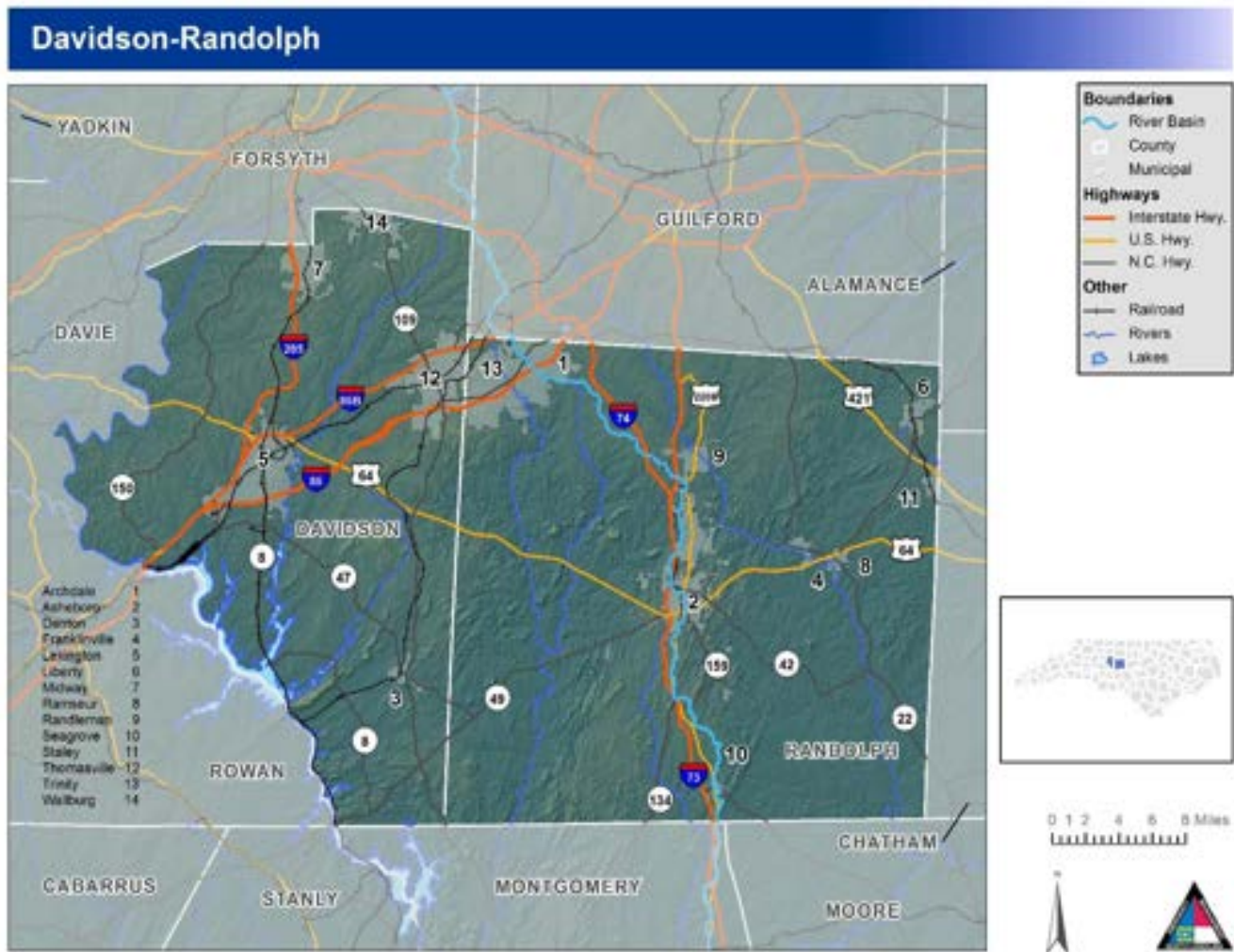


Figure 3- 3: Map of the planning area

3.2 Population and Demographics

In Davidson County, Thomasville is the largest municipality with an estimated 27,261 residents in 2023. Davidson County experienced a 1.65% population increase between 2018 and 2023

¹ N.C. Department of Transportation [NCDOT]. (2024). NCDOT City Boundaries (By NC OneMap) [Dataset]. NCDOT.gov. <https://www.nconemap.gov/maps/ee098aeaf28d44138d63446fbdaac1ee/about>

and is expected to increase by 11.4% between 2020 and 2030, with a projected 2030 population of 188,246. The Town of Lexington had the highest rate of growth in Davidson County between 2018 and 2023, at an increase of 4.2%.²

In Randolph County, the City of Asheboro has the largest population, with an estimated 27,535 residents as of 2023 and a growth rate of 1.57% between 2018 and 2023. The Town of Ramseur experienced the largest population increase between 2018 and 2023, with a population increase of 18.58%. Randolph County Growth Management Plan³ estimates that by 2040 there will be around 63,000 residents, compared to 55,917 residents in 2020, while experiencing a 3.89% population increase between 2018 and 2023. Randolph County is expected to see an increase of population around 5.9% between 2020 and 2030, with an

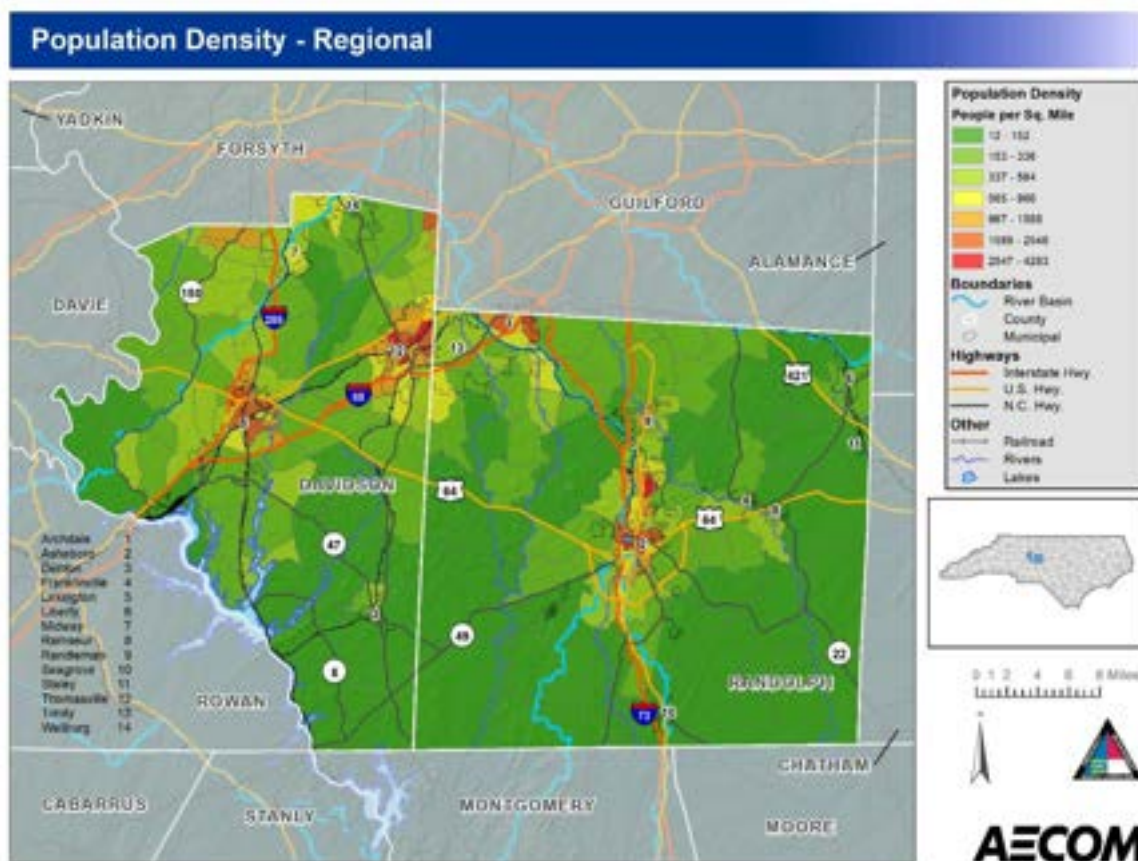


Figure 3- 4: Population Density for the planning area

² North Carolina Office of State Budget & Management [NCOSBM]. (n.d.). Population Growth 2020-2030. North Carolina Office of State Budget & Management. Retrieved January 23, 2025, from <https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer/countystate-population-projections/population-growth-2020-2030>

³ Northeast Randolph County Growth Management Plan. (2023). Randolph County. Retrieved January 23, 2025, from <https://www.randolphcountync.gov/DocumentCenter/View/3510/Randolph-County---Growth-Management-Plan---FINAL>

estimated 8,525 new residents expected by 2030⁴.

Table 3- 4: Characteristics of the planning area

Jurisdiction	Percent of People with a disability (2023)	Percent of People without a computer (2023)	Percent of People without a broadband internet subscription (2023)	Percent of People who speak English “Less than well” (2023)	Percent of People without a Vehicle Available (2023)	Percent of people without telephone service (2023)
Davidson County	14.8%	5.7%	9.7%	3.3%	5.3%	0.6%
Town of Denton	20.5%	88.8%	83.2%	4.1%	9.6%	0%
Town of Lexington	16.5%	8.2%	7.9%	17.6%	9.7%	3.4%
Town of Midway	20.8%	3.9%	9.8%	2.9%	4.8%	0%
City of Thomasville	15.3%	5%	2.4%	6.8%	4.2%	0.8%
Town of Wallburg	13.8%	3%	4.6%	0.1%	0%	0%
Randolph County	15.0%	4.7%	17.7%	4.9%	2.9%	0.8%
City of Archdale	12.3%	4.5%	7.2%	5.8%	1.1%	0.5%
City of Asheboro	17.5%	6.9%	14.2%	9.6%	6.1%	1%
Town of Franklinville	21.7%	4.5%	87.6%	5%	0.8%	4.5%
Town of Liberty	16.6%	16.6%	26.4%	11.4%	6.5%	1.2%
Town of Ramseur	19.4%	6.9%	13.3%	1.2%	1.6%	0%
City of Randleman	21.1%	6.4%	8%	3.1%	6.6%	2.4%
Town of Seagrove	13.3%	8.1%	8.1%	0.3%	0%	0.7%
Town of Staley	12.6%	10.6%	17.9%	9.6%	4.5%	1.7%
City of Trinity	15.2%	8.4%	13%	1.4%	5.6%	0.2%

⁴ North Carolina Office of State Budget & Management [NCOSBM]. (n.d.). Population Growth 2020-2030. North Carolina Office of State Budget & Management. Retrieved January 23, 2025, from <https://www.osbm.nc.gov/facts-figures/population-demographics/state-demographer/countystate-population-projections/population-growth-2020-2030>

Jurisdiction	Percent of People with a disability (2023)	Percent of People without a computer (2023)	Percent of People without a broadband internet subscription (2023)	Percent of People who speak English “Less than well” (2023)	Percent of People without a Vehicle Available (2023)	Percent of people without telephone service (2023)
Davidson County	14.8%	5.7%	9.7%	3.3%	5.3%	0.6%
Town of Denton	20.5%	88.8%	83.2%	4.1%	9.6%	0%
Town of Lexington	16.5%	8.2%	7.9%	17.6%	9.7%	3.4%
Town of Midway	20.8%	3.9%	9.8%	2.9%	4.8%	0%
City of Thomasville	15.3%	5%	2.4%	6.8%	4.2%	0.8%
Town of Wallburg	13.8%	3%	4.6%	0.1%	0%	0%
Randolph County	15.0%	4.7%	17.7%	4.9%	2.9%	0.8%
City of Archdale	12.3%	4.5%	7.2%	5.8%	1.1%	0.5%
City of Asheboro	17.5%	6.9%	14.2%	9.6%	6.1%	1%
Town of Franklinville	21.7%	4.5%	87.6%	5%	0.8%	4.5%
Town of Liberty	16.6%	16.6%	26.4%	11.4%	6.5%	1.2%
Town of Ramseur	19.4%	6.9%	13.3%	1.2%	1.6%	0%
City of Randleman	21.1%	6.4%	8%	3.1%	6.6%	2.4%
Town of Seagrove	13.3%	8.1%	8.1%	0.3%	0%	0.7%
Town of Staley	12.6%	10.6%	17.9%	9.6%	4.5%	1.7%
City of Trinity	15.2%	8.4%	13%	1.4%	5.6%	0.2%

Table 3- 2: Population Counts for Participating Jurisdictions⁵

Jurisdiction	2013 Census Population	2018 Census Population	2023 Census Population	% Change 2018 to 2023
Davidson County	162,975	164,664	171,063	3.89%
Town of Denton	1,640	1,820	1,271	-30.16%
Town of Lexington	18,981	18,897	19,691	4.20%
Town of Midway	4,698	4,815	4,826	0.23%
City of Thomasville	26,983	26,839	27,261	1.57%

⁵ U.S. Census Bureau, U.S. Department of Commerce. (2023). ACS Demographic and Housing Estimates. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP05. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2023.DP05?t=Populations and People&g=160XX00US3716980>.

Jurisdiction	2013 Census Population	2018 Census Population	2023 Census Population	% Change 2018 to 2023
Town of Wallburg	3,067	3,029	3,104	2.48%
Randolph County	142,042	142,958	145,322	1.65%
City of Archdale	11,299	11,538	11,992	3.93%
City of Asheboro	25,432	25,859	27,353	5.78%
Town of Franklinville	1,190	1,106	1,129	2.08%
Town of Liberty	2,665	2,657	2,678	0.79%
Town of Ramseur	1,874	1,738	2,061	18.58%
City of Randleman	4,122	4,111	4,611	12.16%
Town of Seagrove	232	348	347	-0.29%
Town of Staley	473	297	532	79.12%
City of Trinity	6,645	6,621	7,066	6.72%

Table 3- 3: Demographics Of Participating Jurisdictions (2020)⁶

Jurisdiction	White Percent (2020)	Black or African American, Percent (2020)	American Indian or Alaska Native, Percent (2020)	Asian Percent (2020)	Native Hawaiian or Other Pacific Islander, Percent (2020)	Other Race Percent (2020)	Two or More Races Percent (2020)	Hispanic or Latino (of any race), Percent (2020)
Davidson County	78.1%	9.5%	0.6%	1.5%	0%	4.6%	5.7%	8.2%
Town of Denton	95.3%	0%	0%	0%	0%	0%	4.7%	8.1%
Town of Lexington	43%	26%	0%	4.0%	0%	1%	5%	21%
Town of Midway	83.4%	13.2%	0%	0%	0%	1.4%	7.7%	4.4%
City of Thomasville	64.3%	17%	0.3%	0.9%	0%	4.1%	13.5%	15.9%
Town of Wallburg	80.8%	3.7%	0%	0.4%	0%	2.7%	12.3%	13.1%
Randolph County	77.3%	6.1%	0.8%	1.5%	0%	7.5%	6.8%	13.2%
City of Archdale	80.2%	7.5%	2.6%	9.3%	0.1%	5.8%	5.2%	6.6%
City of Asheboro	57.4%	12.3%	1.3%	1.4%	0%	16.9%	10.8%	29.4%
Town of Franklinville	59.9%	12.6%	1.5%	0%	0%	15.3%	10.7%	24.8%
Town of Liberty	61.8%	18.8%	1.9%	0.7%	0%	9.2%	7.7%	17.7%
Town of Ramseur	64.9%	13.2%	1.0%	1.8%	0%	8.3%	10.8%	16.7%
City of Randleman	78.5%	7.4%	0.5%	0.7%	0%	6%	6.9%	10.8%

⁶ U.S. Census Bureau, U.S. Department of Commerce. (2020). PROFILE OF GENERAL POPULATION AND HOUSING CHARACTERISTICS. Decennial Census, DEC Demographic Profile, Table DP1. Retrieved January 21, 2025, from [https://data.census.gov/table/DECENNIALDP2020.DP1?g=050XX00US37057&d=DEC Demographic Profile](https://data.census.gov/table/DECENNIALDP2020.DP1?g=050XX00US37057&d=DEC%20Demographic%20Profile).

Jurisdiction	White Percent (2020)	Black or African American, Percent (2020)	American Indian or Alaska Native, Percent (2020)	Asian Percent (2020)	Native Hawaiian or Other Pacific Islander, Percent (2020)	Other Race Percent (2020)	Two or More Races Percent (2020)	Hispanic or Latino (of any race), Percent (2020)
Town of Seagrove	90.2%	0%	0.4%	0%	0%	3.8%	5.5%	7.7%
Town of Staley	68.3%	8.3%	1.8%	0%	0%	12.3%	9.3%	18.6%
City of Trinity	84.9%	4.9%	0.7%	2.5%	0%	2.6%	4.5%	4.7%

*Hispanics may be of any race, so also are included in applicable race categories

Table 3- 4: Characteristics of the planning area

Jurisdiction	Percent of People with a disability (2023) ⁷	Percent of People without a computer (2023) ⁸	Percent of People without a broadband internet subscription (2023) ⁹	Percent of People who speak English “Less than well” (2023) ¹⁰	Percent of People without a Vehicle Available (2023) ¹¹	Percent of people without telephone service (2023) ¹²
Davidson County	14.8%	5.7%	9.7%	3.3%	5.3%	0.6%
Town of Denton	20.5%	88.8%	83.2%	4.1%	9.6%	0%
Town of Lexington	16.5%	8.2%	7.9%	17.6%	9.7%	3.4%
Town of Midway	20.8%	3.9%	9.8%	2.9%	4.8%	0%
City of Thomasville	15.3%	5%	2.4%	6.8%	4.2%	0.8%
Town of Wallburg	13.8%	3%	4.6%	0.1%	0%	0%
Randolph County	15.0%	4.7%	17.7%	4.9%	2.9%	0.8%
City of Archdale	12.3%	4.5%	7.2%	5.8%	1.1%	0.5%
City of Asheboro	17.5%	6.9%	14.2%	9.6%	6.1%	1%
Town of Franklinville	21.7%	4.5%	87.6%	5%	0.8%	4.5%
Town of Liberty	16.6%	16.6%	26.4%	11.4%	6.5%	1.2%
Town of Ramseur	19.4%	6.9%	13.3%	1.2%	1.6%	0%
City of Randleman	21.1%	6.4%	8%	3.1%	6.6%	2.4%
Town of Seagrove	13.3%	8.1%	8.1%	0.3%	0%	0.7%

⁷ U.S. Census Bureau, U.S. Department of Commerce. (2023). Disability Characteristics. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1810. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSST5Y2023.S1810?t=Disability:Health&g=160XX00US3716980>.

⁸ U.S. Census Bureau, U.S. Department of Commerce. (2023). Selected Social Characteristics in the United States. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP02. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2023.DP02?t=Disability:Health:Housing&g=160XX00US3716980>.

⁹ U.S. Census Bureau, U.S. Department of Commerce. (2023). Selected Social Characteristics in the United States. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP02. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2023.DP02?t=Disability:Health:Housing&g=160XX00US3716980>.

¹⁰ U.S. Census Bureau, U.S. Department of Commerce. (2023). Language Spoken at Home. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S1601. Retrieved January 22, 2025, from <https://data.census.gov/table/ACSST5Y2023.S1601?q=language&g=160XX00US3764380,3768400>.

¹¹ U.S. Census Bureau, U.S. Department of Commerce. (2023). Physical Housing Characteristics for Occupied Housing Units. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2504. Retrieved January 22, 2025, from <https://data.census.gov/table/ACSST5Y2023.S2504?q=vehicle&g=160XX00US3755080>.

¹² U.S. Census Bureau, U.S. Department of Commerce. (2023). Physical Housing Characteristics for Occupied Housing Units. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S2504. Retrieved January 22, 2025, from <https://data.census.gov/table/ACSST5Y2023.S2504?q=vehicle&g=160XX00US3755080>.

Jurisdiction	Percent of People with a disability (2023) ⁷	Percent of People without a computer (2023) ⁸	Percent of People without a broadband internet subscription (2023) ⁹	Percent of People who speak English "Less than well" (2023) ¹⁰	Percent of People without a Vehicle Available (2023) ¹¹	Percent of people without telephone service (2023) ¹²
Town of Staley	12.6%	10.6%	17.9%	9.6%	4.5%	1.7%
City of Trinity	15.2%	8.4%	13%	1.4%	5.6%	0.2%

3.2.1 Housing

According to the 2023 US Census, there were 75,615 housing units in Davidson County with an average home value of \$200,100. The same Census Data reports that there are 63,303 housing units in Randolph County as of 2023, with the average home value at \$171,600. As Randolph and Davidson County populations are expected to continue increasing, an increase in new housing units should be expected to meet the demand. Housing information for the participating jurisdictions is presented in Table 3- 5. As shown in the table, Randolph County has a low percentage of seasonal housing throughout the County.

Table 3- 5: Housing Characteristics of Participating Jurisdictions¹³

Jurisdiction	Housing Units (2010 ¹⁴)	Housing Units (2020 ¹⁵)	Housing Units (2023)	Percent Change between 2020 and 2023	Percent Occupied Housing Units Built 2020 or later (2023)	Average Home Value (2023)	Number of Mobile Homes (2023)	Number of Housing Units that are a Boat, RV, Van etc. (2023)
Davidson County	71,474	75,465	75,615	19.88%	2.9%	\$200,100	10,032	0
Town of Denton	831	758	718	-527.70%	0.7%	\$160,400	64	0
Town of Lexington	9,228	9,095	8,973	-134.14%	1.2%	\$158,100	309	0
Town of Midway	1,978	2,074	2,054	-96.3%	0%	\$250,000	167	0
City of Thomasville*	11,405	11,832	11,997	139.45%	1.2%	\$163,200	244	0
Town of Wallburg	1,154	1,316	1,282	-258.36%	0%	\$292,500	122	0
Randolph County	60,510	62,670	63,303	101.01%	2.8%	\$171,600	12,491	27

¹³ U.S. Census Bureau, U.S. Department of Commerce. (2023). Selected Housing Characteristics. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2023.DP04?t=Housing:Housing Units:Physical Characteristics:Telephone, Computer, and Internet Access&g=160XX00US3716980>

¹⁴ U.S. Census Bureau. (2010). SELECTED HOUSING CHARACTERISTICS. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2010.DP04?t=Housing:Housing Units:Physical Characteristics:Telephone, Computer, and Internet Access&g=160XX00US3716980>.

¹⁵ U.S. Census Bureau. (2020). SELECTED HOUSING CHARACTERISTICS. American Community Survey, ACS 5-Year Estimates Data Profiles, Table DP04. Retrieved January 21, 2025, from <https://data.census.gov/table/ACSDP5Y2020.DP04?t=Housing:Housing Units:Physical Characteristics:Telephone, Computer, and Internet Access&g=160XX00US3716980>.

Jurisdiction	Housing Units (2010 ¹⁴)	Housing Units (2020 ¹⁵)	Housing Units (2023)	Percent Change between 2020 and 2023	Percent Occupied Housing Units Built 2020 or later (2023)	Average Home Value (2023)	Number of Mobile Homes (2023)	Number of Housing Units that are a Boat, RV, Van etc. (2023)
City of Archdale*	4,580	4,935	5,077	287.74%	0.7%	\$188,200	0	0
City of Asheboro	11,508	11,735	12,269	455.05%	0.3%	\$162,800	848	0
Town of Franklinville	460	573	442	-2286.21%	0%	\$122,400	228	0
Town of Liberty	1,266	1,210	1,238	231.40%	1%	\$152,800	70	0
Town of Ramseur	717	764	781	222.51%	0.9%	\$130,000	13	0
City of Randleman	1,813	1,583	1,766	1156.03%	0%	\$164,100	41	0
Town of Seagrove	107	206	154	-2524.27%	0%	\$158,900	37	0
Town of Staley	193	161	204	2670.81%	0%	\$133,800	46	0
City of Trinity	2,937	2,823	2,836	46.05%	0%	\$187,700	252	6

3.2.2 Infrastructure

Transportation

There is one interstate that crosses Davidson County. Interstate 85 is the major east-west thoroughfare connecting the county to Rowan and Randolph Counties and it also runs through Lexington and Thomasville. There are also several US highways that cross Davidson County. US Routes 64 and 29 are two additional east-west thoroughfares that link the county to its neighboring counties (Randolph, Davie, and Rowan). The major north-south highway is US Route 52 which links the county to Forsyth and Rowan Counties.

Within Davidson County, a public transportation system serves participating local human service agencies as well as the public. Service is also provided to Lexington and Thomasville.

Both the Piedmont and Carolinian Amtrak trains do make special once-a-year stops in Lexington for the Barbecue Festival. Additionally, freight carriers such as Winston-Salem Southbound and Norfolk Southern serve the county.

Table 3- 6: Length of railroads in the planning area and the miles within each flood hazard area¹⁶

County	Flood Hazard Area Type	Miles
Davidson	0.2% Annual Chance Flood Hazard	21.91
	AE	67.87
	X	120.43
	Davidson County Total	210.22
Randolph	0.2% Annual Chance Flood Hazard	3.72
	AE	2.48

¹⁶ NC Department of Transportation [NCDOT]. (2024). GIS Data Layers [Dataset]. In Connect NCDOT. <https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx>

County	Flood Hazard Area Type	Miles
	X	47.30
	Randolph County Total	53.50
Planning Area Total		263.72

The Piedmont Triad International Airport is the largest airport closest to Davidson County. It offers 14 non-stop commercial flight locations on 6 different passenger airlines and saw over 281 million pounds of cargo enplaned and deplaned in airfreight, air mail, and freight passengers in 2023. The Airport also sees 39 daily departures on passenger airlines and is approximately 66 miles from the center of the county. The Piedmont Triad International Airport located just west of Greensboro is a high-use airport for out-of-state travelers and employs approximately 7,000 people.

Davidson County Airport, located in Lexington, also provides a public air service to Davidson County as well as one other privately-owned airport, Hiatt Airport, located just outside of Thomasville. The Charlotte Douglas International Airport and Raleigh-Durham International Airport are two additional large airports that are also in proximity to the county.

The Asheboro Regional Airport serves Randolph County. The airport is a city-owned public-use facility with one 5,500' runway. Some residents within the County also use Charlotte-Douglas International Airport, the largest airport in the State, and Raleigh-Durham International Airport. The Charlotte-Douglas International Airport currently offers non-stop commercial flights on nine airlines to cities around the country and the world. The Raleigh-Durham International Airport offers more than 35 domestic and international flights on nine different airlines.

There are several major highways that cross through Randolph County. Interstate 73 runs north-south from Greensboro through Asheboro and, upon construction completion, is planned to continue towards South Carolina and Virginia. Interstate 74 travels west-east connecting cities throughout North Carolina, including Winston-Salem, High Point, Asheboro, Rockingham, and Lumberton. Interstates 73 and 74 merge south of the City of Randleman and continue to the southern County line. Interstate 85 runs north-south providing transportation from North Carolina into South Carolina and Virginia, and it is the second longest interstate within North Carolina. US Route 29-70 is a north-south highway serving that operates around the City of High Point, which is partially located in Randolph County, and the greater Piedmont area of North Carolina while providing access to adjacent states. US Highway 64 runs east-west and is the longest number route in North Carolina, running from Tennessee to the Outer Banks of North Carolina. US Highway 220 runs north-south connecting multiple cities within the Central Piedmont area of North Carolina. US Highway 311 operates throughout North Carolina into Virginia, and US Highway 421 runs north-south from Fort Fisher in North Carolina to Tennessee. Within Randolph County, multiple transportation routes run in concurrency.

In terms of other transportation services, Randolph County provides various transportation alternatives. The Regional Coordinated Area Transportation System (RCATS) provides public transportation services to residents throughout Randolph County on an advanced reservation basis. The Piedmont Authority for Regional Transportation (PART) provides bus transportation

and vanpool service within the ten Piedmont Triad counties, including Randolph County. Amtrak also provides service near Randolph County.

Flood Hazard Zones:

- **“X” Flood Hazard Zones** are areas of moderate flood risk between 100-year and 500-year flood limits, or 1% to 0.2% annual flood risk.
- An **“AE” Flood Hazard Zone** is an area that is subject to a 1% chance of a flooding event annually.
- A **“0.2%” Flood Hazard Zone** is an area with a 0.2% annual chance of flooding, which means the area is considered to be in the 500-year floodplain.

Table 3- 7: Miles of Roads in Flood Hazard Zones in the Planning Area¹⁷.

County	Flood Hazard Zone	Miles of Roads
Davidson	0.2% Annual Chance Flood Hazard	618.87
	AE	450.52
	X	1,960.91
Davidson Total		3,030.30
Randolph	0.2% Annual Chance Flood Hazard	259.51
	AE	691.34
	X	1,344.26
Randolph Total		2,295.11
Grand Total		5,325.41

Utilities

Electrical power in Davidson County is provided by one public utility, one electricity cooperative, and one municipality. Duke Energy Progress, the largest electric power holding company in the US, provides service across Davidson County. Energy United is an electricity cooperative that also services most of the county, excluding a small area in the northeast portion of the county and a sliver along the northern county boundary. The Town of Lexington also provides municipally owned and operated electric service to its residents as well as other customers across much of Davidson County.

Sewer service providers in Davidson County are the Town of Lexington, the City of Thomasville, the Town of Denton, and the Winston Salem Utilities Commission. The City of High Point (in Guilford County) has a sewage treatment facility that Davidson County may have the opportunity to jointly work with in the future.

Water is widely available throughout the county though it is not without limitations. Davidson Water, Inc. is a consolidation of five rural water systems and one of the first rural water systems in the nation. It serves all developed areas in Davidson County outside the

¹⁷ NC Department of Transportation [NCDOT]. (2024). GIS Data Layers [Dataset]. In Connect NCDOT. <https://connect.ncdot.gov/resources/gis/Pages/GIS-Data-Layers.aspx>

municipalities of Lexington, Thomasville, and Denton, which each has its own municipal water system. The Handy Sanitary District serves the areas south of Denton.

Electrical power in Randolph County is provided by Duke Power, Central Electric Membership Corporation, Energy United, and Randolph Electric Membership Corporation. Duke Power is a major provider in many areas of North Carolina. Central Electric Membership Corporation, Energy United, and Randolph Electric Membership Corporation all serve users in Randolph County as well as multiple neighboring counties.

Water and sewer services are provided throughout Randolph County by several municipalities including the City of Asheboro, City of High Point, and other localized utility companies. Most areas in the County rely on private or shared wells and septic systems.

3.2.3 Land Use

The Region is preparing for and managing development to accommodate new growth and redevelopment through planning, zoning, and growth management. The Region's location within the Piedmont Triad presents various opportunities to expand growth and development; however, County land use policies are designed to recognize that sustainable economic growth, environmental protection, and rural quality of life can be pursued together as mutually supporting public policy goals. Local land use and associated regulations are further discussed in *Section 7: Capability Assessment*.

3.2.3.1 Randolph County Growth Management Plan

The Randolph County Growth Management Plan looks out to 2040 and compiles several points of data about current growth and development trends in Randolph County. It is projected that by 2040 the northeast part of the County will grow from 55,917 in population to 63,065, an increase of 13%. Employment is projected to grow from 29,486 to 37,440 in the study area.

The Growth Management Plan represents a united vision for the county's future, blending strategies for planned growth and development with environmental stewardship. Through the plan's implementation, Randolph County is poised to achieve responsible growth while preserving its distinct character and enhancing the overall well-being of its residents.

3.2.3.2 Davidson County Land Development Plan

Davidson County has a population of 156,000 people and has seen continued growth over the last half century. The Davidson County Land Use Development Plan was approved and has been used by citizens, staff, and elected officials over the past eight years. However, recently several issues have been identified by the County Commissioners and County Staff that need to be addressed. The Land Use Development Plan was commissioned and includes new ideas and strategies for dealing with the strategic issues of Economic Development, School Facilities, and Agriculture and Rural Area Preservation.

The Davidson County Land Development Plan Update is a guide for making strategic decisions about the orderly growth and development of the community. The Plan encompasses the entire County (522 square miles), from 2008 to 2028, except for the following municipalities and any accompanying extraterritorial planning jurisdictions: Denton, High Point, Lexington, Midway, Thomasville, and Wallburg.

3.3 Employment and Industry

According to the Bureau of Labor Statistics, Randolph County has a reported unemployment rate of 3.6% in Randolph County and Davidson County as of November 2024 (compared to 3.7% percent for the State)¹⁸. Average annual employment in Randolph County was 21,721 and 14,934 in Davidson County in 2023, with an average annual household income \$71,400 in Davidson County and \$59,646 in Randolph County.

The largest employment industry in Davidson County is Manufacturing and Retail Trade in Randolph County. According to the Randolph County Economic Development Corporation, the largest employers in Randolph County are the Randolph County Schools (2,066 employees), Technimark (1,500 employees), Hughes Furniture Industries (834 employees), County of Randolph (734 employees), Randolph Health (726 employees), Asheboro City Schools (550 employees), Dart Container (446 employees), NC Zoological Park and Society (440 employees), Energizer Battery (405 employees), and the City of Asheboro (383 employees)¹⁹. In Davidson County the top 10 employers as of 2023 were the Davidson County Board of Education, the County of Davidson, Cornerstone Building Brands Service, Old Dominion Freight Line Inc, Wal-Mart Associates Inc, Food Lion, Novant Health Thomasville Medical Center (previously named Community General Hospital of Thomasville), Jeld-Wen Inc, Unilin North America Llc., and Asco Power Technologies Lp²⁰.

Access to multiple major transportation routes, regional airports, and available rail and truck services support continual economic growth within the County. Randolph County's location in the Piedmont Triad region allows for multiple types of commercial and industrial development and support of various business hubs. Randolph County is near industrial centers for the High Point Furniture Market, FedEx, The Research Triangle Park area, The Gateway University Research Park, Bank of America, Well Fargo, and Pinehurst. Economic recruitment efforts by both private and public sectors are being pursued to encourage economic growth within the County, such as the Greensboro-Randolph County Mega site near the Town of Liberty.

Table 3- 8: 2023 Employment information

Jurisdiction	Average Household Income ²¹	Average Annual Employment ²²
Davidson County	\$71,400	14,934
Randolph County	\$59,646	21,721

¹⁸ Quarterly Census of Employment and Wages. (n.d.). [Dataset]. In NC Department of Commerce Labor and Economic Analysis Division & U.S. Department of Labor Bureau of Labor Statistics, Demand Driven Data Delivery. NC Department of Commerce. <https://d4.nccommerce.com/QCEWSelection.aspx>

¹⁹ Largest Employers. (n.d.). Randolph County Economic Development Corporation. Retrieved January 22, 2025, from <https://www.rcedc.com/county-profile/largest-employers>

²⁰ NC Department of Commerce Labor and Economic Analysis Division & U.S. Department of Labor Bureau of Labor Statistics. (n.d.). Quarterly Census of Employment and Wages (QCEW) Largest Employers. Demand Driven Data Delivery. Retrieved January 22, 2025, from <https://d4.nccommerce.com/QCEWLargestEmployers.aspx>

²¹ U.S. Census Bureau, U.S. Department of Commerce. (2023). Mean Income in the Past 12 Months (in 2023 Inflation-Adjusted Dollars). American Community Survey, ACS 1-Year Estimates Subject Tables, Table S1902. Retrieved January 22, 2025, from <https://data.census.gov/table/ACSST1Y2023.S1902?q=vehicle&t=Income and Poverty&g=050XX00US37057,37151>.

²² Quarterly Census of Employment and Wages. (n.d.). [Dataset]. In NC Department of Commerce Labor and Economic Analysis Division & U.S. Department of Labor Bureau of Labor Statistics, Demand Driven Data Delivery. NC Department of Commerce. <https://d4.nccommerce.com/QCEWSelection.aspx>

Table 3- 9: Average employment in 2023 by industry type in Davidson County and Randolph County²³

Industry	Average Employment (2023)	
	Davidson County	Randolph County
Manufacturing	10,826	269
Retail Trade	5,488	382
Health Care and Social Assistance	4,685	285
Accommodation and Food Services	4,295	211
Educational Services	3,852	61
Administrative and Support and Waste Management and Remediation Services	3,241	201
Wholesale Trade	2,451	183
Construction	2,373	365
Public Administration	2,062	30
Transportation and Warehousing	1,677	116
Other Services (except Public Administration)	1,234	218
Management of Companies and Enterprises	1,163	7
Professional, Scientific, and Technical Services	898	213
Arts, Entertainment, and Recreation	760	35
Finance and Insurance	605	118
Real Estate and Rental and Leasing	399	93
Utilities	150	10
Information	114	24
Agriculture, Forestry, Fishing and Hunting	56	44
Mining, Quarrying, and Oil and Gas Extraction	20	4
Unclassified	0	3

3.4 Critical Facilities

Within the planning area there are many facilities that are crucial for the health and safety residents, which include hospitals, medical facilities, law enforcement facilities, emergency medical services (EMS), and fire stations.

Table 3- 10 shows the number of each type of facility in the planning area, however it should be noted that some EMS, law enforcement, and fire stations may utilize the same location or

²³ Quarterly Census of Employment and Wages. (n.d.). [Dataset]. In NC Department of Commerce Labor and Economic Analysis Division & U.S. Department of Labor Bureau of Labor Statistics, Demand Driven Data Delivery. NC Department of Commerce. <https://d4.nccommerce.com/QCEWSelection.aspx>

facility. The Following maps are critical facilities located within the planning area derived from North Carolina OneMap Datasets²⁴. For information about specific critical facilities addresses, names, and locations, see Appendix F. Appendix G has more information about the critical facilities that are within flood hazard zones and which flood hazard zones each critical facility is in.

Table 3- 10: Critical Facilities Count by County from North Carolina OneMap Datasets

Critical Facility Type	Count of Facilities	
	Davidson County	Randolph County
Hospital	2	1
Law Enforcement	6	10
Emergency Medical Services	20	33
Fire Stations	35	34
Medical Facilities (Not including Hospitals)	67	77

All EMS, Law Enforcement, and Fire Station locations in the planning area are within X Flood Hazard Zones. There are 2 medical facilities in the planning area that are within AE Zones, which are listed as Vocational Opportunities in the Community in Asheboro, a mental health home, and Lexington Health Care Center in Lexington, which is listed as a Nursing Home Facility. For more detailed information about critical facilities and their Flood Hazard Zones, please see Appendix G.

Table 3- 11: Nursing Homes in the planning area and their Flood Hazard Zones

County	NAICS Description	City	Flood Hazard Zone	
			AE	X
DAVIDSON	Homes For The Elderly Without Nursing Care	Clemmons		1
		Lexington	1	1
		Linwood		1
		Thomasville		1
		Winston Salem		1
	Nursing Homes	Denton		1
		Lexington		5
Thomasville			3	
DAVIDSON Total			1	14
RANDOLPH	Homes For The Elderly Without Nursing Care	Archdale		1
		Asheboro		3
		Franklinville		1
		Randleman		3
	Nursing Homes	Archdale		1
		Asheboro		3

²⁴ NC OneMap. (n.d.). NC OneMap. <https://www.nconemap.gov/>

County	NAICS Description	City	Flood Hazard Zone	
			AE	X
		Ramseur		1
		Trinity		1
RANDOLPH Total				14
Planning Area Total			1	28

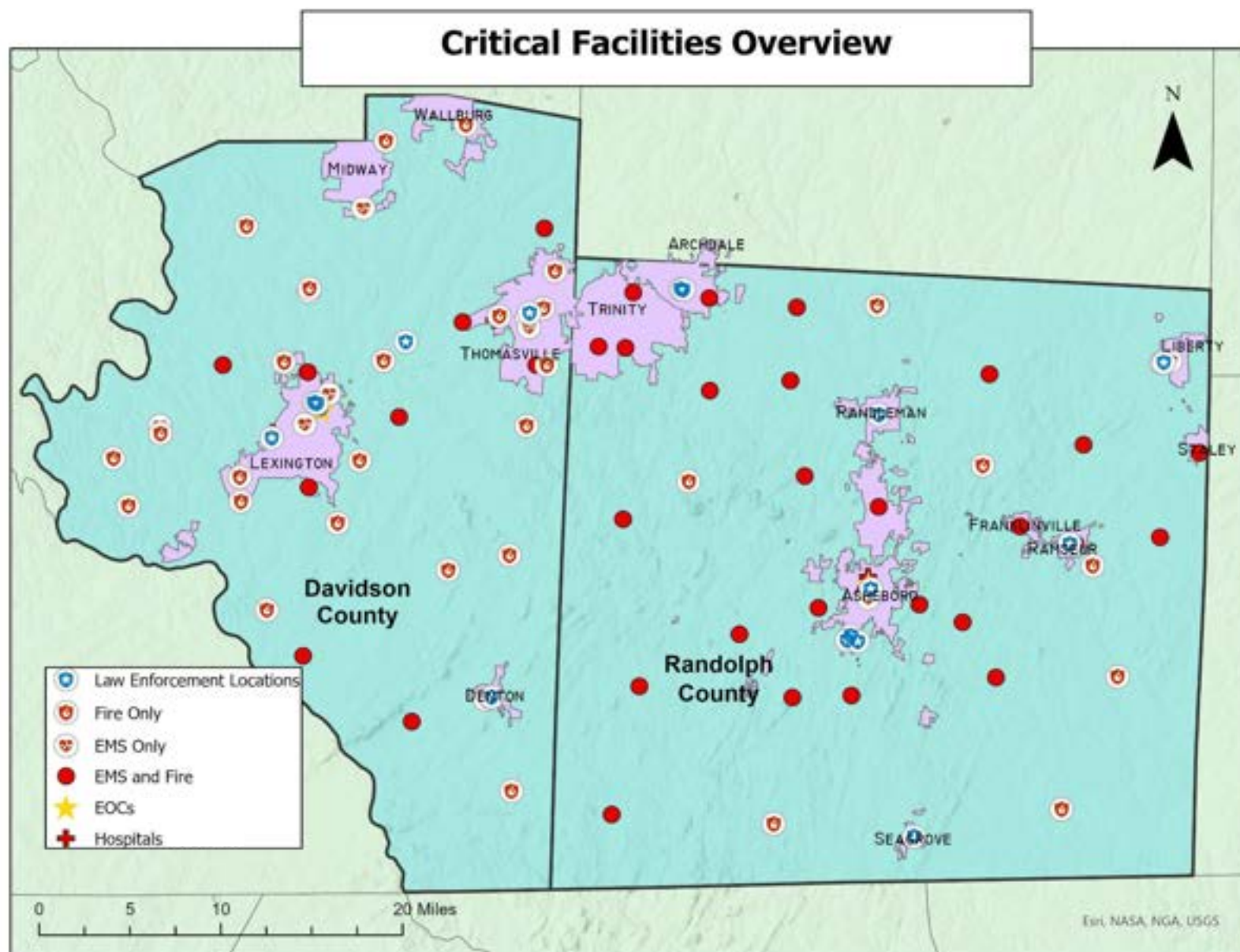


Figure 3- 5: Critical Facilities in the Planning Area

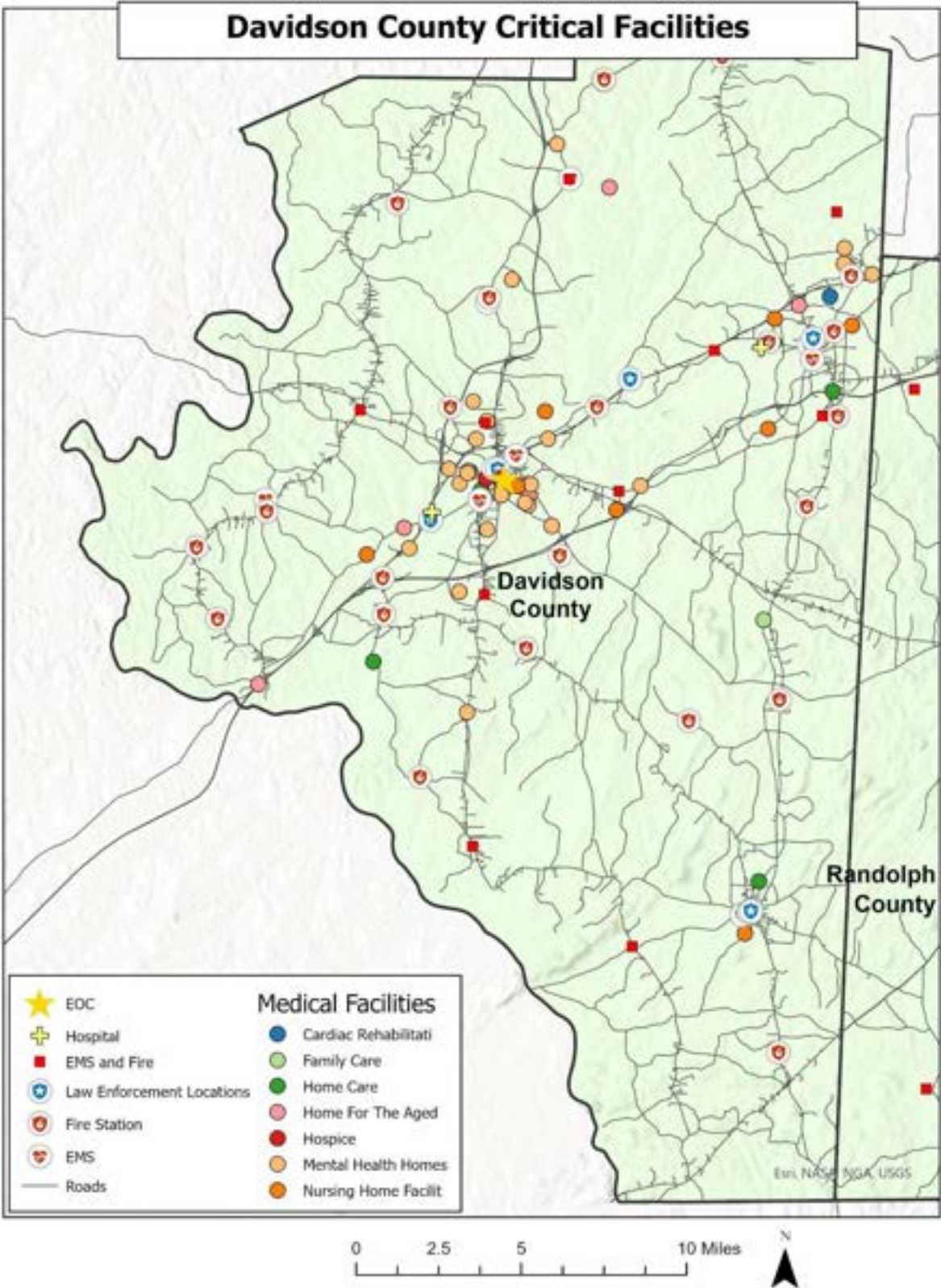


Figure 3- 6: Davidson County Critical Facilities

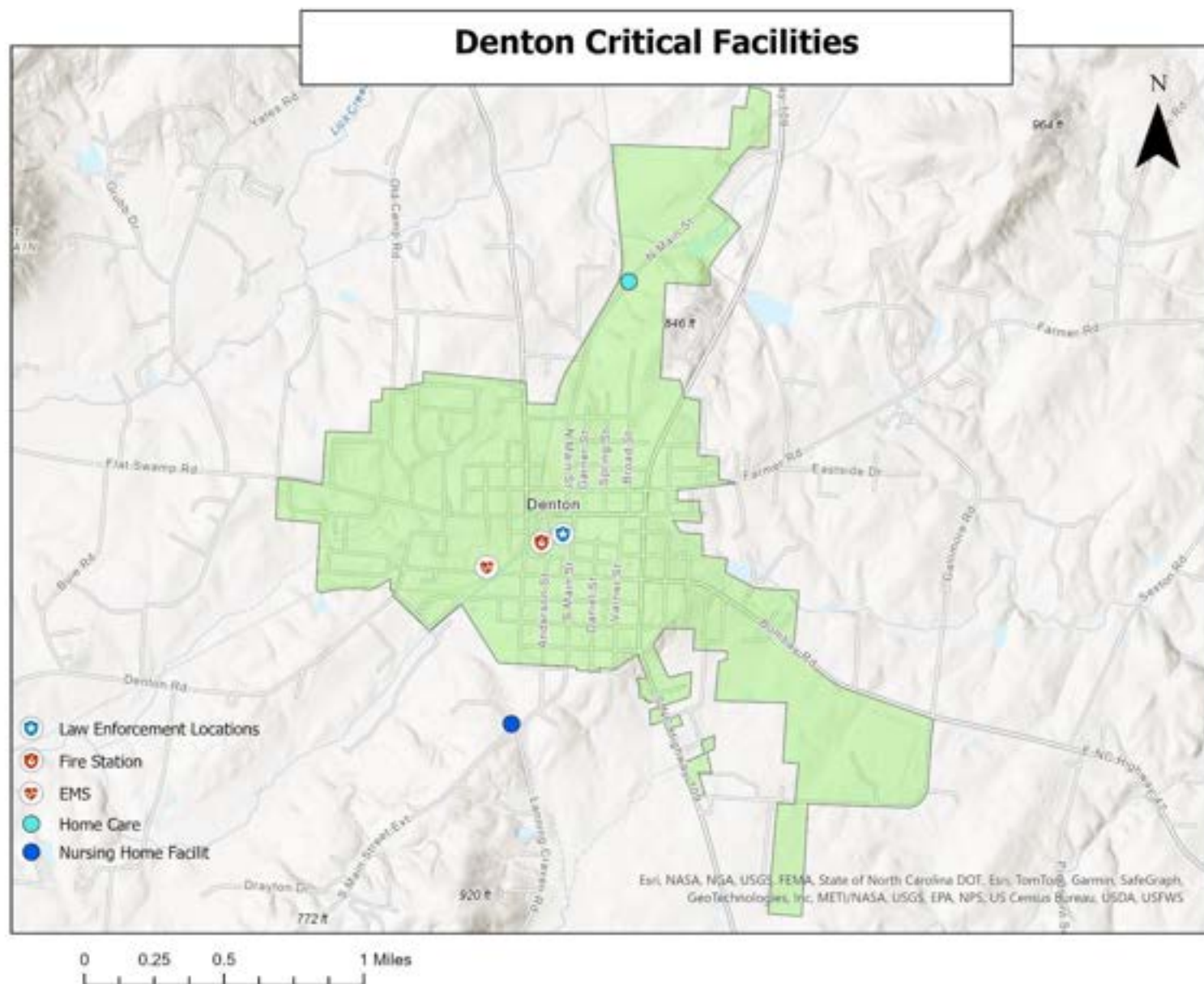


Figure 3- 7: Denton Critical Facilities

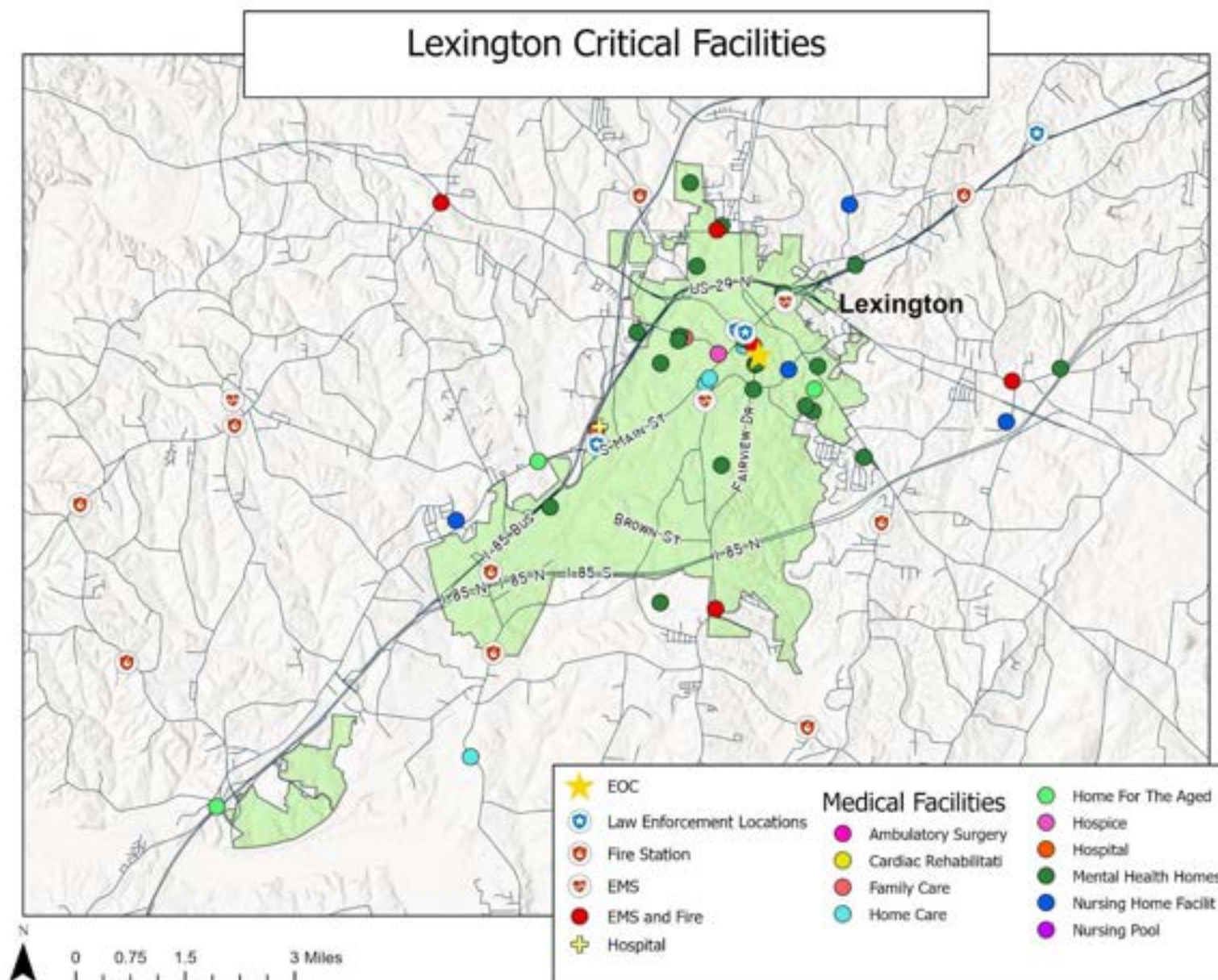


Figure 3- 8: Lexington Critical Facilities

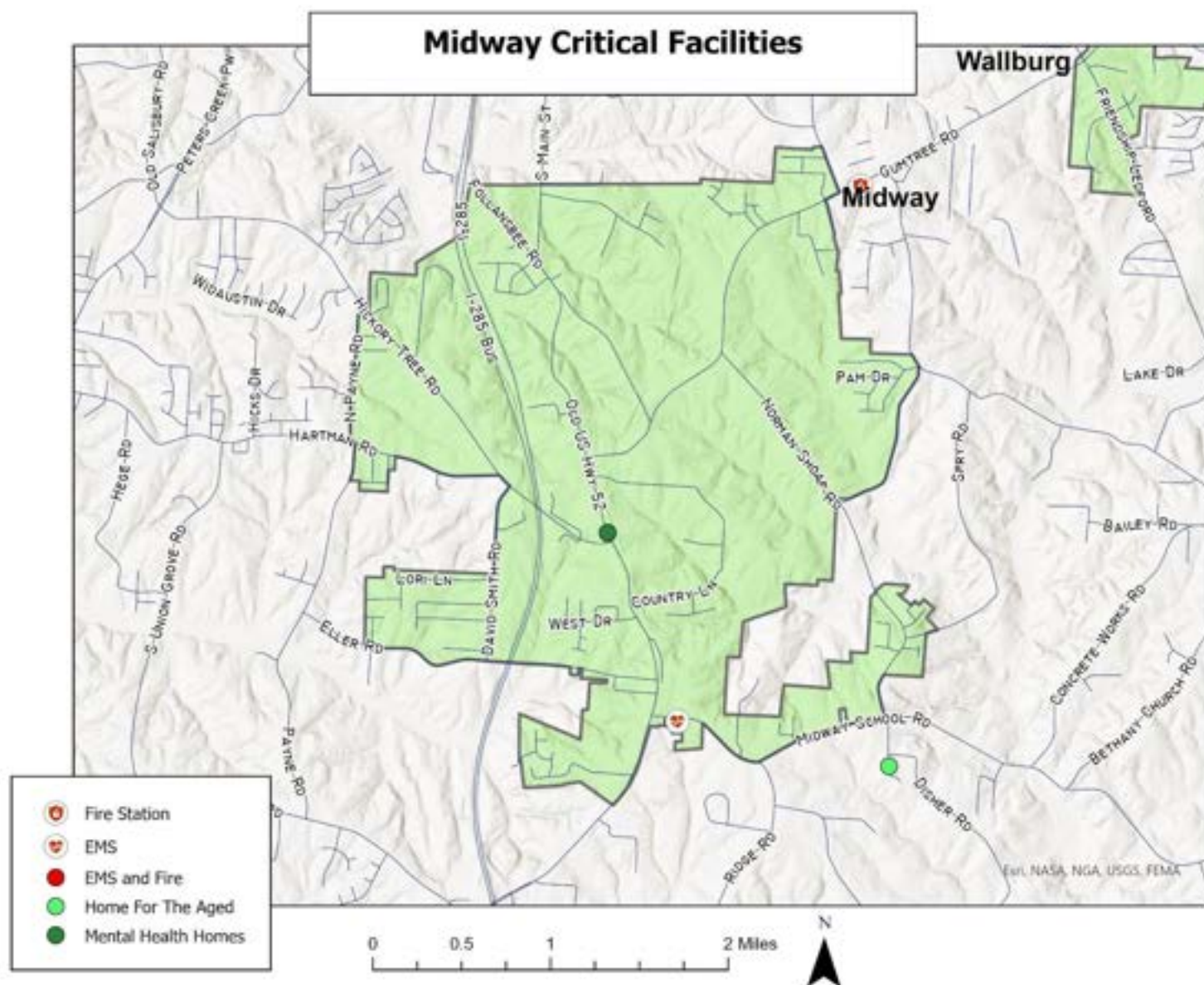


Figure 3- 9: Midway Critical Facilities

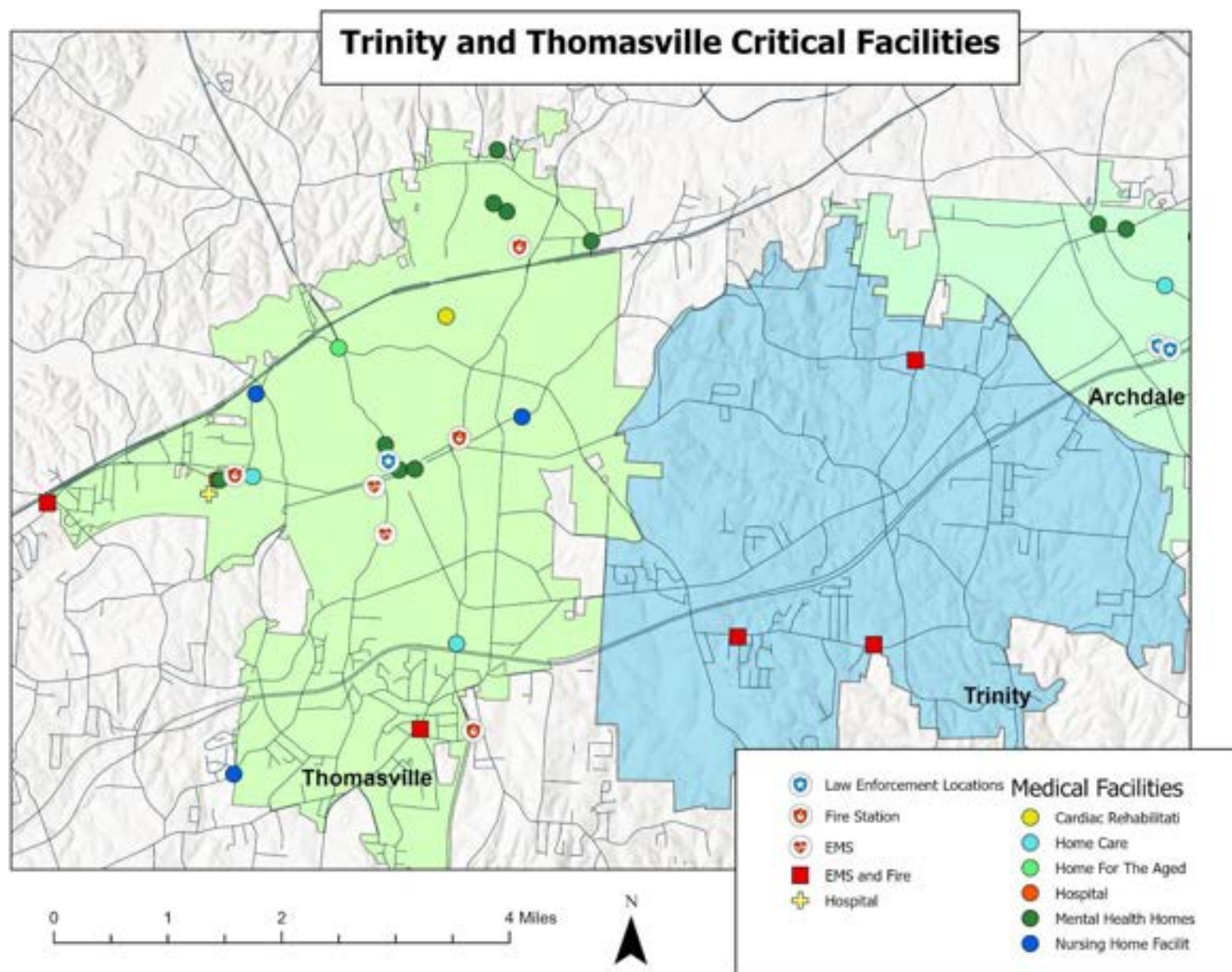


Figure 3- 10: Trinity and Thomasville Critical Facilities

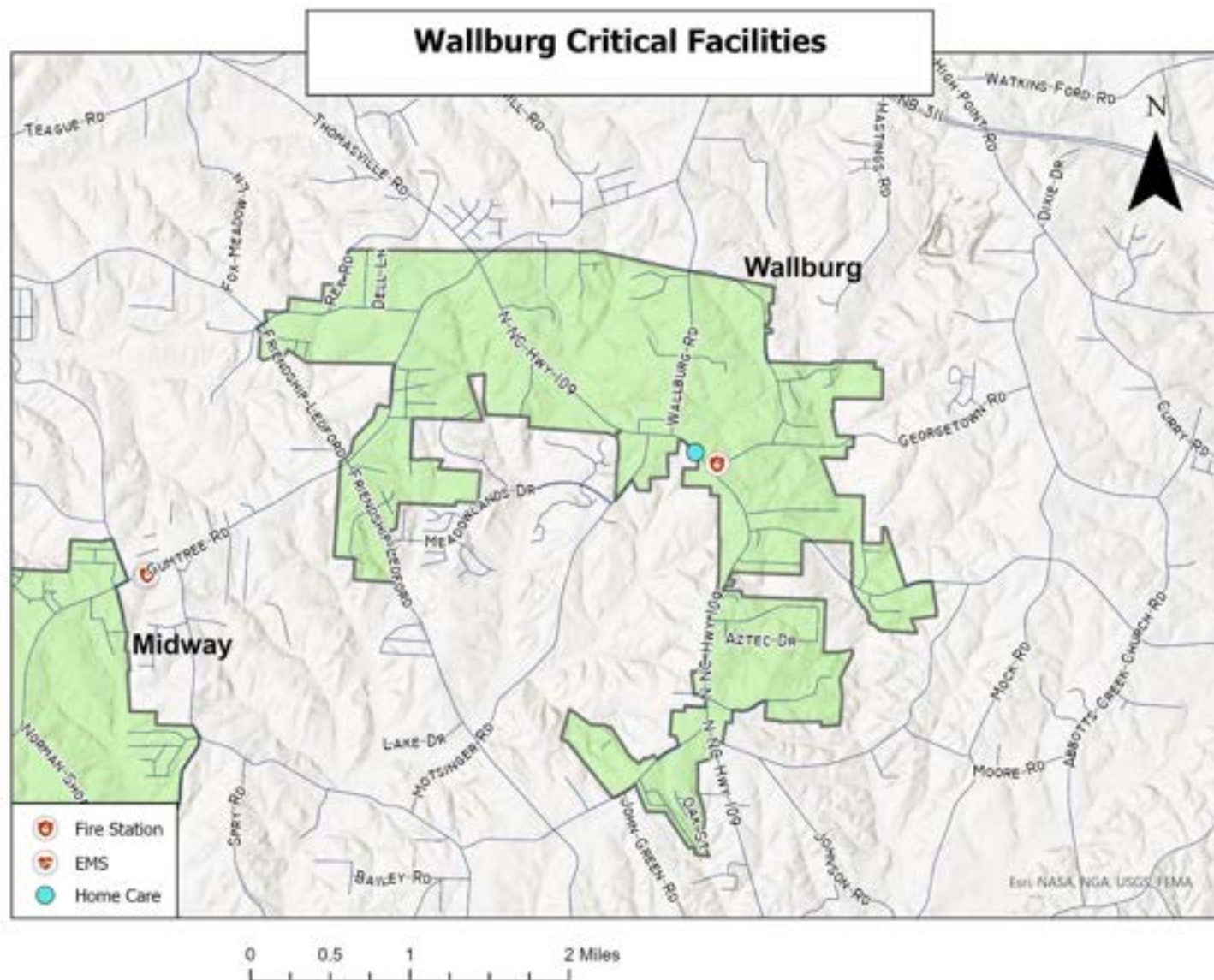


Figure 3- 11: Wallburg Critical Facilities

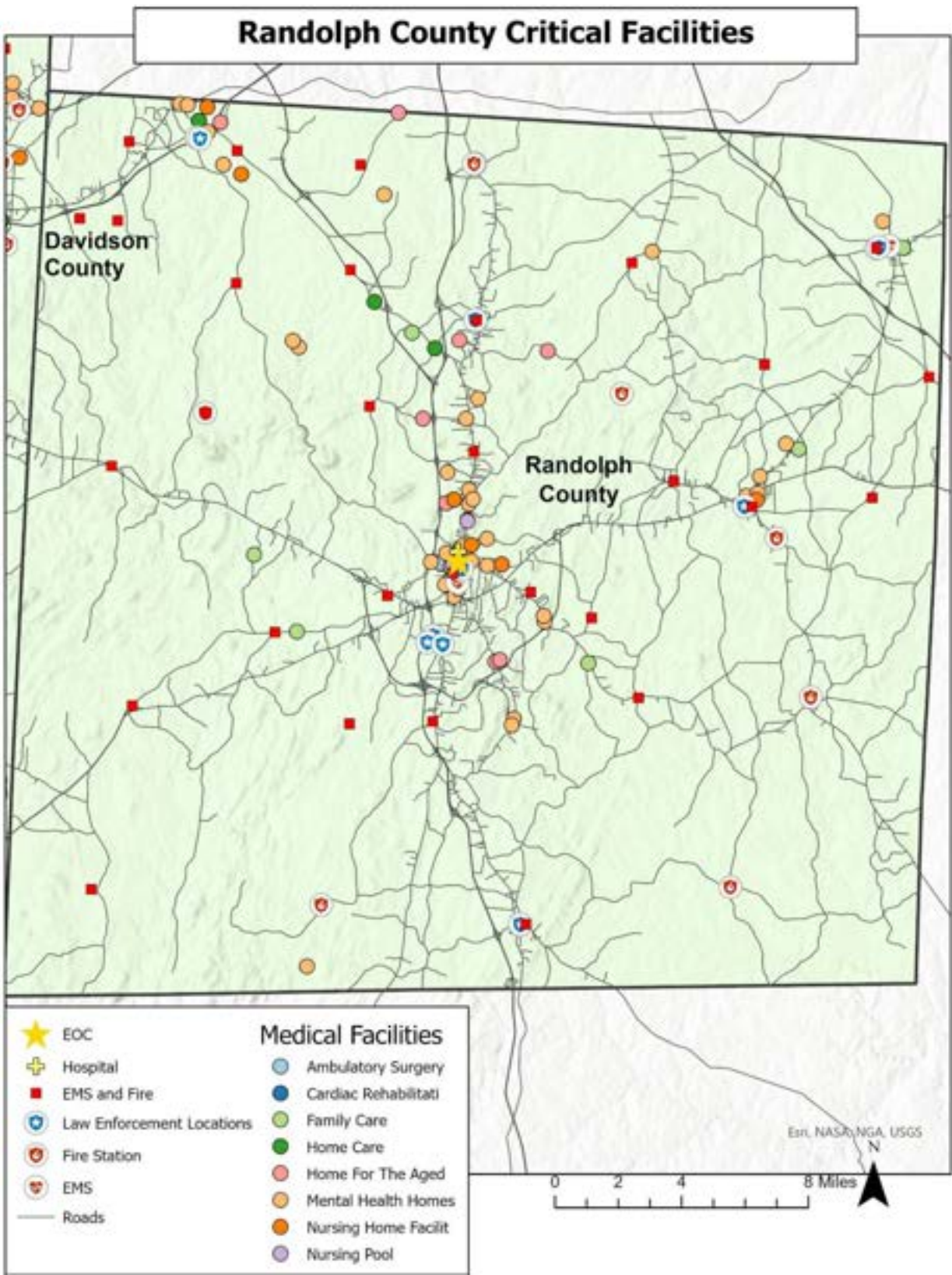


Figure 3- 12: Randolph County Critical Facilities

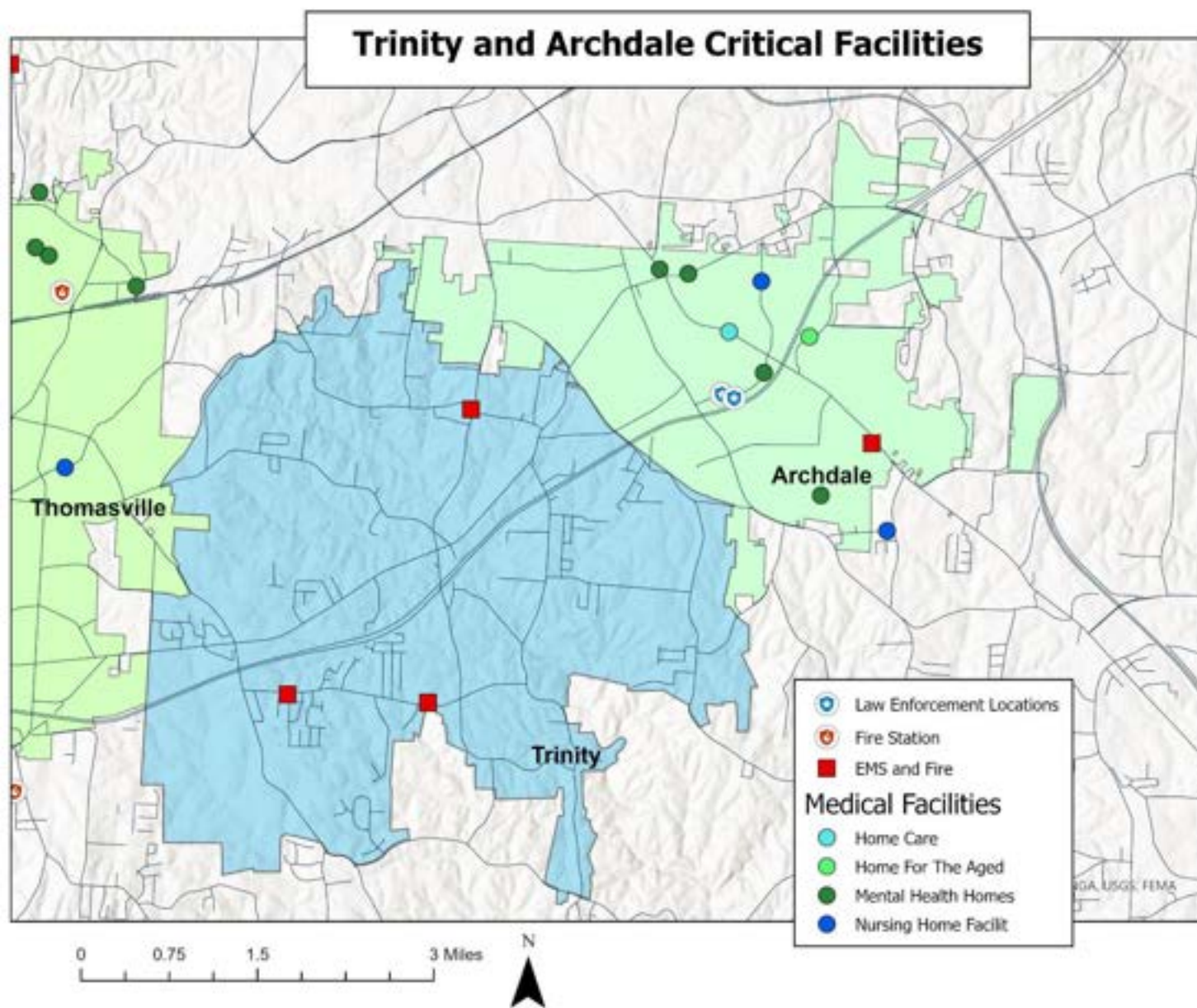


Figure 3- 13: Trinity and Archdale Critical Facilities

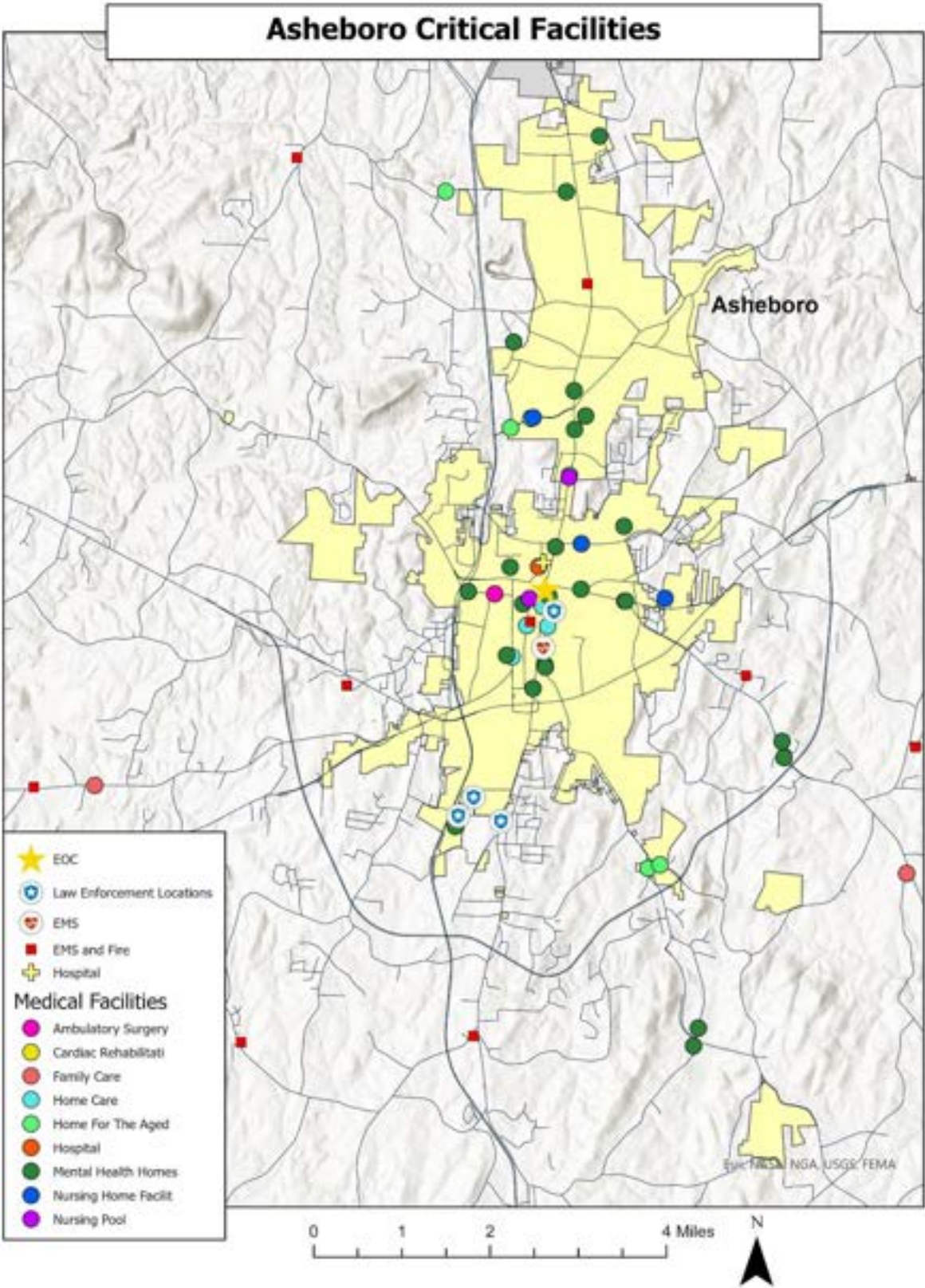


Figure 3- 14: Asheboro Critical Facilities

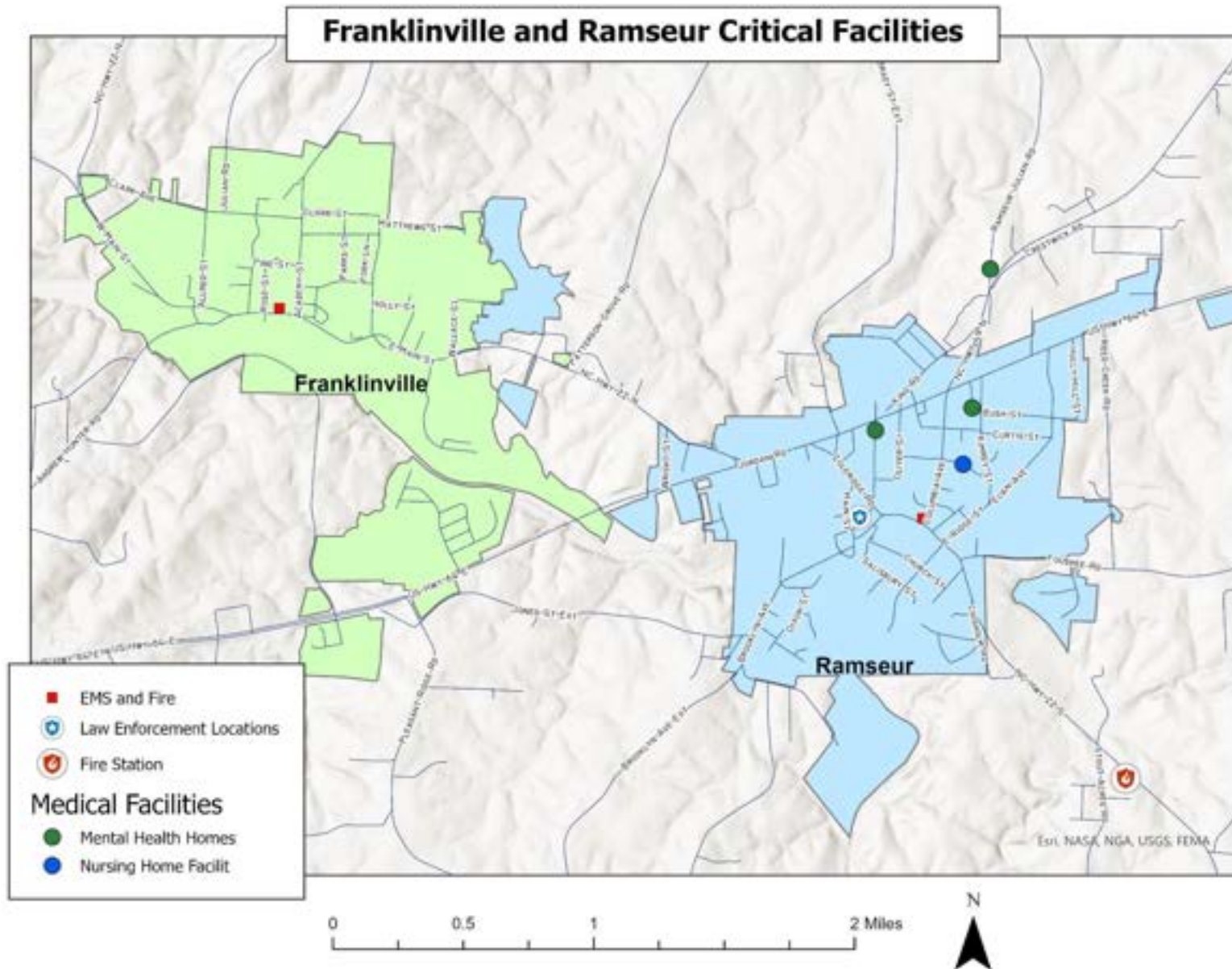


Figure 3- 15: Franklinville and Ramseur Critical Facilities

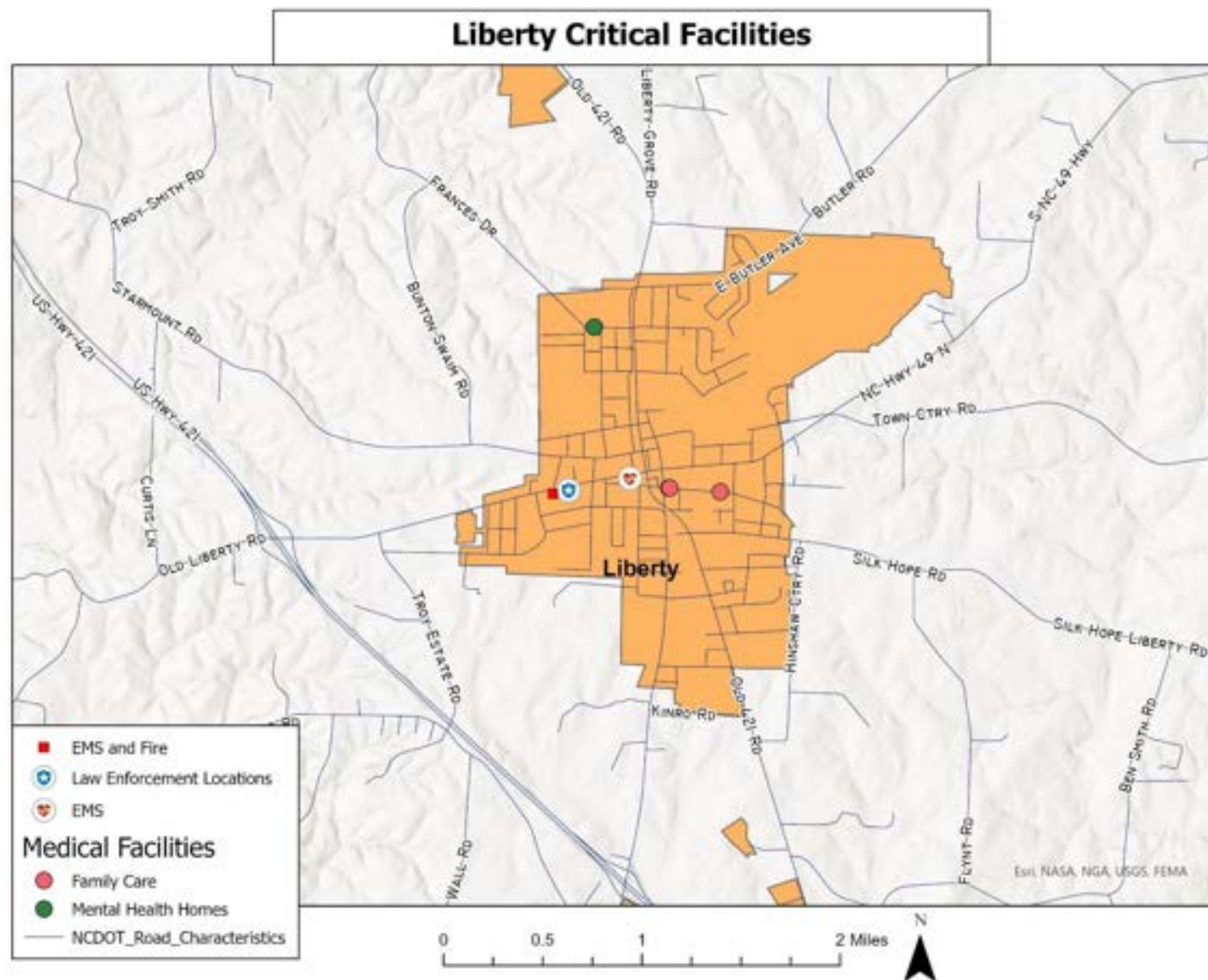


Figure 3- 16: Liberty Critical Facilities

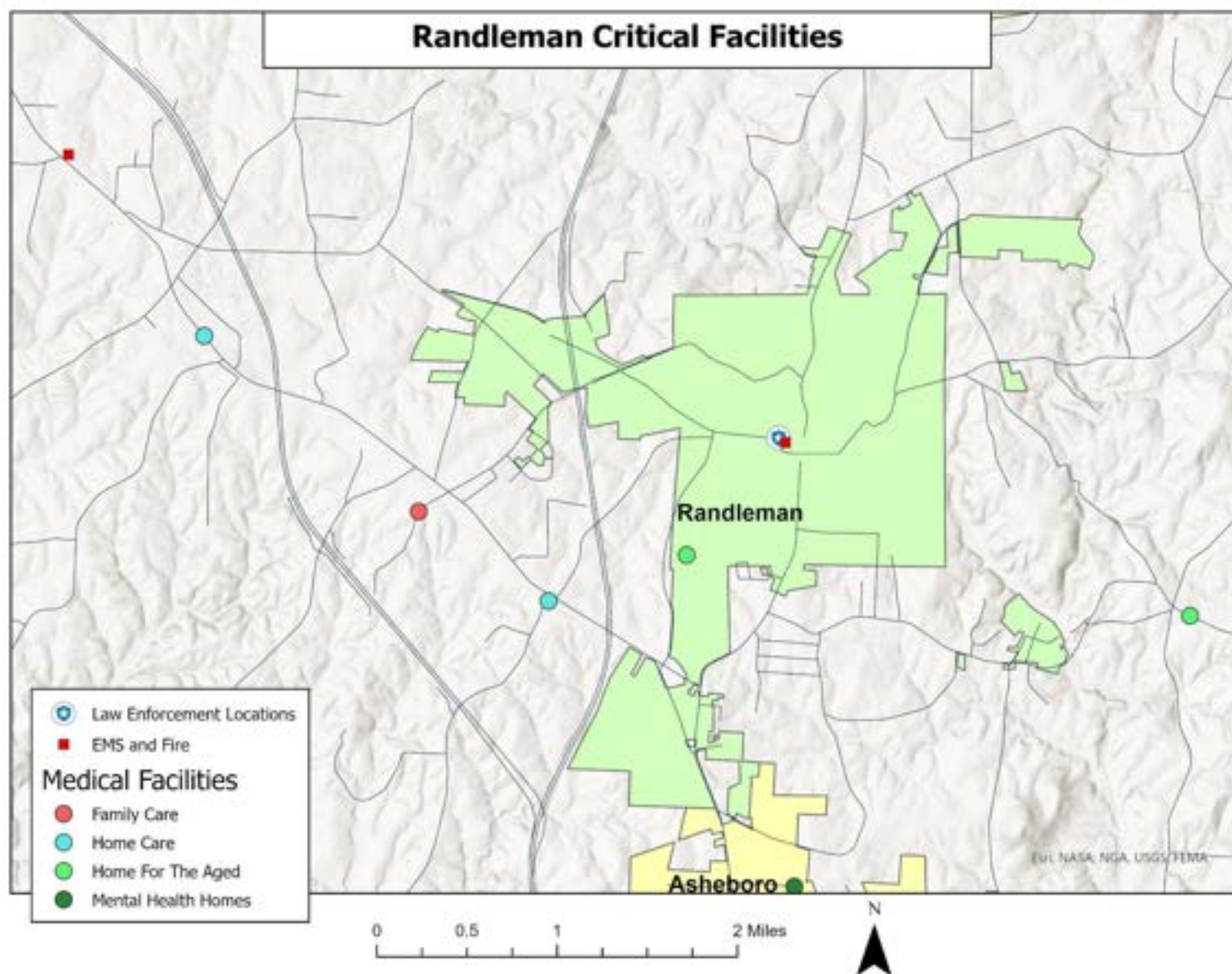


Figure 3- 17: Randleman Critical Facilities

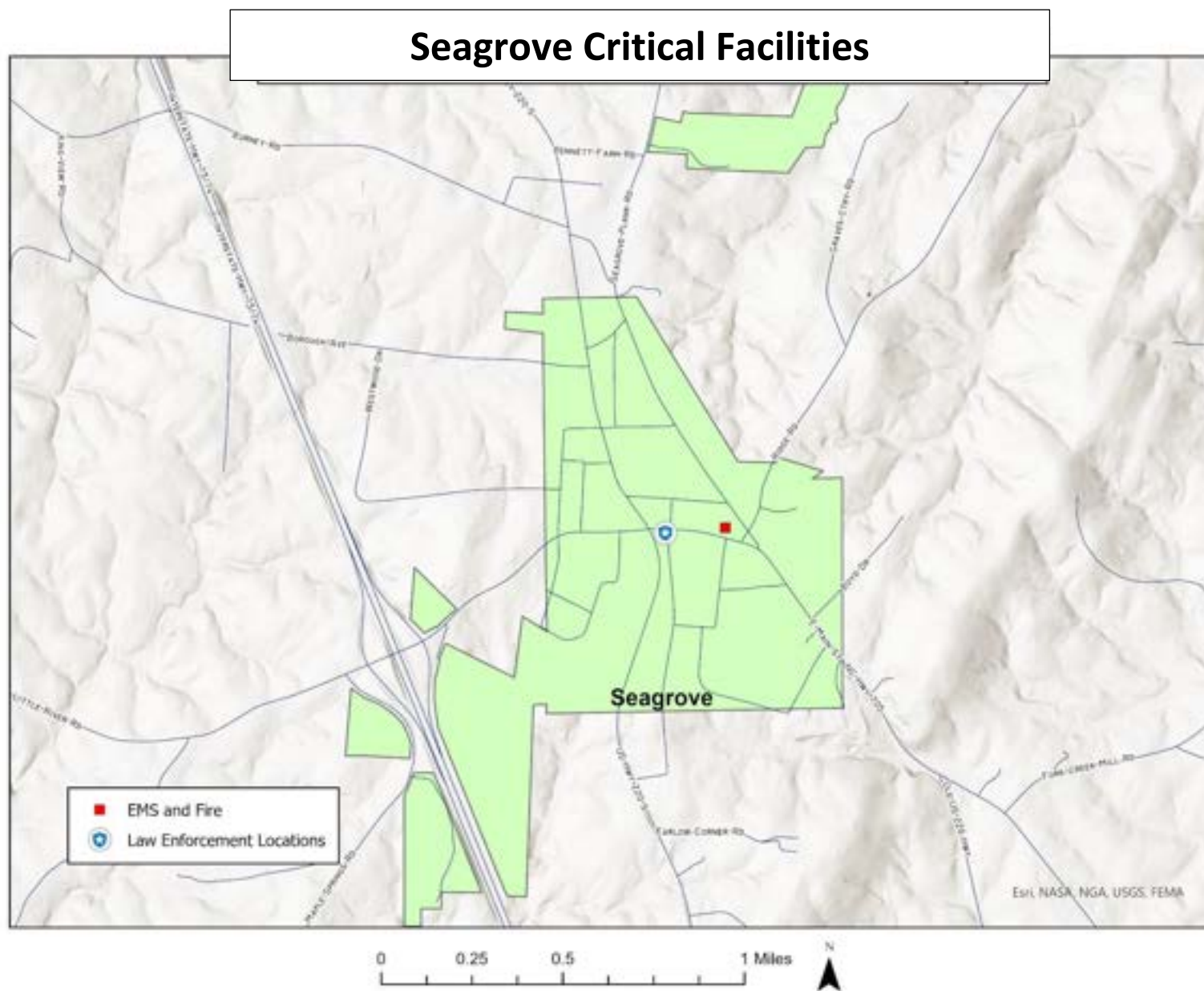


Figure 3- 18: Seagrove Critical Facilities

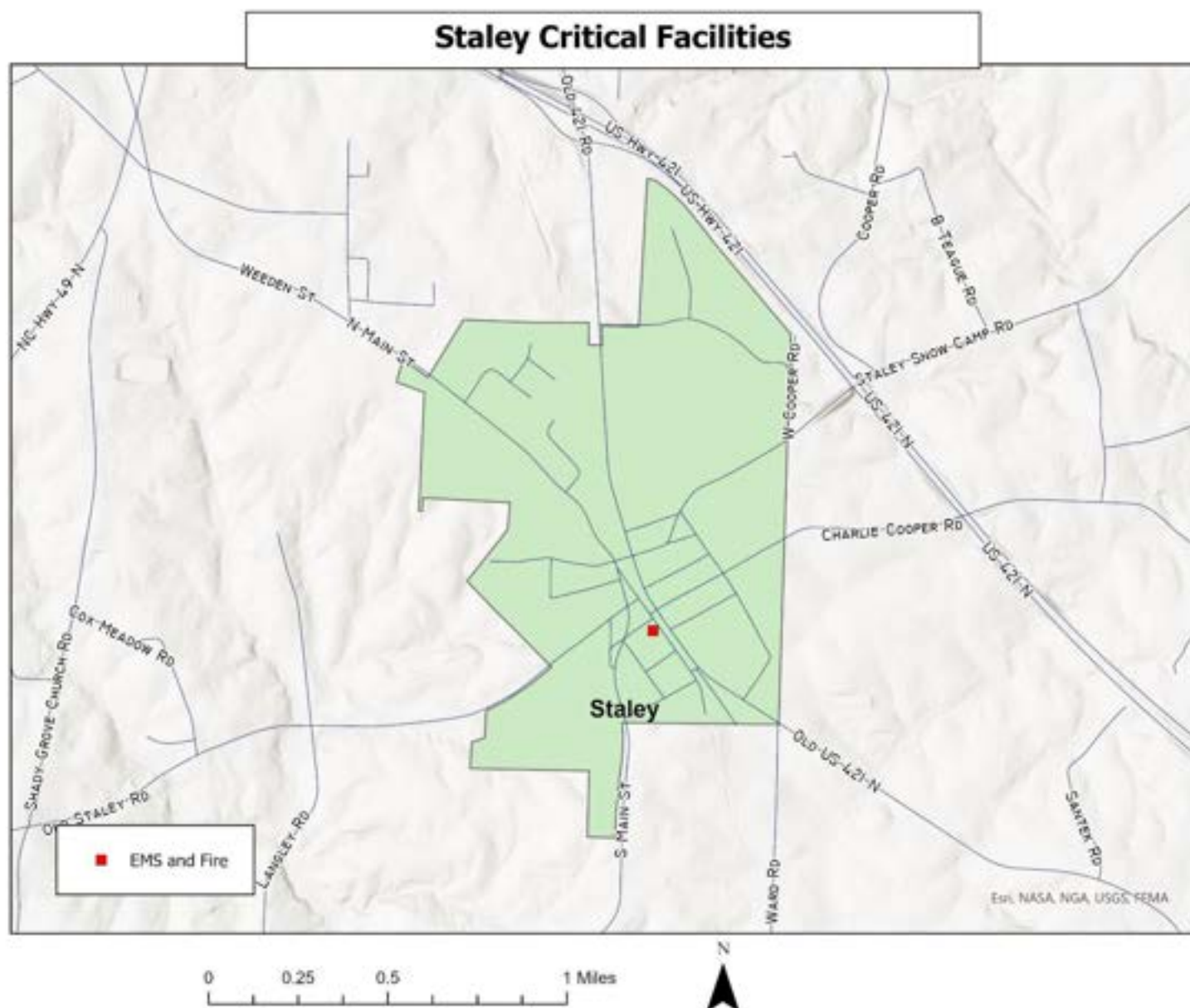


Figure 3- 19: Staley Critical Facilities

SECTION 4: HAZARD IDENTIFICATION

This section describes how the planning team identified the hazards to be included in the *Plan*. It consists of the following five subsections:

- ◆ 4.1 Overview;
- ◆ 4.2 Description of Full Range of Hazards;
- ◆ 4.3 Disaster Declarations;
- ◆ 4.4 Hazard Evaluation; and
- ◆ 4.5 Hazard Identification Results.

44 CFR Requirement

44 CFR Part 201.6(2)(i): The risk assessment shall include a description of the type, location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events.

4.1 Overview

The Region is vulnerable to a wide range of natural and human-caused hazards that threaten life and property. Current FEMA regulations and guidance under the Disaster Mitigation Act of 2000 (DMA 2000) require, at a minimum, an evaluation of a full range of natural hazards. An evaluation of human- caused hazards (i.e., technological hazards, terrorism, etc.) is encouraged, though not required, for plan approval. The Region has included an assessment of primarily natural hazards, but some human- caused hazards to have also been identified.

Upon a review of the full range of natural hazards suggested under FEMA planning guidance, the participating jurisdictions in the Region have identified several hazards that are to be addressed in their *Regional Hazard Mitigation Plan*. These hazards were identified through an extensive process that utilized input from the previous *Plan*, Planning Team members, research of past disaster declarations in the Region and review of the *North Carolina State Hazard Mitigation Plan*. Readily available information from reputable sources (such as Federal and State agencies) was also evaluated to supplement information from these key sources.

4.2 Description of Full Range of Hazards

Table 4- 1 lists the full range of hazards initially identified for inclusion in the *Plan* and provides a brief description for each. This table includes 26 individual hazards. Some of these hazards are interrelated or cascading, but for preliminary hazard identification purposes these individual hazards are broken out separately.

Table 4- 1: Descriptions of the Full Range of Initially Identified Hazards

HAZARD	DESCRIPTION
Atmospheric Hazards	
Avalanche	A rapid fall or slide of a large mass of snow down a mountainside.
Drought	A prolonged period of less than normal precipitation such that the lack of water causes a serious hydrologic imbalance. Common effects of drought include crop failure, water supply shortages, and fish and wildlife mortality. High temperatures, high winds, and low humidity can worsen drought conditions and make areas more susceptible to wildfire. Human demands and actions can hasten or mitigate drought-related impacts on local communities.
Extreme Cold	Extreme cold is generally considered to occur when the temperature is at or below freezing for a period. Often these events are associated with winter storms and other winter weather, but extreme cold events can occur on their own. Dangers associated with extreme cold events include frostbite and hypothermia among other impacts to people, and these events can often last for several days or weeks in a row.
Hailstorm	Any storm that produces hailstones that fall to the ground; usually used when the amount or size of the hail is considered significant. Hail is formed when updrafts in thunderstorms carry raindrops into parts of the atmosphere where the temperatures are below freezing.
Heat Wave/Extreme Heat	A heat wave may occur when temperatures hover 10 degrees or more above the average high temperature for the region and last for several weeks. Humid or muggy conditions, which add to the discomfort of high temperatures, occur when a “dome” of high atmospheric pressure traps hazy, damp air near the ground. Excessively dry and hot conditions can provoke dust storms and low visibility. A heat wave combined with a drought can be very dangerous and have severe economic consequences on a community.
Hurricane/Tropical Storm	Hurricanes and tropical storms are classified as cyclones and defined as any closed circulation developing around a 10 to 30 mile (on average) in diameter low-pressure center in which the winds rotate counterclockwise in the Northern Hemisphere (or clockwise in the Southern Hemisphere). When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name, and is closely monitored by the National Hurricane Center. When sustained winds reach or exceed 74 miles per hour the storm is deemed a hurricane. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation, and tornadoes. Coastal areas are also vulnerable to the additional forces of storm surge, wind-driven waves, and tidal flooding which can be more destructive than cyclone wind. Most hurricanes and tropical storms form in the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico during the official Atlantic hurricane season, which extends from June through November.
Lightning	Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a “bolt” when the buildup of charges becomes strong enough. This flash of light usually occurs within the

HAZARD	DESCRIPTION
	clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes, but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes thunder. On average, 73 people are killed each year by lightning strikes in the United States.
Nor'easter	Like hurricanes, nor'easters are ocean storms capable of causing substantial damage to coastal areas in the Eastern United States due to their associated strong winds and heavy surf. Nor'easters are named for the winds that blow in from the northeast and drive the storm up the East Coast along the Gulf Stream, a band of warm water that lies off the Atlantic coast. They are caused by the interaction of the jet stream with horizontal temperature gradients and generally occur during the fall and winter months when moisture and cold air are plentiful. Nor'easters are known for dumping heavy amounts of rain and snow, producing hurricane-force winds, and creating high surf that causes severe beach erosion and coastal flooding.
Severe Thunderstorm/High Wind	Thunderstorms are caused by air masses of varying temperatures meeting in the atmosphere. Rapidly rising warm moist air fuels the formation of thunderstorms. Thunderstorms may occur singularly, in lines, or in clusters. They can move through an area very quickly or linger for several hours. Thunderstorms may result in hail, tornadoes, or straight-line winds. Windstorms pose a threat to lives, property, and vital utilities primarily because of flying debris and can down trees and power lines.
Tornado	A tornado is a violently rotating column of air that has contact with the ground and is often visible as a funnel cloud. Its vortex rotates cyclonically with wind speeds ranging from as low as 40 mph to as high as 300 mph. Tornadoes are most often generated by thunderstorm activity when cool, dry air intersects and overrides a layer of warm, moist air forcing the warm air to rise rapidly. The destruction caused by tornadoes ranges from light to catastrophic depending on the intensity, size, and duration of the storm.
Winter Storm and Freeze	Winter storms may include snow, sleet, freezing rain, or a mix of these wintry forms of precipitation. Blizzards, the most dangerous of all winter storms, combine low temperatures, heavy snowfall, and winds of at least 35 miles per hour, reducing visibility to only a few yards. Ice storms occur when moisture falls and freeze immediately upon impact on trees, power lines, communication towers, structures, roads, and other hard surfaces. Winter storms and ice storms can down trees, cause widespread power outages, damage property, and cause fatalities and injuries to human life.
GEOLOGIC HAZARDS	
Earthquake	A sudden, rapid shaking of the Earth caused by the breaking and shifting of rock beneath the surface. This movement forces gradual building and accumulation of energy. Eventually, strain becomes so great that the energy is abruptly released, causing the shaking at the earth's surface which we know as an earthquake. Roughly 90 percent of all earthquakes occur at the boundaries where plates meet, although it is possible for earthquakes to occur entirely within plates.

HAZARD	DESCRIPTION
	Earthquakes can affect hundreds of thousands of square miles, cause damage to property measured in tens of billions of dollars, result in loss of life and injury to hundreds of thousands of persons and disrupt the social and economic functioning of the affected area.
Expansive Soils	Soils that will exhibit some degree of volume change with variations in moisture conditions. The most important properties affecting degree of volume change in a soil are clay mineralogy and the aqueous environment. Expansive soils will exhibit expansion caused by the intake of water and, conversely, will exhibit contraction when moisture is removed by drying. They often appear sticky when wet and are characterized by surface cracks when dry. Expansive soils become a problem when structures are built upon them without taking proper design precautions into account about soil type. Cracking walls and floors can be minor or can be severe enough for the home to be structurally unsafe.
Landslide	The movements of a mass of rock, debris, or earth down a slope when the force of gravity pulling down the slope exceeds the strength of the earth materials that comprise to hold it in place. Slopes greater than 10 degrees are more likely to slide, as are slopes where the height from the top of the slope to its toe is greater than 40 feet. Slopes are also more likely to fail if the vegetative cover is low and/or soil water content is high.
Land Subsidence/Sinkhole	The gradual settling or sudden sinking of the Earth's surface due to the subsurface movement of earth materials. Causes of land subsidence include groundwater pumping, aquifer system compaction, drainage of organic soils, underground mining, hydro compaction, natural compaction, sinkholes, and thawing permafrost.
Tsunami	A series of waves generated by an undersea disturbance such as an earthquake. The speed of a tsunami traveling away from its source can range from up to 500 miles per hour in deep water to approximately 20 to 30 miles per hour in shallower areas near coastlines. Tsunamis differ from regular ocean waves in that their currents travel from the water surface all the way down to the sea floor. Wave amplitudes in deep water are typically less than one meter; they are often barely detectable to the human eye. However, as they approach shore, they slow in shallower water, basically causing the waves from behind to effectively "pile up," and wave heights increase dramatically. As opposed to typical waves which crash at the shoreline, tsunamis bring with them a continuously flowing 'wall of water' with the potential to cause devastating damage in coastal areas located immediately along the shore.
Volcano	A mountain that opens downward to a reservoir of molten rock below the surface of the earth. While most mountains are created by forces pushing up the earth from below, volcanoes are different in that they are built up over time by an accumulation of their own eruptive products: lava, ash flows, and airborne ash and dust. Volcanoes erupt when pressure comes from gases and the molten rock beneath becomes strong enough to cause an explosion.
HYDROLOGIC HAZARDS	

HAZARD	DESCRIPTION
Dam and Levee Failure	Dam failure is the collapse, breach, or other failure of a dam structure resulting in downstream flooding. In the event of a dam failure, the energy of the water stored behind even a small dam can cause loss of life and severe property damage if development exists downstream of the dam. Dam failure can result from natural events, human-induced events, or a combination of the two. The most common cause of dam failure is prolonged rainfall that produces flooding. Failures due to other natural events such as hurricanes, earthquakes, or landslides are significant because there is generally little or no advance warning.
Erosion	Erosion is the gradual breakdown and movement of land due to both physical and chemical processes of water, wind, and general meteorological conditions. Natural, or geological, erosion has occurred since the Earth's formation and continues at a very slow and uniform rate each year.
Flood	The accumulation of water within a water body results in the overflow of excess water onto adjacent lands, usually floodplains. The floodplain is the land adjoining the channel of a river, stream ocean, lake, or other watercourse or water body that is susceptible to flooding. Most floods fall into the following three categories: riverine flooding, coastal flooding, or shallow flooding (where shallow flooding refers to sheet flow, ponding, and urban drainage).
Storm Surge	A storm surge is a large dome of water often 50 to 100 miles wide and rising anywhere from four to five feet in a Category 1 hurricane up to more than 30 feet in a Category 5 storm. Storm surge heights and associated waves are also dependent upon the shape of the offshore continental shelf (narrow or wide) and the depth of the ocean bottom (bathymetry). A narrow shelf, or one that drops steeply from the shoreline and subsequently produces deep water close to the shoreline, tends to produce a lower surge but higher and more powerful storm waves. Storm surge arrives ahead of a storm's actual landfall and the more intense the hurricane is, the sooner the surge arrives. Storm surge can be devastating to coastal regions, causing severe beach erosion and property damage along the immediate coast. Further, water rise caused by storm surge can be very rapid, posing a serious threat to those who have not yet evacuated flood-prone areas.
OTHER HAZARDS	
Wildfire	An uncontrolled fire burning in an area of vegetative fuels such as grasslands, brushes, or woodlands. Heavier fuels with high continuity, steep slopes, high temperatures, low humidity, low rainfall, and high winds all work to increase risk for people and property located within wildfire hazard areas or along the urban/wildland interface. Wildfires are part of the natural management of forest ecosystems, but most are caused by human factors. Over 80 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly extinguishing campfires. The second most common cause of wildfire is lightning.
Solar Flare	According to National Oceanic and Atmospheric Administration (NOAA), solar flares are large outbursts of electromagnetic radiation from the Sun lasting from minutes to hours. They are caused by magnetic reconnection associated with

HAZARD	DESCRIPTION
	large-scale eruptions of magnetic flux called “coronal mass ejections” (CMEs). Solar flares occur in a large range of strengths and are classified on a logarithmic scale based on their intensity in the 1-minute averaged NOAA/GOES XRS instrument’s 0.1 -- 0.8 nm spectral band, with the smallest flares being labeled “A” flares, the next (10 times) larger called “B” flares, the next larger “C” flares, followed by the fairly large “M” flares, and finally the largest “X” flares.
Nuclear Accident	A nuclear and radiation accident is defined by the International Atomic Energy Agency as “an event that has led to significant consequences to people, the environment, or the facility.” Often, this type of incident results from damage to the reactor core of a nuclear power plant which can release radioactivity into the environment. The degree of exposure from nuclear accidents has varied from serious to catastrophic.
Terror Threat	Terrorism is defined by FEMA as, “the use of force or violence against persons or property in violation of the criminal laws of the United States for purposes of intimidation, coercion, or ransom.” Terrorist acts may include assassinations, kidnappings, hijackings, bomb scares and bombings, cyberattacks (computer-based), and the use of chemical, biological, nuclear and radiological weapons.
Public Health/Infectious Disease Threat	Public health threats are often defined by an infectious disease that involves a biological agent/disease that may result in mass casualties or an outbreak of symptoms in those affected. Often emerging diseases are the greatest threat because they are new or varied iterations of existing threats, and the population may not have built up a collective immunity to the disease.

Table 4- 2 documents the decisions made by the planning team as it relates to those hazards that were to be identified, analyzed, and addressed through the development of this plan. This table lists whether the hazard was included in the 2023 State of North Carolina Hazard Mitigation Plan and the Davidson Randolph Hazard Mitigation Plan. This table summarizes those hazards identified for inclusion in this plan as well as those that were not included and the reason for the decision.

Table 4- 2: Hazard Evaluation

Hazard	Included in 2023 State Plan?	Included in the 2023 Davidson Randolph Plan?	Identified as a significant hazard to be included in this plan update?
Coastal Hazards (coastal flooding, coastal erosion, storm surge & sea level rise)	Yes	No	No
Dam/Levee Failure	Yes	Yes	Yes
Drought	Yes	Yes	Yes
Earthquake	Yes	Yes	Yes

Hazard	Included in 2023 State Plan?	Included in the 2023 Davidson Randolph Plan?	Identified as a significant hazard to be included in this plan update?
Erosion	No	No	No
Extreme Heat	No	Yes	Yes
Hurricane/Tropical Storm	Yes	Yes	Yes
Flooding	Yes	Yes	Yes
Severe Weather (thunderstorm, wind, lightning, & hail)	Yes	Yes	Yes
Sinkhole	Yes	No	No
Tornado	Yes	Yes	Yes
Wildfire	Yes	Yes	Yes
Winter Weather	Yes	Yes	Yes
Infectious Disease	Yes	No	No

The following hazards were evaluated by the planning committee and determined to be non-prevalent hazards that should not be included in the plan:

- **Avalanche** – According to the Federal Emergency Management Agency’s Multi-Hazard Identification and Risk Assessment, this hazard is only relevant to the western United States.
- **Erosion**- No known issues or historical events regarding erosion. Coastal erosion is discussed in the North Carolina State Hazard Mitigation Plan but only for coastal areas (there is no discussion of riverine erosion). The Region is not in a coastal area.
- **Landslide** – Based on the national U.S. Geological Survey map of landslide susceptibility and incidence, Robeson County rests within a zone of low incidence. The topography of the upper coastal plain does not provide enough elevation relief to support a landslide event.
- **Tsunami** – According to a 2009 report by the USGS titled Regional Assessment of Tsunami Potential in the Gulf of Mexico, there are no significant earthquake sources within the Atlantic Ocean that are likely to generate tsunamis. Furthermore, the Region lies over 40 miles inland from the coast.
- **Volcano** – There are no known active volcanoes in the United States east of central New Mexico.

4.3 Disaster Declarations

Disaster declarations provide initial insight into the hazards that may impact the planning area. Since 2018, 9 disaster declarations have been reported by FEMA in the Region. This includes five storms related to severe winter weather and four hurricanes and a Tropical Storm.

However, this list is not inclusive of many of the major disaster events that impacted the Region, and which may have resulted in Small Business Administration disaster loan assistance or no federal assistance.

Table 4- 3: Disaster Declarations between 2018 and 2024

Disaster Name	Disaster Number	Date	County(s)
North Carolina Tropical Storm Michael	DR-4412-NC	1/31/2019	Davidson, Randolph
Hurricane Dorian	EM-3423-NC; DR-4465-NC	9/3/2019	Davidson, Randolph
Covid-19	EM-3471-NC; DR-4487-NC	3/13/2020	Davidson, Randolph
North Carolina Severe Storms, Tornadoes, and Flooding	DR-4543-NC	5/8/2020	Randolph
North Carolina Hurricane Isaias	EM-3534-NC	8/2/2020	Davidson, Randolph
North Carolina Tropical Storm Eta	DR-4588-NC	3/3/2021	Davidson
North Carolina Hurricane Ian	EM-3586-NC	10/1/2022	Davidson, Randolph
North Carolina Tropical Storm Debby	EM-3608-NC	8/6/2024	Davidson, Randolph
North Carolina Hurricane Helene	EM-3617-NC	9/26/2024	Davidson, Randolph

4.4 Hazard Evaluation

Table 4- 4 documents the evaluation process used for determining which of the initially identified hazards are considered significant enough to warrant further evaluation in the risk assessment. For each hazard considered, the table indicates whether it was identified as a significant hazard to be further assessed, how it was made, and why it was made. The table works to summarize not only those hazards that *were* identified (and why) but also those that *were not* identified along with the reasoning for their exclusion from the *Plan*. Hazard events not identified for inclusion may be addressed during future evaluations and risk assessment updates if deemed necessary by the Hazard Mitigation Planning Team during the Plan update process.

Table 4- 4: Documentation of the Hazard Evaluation Process

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
ATMOSPHERIC HAZARDS			
Avalanche	NO	- Review of the <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i>. - Review of US Forest Service National Avalanche Center website.	- Avalanche hazard was removed from the <i>North Carolina State Hazard Mitigation Plan</i> after determining the mountain elevation in Western North Carolina did not have enough snow to produce this hazard. - Avalanche is not included in the previous <i>Hazard Mitigation Plan</i>. - There is no risk of avalanche events in North Carolina.
Drought	YES	- Review of the <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i>. - Review of the NC State Climate Office website.	- Drought is a normal part of virtually all climatic regimes, including areas with high and low average rainfall. - Droughts are discussed in <i>North Carolina State Hazard Mitigation Plan</i> as a lesser hazard. - Drought is included in the previous <i>Hazard Mitigation Plan</i>. - There are reports of moderate to extreme drought conditions in eleven of the last fourteen years in the Region according to the NC State Climate Office.
Extreme Cold	NO	- Review of the <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous Hazard Mitigation Plans - Review of NOAA NCDC Storm Events Database.	- Because North Carolina is in the southeastern United States, it rarely experiences extreme cold events that are on par with other locations in the country. - Extreme cold events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> as a greater hazard. - Extreme cold was not included in the previous <i>Hazard Mitigation Plan</i>.
Hailstorm	YES (included with	Review of <i>North</i>	Although hailstorms occur

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
	Severe Weather)	<i>Carolina State Hazard Mitigation Plan.</i> - Review of the previous <i>Hazard Mitigation Plan</i> - Review of NOAA NCEC Storm Events Database.	primarily in the Midwestern states, they do occur in every state on the mainland U.S. Most inland regions experience hailstorms at least two or more days each year. Hailstorm events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> under the Severe Thunderstorm hazard.
Heat Wave/Extreme Heat	YES	- Review of the <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous Hazard Mitigation Plans - Review of NOAA NCEC Storm Events Database.	- Many areas of the United States are susceptible to heat waves, including North Carolina. - The <i>North Carolina State Hazard Mitigation Plan</i> reports the central portion of the State as having a moderate vulnerability. - Extreme (severe) heat was included in the previous <i>Hazard Mitigation Plan</i> under the extreme temperatures hazard.
Hurricane/Tropical Storm	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i> - An analysis of NOAA historical tropical cyclone tracks and National Hurricane Center Website. - Review of NOAA NCEC Storm Events Database. - Review of historical presidential disaster declarations.	- The Atlantic and Gulf regions are most prone to landfall by hurricanes and tropical storms. - Hurricane and tropical storm events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> and are listed as a greater hazard. - Hurricanes and tropical weather were addressed in the previous <i>Hazard Mitigation Plan</i>.
Lightning	YES (as Severe Weather)	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous	Lightning events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> as part of the severe thunderstorm hazard.

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
		<i>Hazard Mitigation Plan</i> - Review of NOAA NCDRC Storm Events Database. - Review of Vaisala's NLDN Lightning Flash Density Map.	Lightning is included in the previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i> under severe thunderstorms.
Nor'easter	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i> - Review of NOAA NCDRC Storm Events Database.	- Nor'easters are discussed in the North Carolina State Hazard Mitigation Plan. The Piedmont Region, which includes the Region, has relatively low vulnerability compared to the state. - Nor'easters were not identified in the previous hazard mitigation plans. NCDRC does not report any nor'easter activity for the Region. However, nor'easters may have affected the area as severe winter storms. In this case, the activity would be reported under winter storm events.
Severe Thunderstorm/High Wind	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plans</i> - Review of NOAA NCDRC Storm Events Database. - Review of historical presidential disaster declarations.	- Severe thunderstorm events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> and are identified in conjunction with the tornado hazard as a lesser hazard. - Severe thunderstorm events were addressed in the previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i>.

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
Tornado	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous Hazard Mitigation Plans - Review of NOAA NCDC Storm Events Database. - Review of historical presidential disaster declarations.	- Tornado events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i>. The Piedmont Region, which includes the Region, has relatively low vulnerability but it is the highest vulnerability in the State. - Tornado events were addressed in the previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i>.
Winter Storm	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of NOAA NCDC Storm Events Database. - Review of historical presidential disaster declarations.	- Severe winter storms, including snowstorms and ice storms, are discussed in the <i>North Carolina State Hazard Mitigation Plan</i>. - Winter snow and ice storm events were addressed in the previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i>.
GEOLOGIC HAZARDS			
Earthquake	YES	- Review of FEMA's Multi-Hazard Identification and Risk Assessment. - Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the National Geophysical Data Center. - Review of USGS Seismic Hazard Maps.	- Although the zone of greatest seismic activity in the United States is along the Pacific Coast, eastern regions have experienced significant earthquakes. - Earthquake events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> and the Region is at low to moderate risk to an earthquake event. - Earthquake was included in the previous <i>Plan</i>. - Earthquakes have occurred in and around the State of North Carolina in the past. The state is affected by the Charleston and the New Madrid (near Missouri) Fault lines which have generated a magnitude 8.0 earthquake in the last 200 years.

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
			- Four events are known to have occurred in the Region according to the National Geophysical Data Center. The greatest MMI report was a VII Magnitude. - According to USGS seismic hazard maps, the peak ground acceleration (PGA) with a 10% probability of exceedance in fifty years for the Region is approximately two to four %g (where g is acceleration of gravity) FEMA recommends that earthquakes be further evaluated for mitigation purposes in areas with a PGA of three %g or more.
Expansive Soils	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous Hazard Mitigation Plans - Review of USDA Soil Conservation Service's Soil Survey.	- The effects of expansive soils are most prevalent in parts of the Southern, Central, and Western U.S. - Expansive soils are identified in the <i>North Carolina State Hazard Mitigation Plan</i>; however, the Piedmont Region, which includes Davidson and Randolph Counties, does not identify expansive soils as a major hazard. - The Region is in an area that has little to no clay swelling potential. - The previous <i>Plan</i> did not identify expansive soils as a potential hazard.
Landslide	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i>. - Review of USGS Landslide Incidence and Susceptibility Hazard Map.	- Landslide/debris flow events are discussed in the <i>North Carolina State Hazard Mitigation Plan</i>, and the Piedmont Region, which includes Davidson and Randolph County, has moderate vulnerability compared to the state. - The previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i> do address landslides.

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
		Review of the North Carolina Geological Survey database of historic landslides.	- USGS landslide hazard maps indicate that a moderate incidence rate is found in the eastern part of the Region. - Data provided by NCGS indicate there are no recorded landslide events in the Region.
Land Subsidence/Sink hole	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i>	- Land subsidence affects at least forty- five states, including North Carolina. However, because of the broad range of causes and impacts, there has been limited national focus on this hazard. <i>The North Carolina State Hazard Mitigation Plan</i> delineates certain areas that are susceptible to land subsidence hazards in North Carolina; the Region has low vulnerability compared to the state.
Tsunami	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i>	- No record exists of a catastrophic Atlantic basin tsunami impacting the mid-Atlantic coast of the United States. - Tsunami inundation zone maps are not available for communities located along the U.S. East Coast. - Tsunamis are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> and described as a greater hazard for the State. However, the Piedmont Region, which includes Davidson and Randolph Counties, scored a zero for tsunami hazard risk. - The previous <i>County Multi-jurisdictional Hazard Mitigation Plan</i> did not address tsunamis. - FEMA mitigation planning guidance suggests that locations along the U.S. East Coast have a relatively low tsunami risk and

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
			need not conduct a tsunami risk assessment at this time.
Volcano	NO	- Review of the previous <i>Hazard Mitigation Plan</i> - Review of USGS Volcano Hazards Program website.	- There are no active volcanoes in North Carolina. - There has not been a volcanic eruption in North Carolina in over 1 million years. - No volcanoes are located near the Region.
HYDROLOGIC HAZARDS			
Dam and Levee Failure	YES	- Review of the previous Hazard Mitigation Plans - Review of North Carolina Division of Energy, Mineral, and Land Resources website.	- The National Inventory of Dams shows dams are in every state. - Dam failure is discussed in the <i>North Carolina State Hazard Mitigation Plan</i> and is listed as a higher hazard for the Piedmont Region than many other areas of the state. The Piedmont Region includes Davidson and Randolph Counties. - The previous <i>Hazard Mitigation Plan</i> did address dam failure.
Erosion	NO	- Review of North Carolina State Hazard Mitigation Plan. - Review of the previous <i>Hazard Mitigation Plan</i>	- Coastal erosion is discussed in the North Carolina State Hazard Mitigation Plan but only for coastal areas (there is no discussion of riverine erosion). the Region is not located in a coastal area. - Erosion is not included as a hazard in the previous County Multi- jurisdictional Hazard Mitigation Plan.
Flood	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>Hazard Mitigation Plan</i> - Review of NOAA NCDC Storm Events Database. - Review of historical	- The flood hazard is thoroughly discussed in the <i>North Carolina State Hazard Mitigation Plan</i>. The Region was found to have low to moderate vulnerability compared to the state. - The previous <i>Hazard Mitigation Plan</i> address flood hazards.

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
		disaster declarations. - Review of FEMA DFIRM data. - Review of FEMA's NFIP Community Status Book and Community Rating System (CRS).	Approximately 6% of the Region is in an identified floodplain (100- or 500-year).
Storm Surge	NO	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i>. - Review of NOAA NCDC Storm Events Database.	- Given the inland location of the Region storm surge would not affect the area. - Storm surge is discussed in the <i>North Carolina State Hazard Mitigation Plan</i> under the hurricane hazard and indicates that the Piedmont Region, which includes Davidson and Randolph Counties, has zero vulnerability to storm surge. - The previous <i>Hazard Mitigation Plan</i> did not address storm surge. - No historical events were reported by NCDC.
OTHER HAZARDS			
Wildfire	YES	- Review of <i>North Carolina State Hazard Mitigation Plan</i>. - Review of the previous Hazard Mitigation Plans - Review of Southern Wildfire Risk Assessment (SWRA) Data. - Review of the NC Division of Forest Resources website.	- Wildfire hazard risks will increase as low-density development along the urban/wildland interface increases. - Wildfires are discussed in the <i>North Carolina State Hazard Mitigation Plan</i> as a greater hazard of concern though the Piedmont Region, which includes Davidson and Randolph Counties, were found to have relatively low vulnerability compared to the state. - The previous <i>Hazard Mitigation Plan</i> address wildfire. - A review of SWRA data indicates that there are some areas of elevated concern in the Region. - Wildfire hazard risks will increase

Natural Hazards Considered	Was This Hazard Identified As A Significant Hazard To Be Addressed In The Plan At This Time? (Yes Or No)	How Was This Determination Made?	Why Was This Determination Made?
			as low-density development along the urban/wildland interface increases.
Solar Flare	YES		Solar flares are a threat that can occur without regard to specific location, so it was evaluated in this plan.
Nuclear Power Plant Emergency	YES	- Review of International Atomic Energy Agency (IAEA) data on the location of nuclear reactors. - Discussion with local officials about the location of nuclear power stations.	- The Shearon Harris Nuclear Power Plant is located within fifty miles of the eastern half of the region. - The previous <i>County Multi-jurisdictional Hazard Mitigation Plans</i> did not include nuclear power plant emergency; however, it is a hazard of concern. - A nuclear accident is unlikely to occur but could cause severe damage in the event of a major incident.
Terrorism	YES	- Review of local official knowledge. - Discussions with local officials.	There are several high profiles targets in the area that caused the HMPT to determine that the hazard should be evaluated further.
Public Health/Infectious Disease Threat	YES	- Review of the previous <i>Hazard Mitigation Plan</i>. - Discussions with local officials.	Public health emergencies are often unpredictable and can ramp up quickly depending on how quickly they are recognized. These threats will potentially impact the Region in the future.

4.5 Hazard Identification Results

Table 4- 5 provides a summary of the hazard identification and evaluation process noting that 21 of the 26 initially identified hazards are considered significant enough for further evaluation through this Plan's risk assessment.

Table 4- 5: Summary of Hazards Considered

Hazard	Hazard Determined Significant for the Planning area (Yes or No)
Avalanche	No
Drought	Yes
Extreme Cold	No
Hailstorm	Yes
Heat Wave/Extreme Heat	Yes
Hurricane & Tropical Storm	Yes
Lightning	Yes
Nor' Easter	No
Severe Thunderstorm/High Wind	Yes
Tornado	Yes
Winter Storm	Yes
Earthquake	Yes
Expansive Soils	No
Landslide	No
Land Subsidence/Sinkhole	No
Tsunami	No
Volcano	No
Dam & Levee Failure	Yes
Erosion	No
Flood	Yes
Storm Surge	No
Wildfire	Yes
Solar Flare	Yes
Nuclear Power Plant Emergency	Yes
Terrorism	Yes
Public Health/Infectious Disease Threat	Yes

SECTION 5: HAZARD PROFILES

This section includes detailed hazard profiles for each of the hazards identified in the previous section (*Hazard Identification*) as significant enough for further evaluation in the *Plan*. It contains the following subsections:

Overview

- ◆ 5.1 Overview

Atmospheric Hazards

- ◆ 5.3 Drought
- ◆ 5.4 Extreme Heat
- ◆ 5.5 Hurricane/Tropical Storm
- ◆ 5.6 Severe Weather: Thunderstorm/Lightning/Hail
- ◆ 5.7 Tornado;
- ◆ 5.8 Winter Storm

Geologic Hazards

- ◆ 5.9 Earthquake

Hydrologic Hazards

- ◆ 5.10 Dam and Levee Failure
- ◆ 5.11 Flood

Other Hazards

- ◆ 5.12 Wildfire
- ◆ 5.13 Solar Flare
- ◆ 5.14 Nuclear Power
- ◆ 5.15 Terror Threat
- ◆ 5.16 Public Health/Infectious Disease Threat

Conclusions

- ◆ 5.17 Conclusions on Hazard Risk
- ◆ 5.18 Final Determinations

44 CFR Requirement

44 CFR Part 201.6(c)(2)(i): The risk assessment shall include a description of the type, location and extent of all natural hazards that can affect the jurisdiction. The plan shall include information on previous occurrences of hazard events and on the probability of future hazard events

5.1 Overview

Each hazard profiled below was considered significant enough to do an assessment on the hazard. The hazard profiles include a general description of the hazard, its location and extent, notable historical occurrences, and the probability of future occurrences. Each profile also includes specific items noted by members of the Planning Team as it relates to unique historical or anecdotal hazard information for the Region.

The following hazards were identified:

- Atmospheric
 - Drought
 - Extreme Heat
 - Hurricane/Tropical Storm
 - Severe Weather (thunderstorm/lightning/hail)
 - Tornado
 - Winter Storm
- Geological

- Earthquake
- Hydrologic
 - Dam and Levee Failure
 - Flood
- Other
 - Wildfire
 - Solar Flare
 - Nuclear Accident
 - Terror Threat
 - Public Health/Infectious Disease Threat

Table 5- 1 provides a summary table of the participating jurisdictions. In addition, Figure 5- 4 provides a base map of Davidson and Randolph Counties for reference.

Table 5- 1: Participating Jurisdictions

Davidson County	Randolph County
Town of Denton	City of Archdale
Town of Lexington	City of Asheboro
Town of Midway	Town of Franklinville
City of Thomasville	Town of Liberty
Town of Wallburg	Town of Ramseur
	City of Randleman
	Town of Seagrove
	Town of Stanley
	City of Trinity

5.2 Methodologies and Assumptions

5.2.1 Hazard Description

This section describes the hazard, including discussion of its speed of onset and duration, and any secondary effects followed by details specific to the Davidson Randolph planning area. It also includes details about hazard characteristics, types of hazards, causes, and affected areas.

5.2.2 Location

This section includes information on the physical extent, with mapped boundaries where applicable. This includes location description, and maps where applicable, for reported natural hazard events and where the hazards are likely to occur.

5.2.3 Extent

This section includes information on the hazard extent in terms of magnitude, describe how the severity of the hazard can be measured. Where available, the most severe event on record is

used as a frame of reference. This also includes historical occurrences of the hazard, extent of events, and the definition of the extent of the hazard within the planning area.

5.2.4 Historical Occurrences

This section contains information on historical events, including the location and consequences of all past events on record within or near the planning area. This includes records from local sources and national sources such as the National Climatic Data Center (NCDC) Storm Events Database Records, National Geophysical Data Center/World Data Service (NGDC/WDS) Significant Earthquake Database, FEMA's National Inventory of Dams, and the US Drought Monitor.

5.2.5 Probability of Future Occurrence

A risk assessment is performed to determine the potential impacts of hazards on the people, built and natural environments, and economy of a given planning area. The Risk Assessment provides the foundation for the rest of the mitigation planning process, which is focused on identifying and prioritizing actions to reduce risk to hazards. In addition to informing the Mitigation Strategy, the Risk Assessment can also be used to establish emergency preparedness and response priorities, for land use and comprehensive planning, and for decision making by elected officials, city and county departments, businesses, and organizations in the community.

A typical risk assessment consists of three primary components. Some hazard identification process must take place, followed by a detailed profiling of the hazards addressed in the plan. Then the profiled hazards are assessed to determine the vulnerability of the planning area to each hazard being addressed. It is also important to document key details regarding the methodologies and assumptions used to perform the risk assessment, the asset inventories used to perform the risk assessment, and finally conclusions on hazard risk. The conclusions on hazard risk consist of a prioritized ranking of hazards of concern.

This section gauges the likelihood of future occurrences based on past events and existing data. National Risk Index (NRI) Data was used with other data sources where available. This was to provide a wide range of vulnerability analyses and provide a standardized comparison to other communities across the United States to compare the levels of vulnerability to other communities. Because some of the hazards within this plan represent multiple types of precipitation or weather in an overall hazard category (Such as winter storm and freezing events may encompass ice, snow, snowstorms, etc.), the hazard names in the NRI data may vary. The NRI hazard names are listed as indicated in the NRI data to distinguish between multiple data sets that may fall under the same hazard category included in this plan. See Section 3 for a more detailed look at census tracts in the planning area.

Table 5- 2: How jurisdictional NRI data was calculated based on census tracts for each natural hazard probability summary

Jurisdiction	Expected Annual Frequency	Expected Annual Loss (EAL)			Risk Score	
		Value	Score	Rating	Score	Rating
Based on North Carolina Department of Transportation (NCDOT) city boundaries ¹ and census tracts that overlap the boundaries of each jurisdiction	Average of expected annual frequency for all census tracts that overlap the jurisdictional boundaries	Sum of EAL for each census tract that overlaps the boundaries of the jurisdiction	Average of EAL scores for all census tracts that overlap the jurisdictional boundaries	Percentile score based on risk rating percentile groupings and descriptions in Table 5- 4	Average of national percentile risk score of all census tracts that overlap the jurisdictional boundaries	Percentile score based on risk rating percentile groupings and descriptions in Table 5- 4

Table 5- 3: Census tracts that overlap with jurisdictions in the planning area

County	Jurisdiction	Census Tracts
Davidson	Denton	62002
	Lexington	61902, 61807, 61805, 61803, 61701, 61600, 61502, 61501, 61400, 61300, 61204, 61203, 61202
	Midway	60301, 60203, 60202, 60201
	Thomasville	61102, 61101, 61000, 60900, 60800, 60700, 60602, 60601, 60500, 31601, 31501
	Wallburg	60202, 60201, 60104, 60103
	Unincorporated	60101, 60302, 60303, 60304, 60400, 61703, 61704, 61705, 61806, 61808, 61903, 61904, 62001
Randolph	Archdale	31602, 31601, 31505, 31504, 31503, 31304, 31303
	Asheboro	31402, 31101, 30806, 30804, 30700, 30600, 30504, 30503, 30502, 30400, 30302, 30301, 30201, 30100
	Franklinville	31102, 31101, 31002, 31001, 30805
	Liberty	31200, 31002

¹ N.C. Department of Transportation [NCDOT]. (2024). NCDOT City Boundaries (By NC OneMap) [Dataset]. NCDOT.gov. <https://www.nconemap.gov/maps/ee098aeaf28d44138d63446fbdaac1ee/about>

County	Jurisdiction	Census Tracts
	Ramseur	31102, 31002, 31001
	Randleman	31402, 31401, 31305, 31101, 30503
	Seagrove	30803
	Staley	31002
	Trinity	61102, 31601, 31505, 31501
	Unincorporated Area	31002, 31401, 31402

5.3.6. Future Vulnerability: Problem Statements

Changes in development or housing, climate change (see below), the natural environment, first responders, and continuity of operations. These are area-specific potential vulnerabilities considered to address people, changes in development or housing, the natural environment, first responders, and continuity of operations. These statements outline potential specific vulnerabilities for each hazard and how the unique nature of each hazard may impact the planning area and vulnerability. This includes considerations about the predicted future frequency and intensity of natural hazards and how this may impact the projected growth of the planning area in terms of people, changes in development or housing, the planning area economy, the natural environment, first responders, and climate change.

5.2.5.1 People

Addresses the changes in vulnerability of population in the planning area for a hazard to understand the potential future risk of population. This includes impacts to vulnerable population groups, disproportionately impacted groups, and future changes to the population composition.

5.2.5.2 Changes in Development or Housing Characteristics

This addresses potential changes in development and housing characteristics in the planning area and the impact it may have on hazard resiliency in the future based on housing and development characteristics such as projected development, changes in housing characteristics, and changes in housing quantity,

5.2.5.3 Economy

Economic future impact addresses the hazards impact on the local economy and the potential future impacts based on current and future economic characteristics of the planning area.

5.2.5.4 Natural Environment

This addresses the future impacts to the natural environment based on the predicted frequency and severity of the natural hazard in the future.

5.2.5.5 First Responders

The impact to first responders may change based on future frequency, distribution, severity, and intensity of future natural hazard events. Therefore, it is important to understand how the

capabilities of the first responders within the planning area may change to better mitigate and prepare for changing natural hazard risks.

5.2.5.6 Climate Change

These are problem statements aimed at reflecting potential vulnerabilities associated with each hazard in climate change. Climate change implications were described from the NC State Climate Science Report² and the Climate Science Special Report³ from the 4th National Climate Assessment.

5.2.6 NRI Overview

Each natural hazard that is included in the FEMA National Risk Index has associated risk values, risk scores, and risk ratings which are representative of the county or census tracts vulnerability to a natural hazard compared to other communities at the same level. To represent the risk more thoroughly to natural hazards that a community has compared to other communities at the same level, the NRI will be used to represent a community-based risk comparison outlined with risk values, ratings, and scores which are listed in Table 5- 4. For more information about NRI Calculations and methodology, please refer to the NRI Technical Documentation⁴.

² Kenneth E. Kunkel et al., “North Carolina Climate Science Report” (North Carolina Institute for Climate Studies, September 2020), <https://ncics.org/programs/nccsr/>.

³ DR Reidmiller et al., “Volume II: Impacts, Risks, and Adaptation in the United States,” Fourth National Climate Assessment (U.S. Global Change Research Program, n.d.), <https://nca2018.globalchange.gov>.

⁴ Casey Zuzak et al., “National Risk Index: Technical Documentation” (Washington, DC: Federal Emergency Management Agency, March 2023), https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf.

Table 5- 4: NRI Overview from the NRI Technical Documentation

Term	Definition or Equation	
Annualized Frequency	Number of Recorded Events / Period of Record	
Historic Loss Ratio	LRB = Loss / Exposure	
	Loss	Loss, by consequence type (Building, population, or agriculture), experienced from each hazard occurrence documented in the data source
	Exposure	The total value, by consequence type (Building, population number, or agriculture), estimated to be exposed to the hazard occurrence in USD, or in population number or Population equivalent for population exposure.
Social Vulnerability	The susceptibility of social Groups to the adverse impacts of natural hazards including disproportionate death, injury, loss, or disruption of livelihood	
	Data Source	Center for Disease Control and Prevention (CDC) / Agency for Toxic Substances and Disease Registry (ATSDR) Social Vulnerability Index (SVI)
Community Resilience	The ability of a community to prepare for anticipated natural hazards, adapt to changing conditions, withstand and recover rapidly from disruptions.	
	Data Source	University of South Carolina's Hazards and Vulnerability Research Institute (HVRI)'s Baseline Resilience Indicators for Communities (HVRI BRIC)
Expected Annual Loss	Represents the average economic loss in dollars resulting from natural hazards each year. It is calculated for each hazard type and quantifies loss for relevant consequence types: buildings, people, and agriculture	
	Equation	Exposure X Annualized Frequency X Historic Loss Ratio
	Score	Percentile of EAL when compared to other communities and labeled based on Risk Rating Percentile Descriptions below.
Risk Value	Values for Risk and EAL in dollars, representing the community's average economic loss from natural hazards each year.	
Risk Score	Scores represent the national percentile ranking of the community's component value compared to all other communities at the same level, at the county or census tract level.	
Risk Rating	Ratings in one of five qualitative categories that describe the community's component value in comparison to all the other communities at the same level. These range from "Very Low" to "Very High."	
	Very High	80 th to 100 th percentile
	Relatively High	60 th to 80 th percentile
	Relatively Moderate	40 th to 60 th percentile
	Relatively Low	20 th to 40 th percentile

Term	Definition or Equation	
	Very Low	0 th to 20 th percentile

Table 5- 5: NRI EAL, Social Vulnerability, and Community Resilience Score

County	Risk Index EAL		Risk Index Social Vulnerability		Risk Index Community Resilience	
	Rating	Score	Rating	Score	Rating	Score
Davidson	Relatively Low	74.09	Relatively High	66.8	Relatively Moderate	44.59
Randolph	Relatively Low	72.49	Relatively High	70.4	Relatively Low	33.35

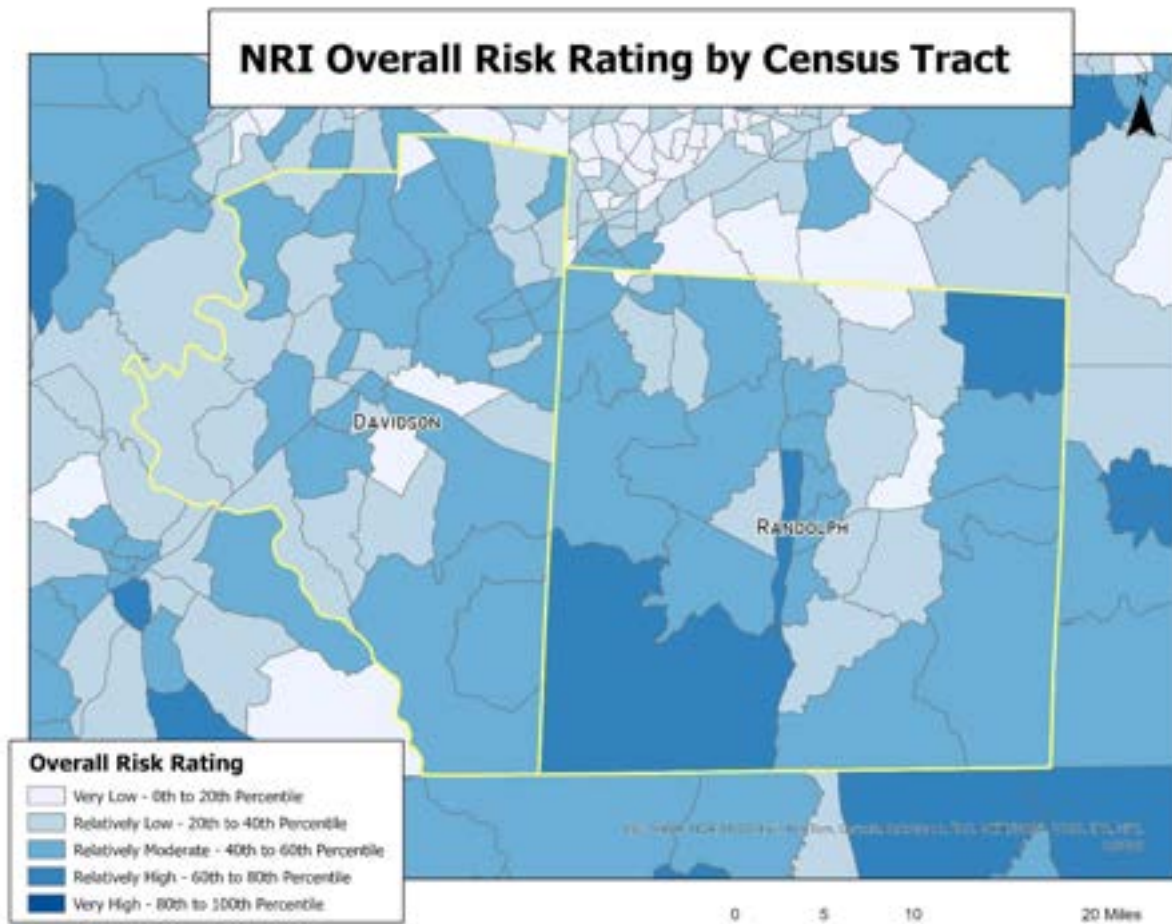


Figure 5- 1: NRI Overall Risk Rating for All Hazards by Census Tract

Table 5- 6: NRI Jurisdictional Summary Overall Hazard Impacts

NRI Jurisdictional Summary							
Jurisdiction	EAL Total					Resilience Score	Social Vulnerability Score
	Value	National Percentile		State Percentile			
		Score	Rating	Score	Rating		
Davidson County	\$13,364,181.69	42.31	Relatively Low	43.86	Relatively Moderate	54.51	33.16
Denton	\$427,637.04	44.62	Relatively Moderate	58.65	Relatively Moderate	33.16	67.80
Lexington	\$3,634,827.22	28.40	Relatively Low	36.39	Relatively Low	33.16	66.99
Midway	\$393,384.26	38.87	Relatively Low	48.54	Relatively Moderate	33.16	42.73
Thomasville	\$3,847,259.78	36.52	Relatively Low	48.49	Relatively Moderate	31.67	62.36
Wallburg	\$1,227,724.04	31.03	Relatively Low	39.76	Relatively Low	33.16	39.71
Unincorporated	\$4,044,464.01	31.96	Very High	41.58	Relatively Low	33.16	43.03
Randolph County	\$12,483,661.41	36.70	Relatively Low	46.78	Relatively Moderate	24.98	61.25
Archdale	\$2,522,111.57	27.75	Relatively Low	34.60	Relatively Low	29.48	61.28
Asheboro	\$5,805,027.97	38.20	Relatively Low	48.64	Relatively Moderate	24.98	70.77
Franklinville	\$1,458,256.07	29.80	Relatively Low	38.82	Relatively Low	24.98	64.16
Liberty	\$970,891.89	49.28	Relatively Moderate	63.01	Relatively High	24.98	78.21
Ramseur	\$921,617.81	31.24	Relatively Low	40.40	Relatively Moderate	24.98	74.08
Randleman	\$1,697,719.02	35.34	Relatively Low	46.75	Relatively Moderate	24.98	60.63
Seagrove	\$516,620.27	52.07	Relatively Moderate	65.56	Relatively High	24.98	19.75
Staley	\$428,308.01	44.69	Relatively Moderate	58.87	Relatively Moderate	24.98	62.54

NRI Jurisdictional Summary							
Jurisdiction	EAL Total					Resilience Score	Social Vulnerability Score
	Value	National Percentile		State Percentile			
		Score	Rating	Score	Rating		
Trinity	\$1,399,294.54	36.21	Relatively Low	47.39	Relatively Moderate	27.02	59.82
Unincorporated	\$1,105,185.01	36.38	Relatively Moderate	45.38	Relatively Low	34.76	24.98
Total	\$26,206,910.02	33.96	Relatively Low	43.64	Relatively Low	29.90	58.16

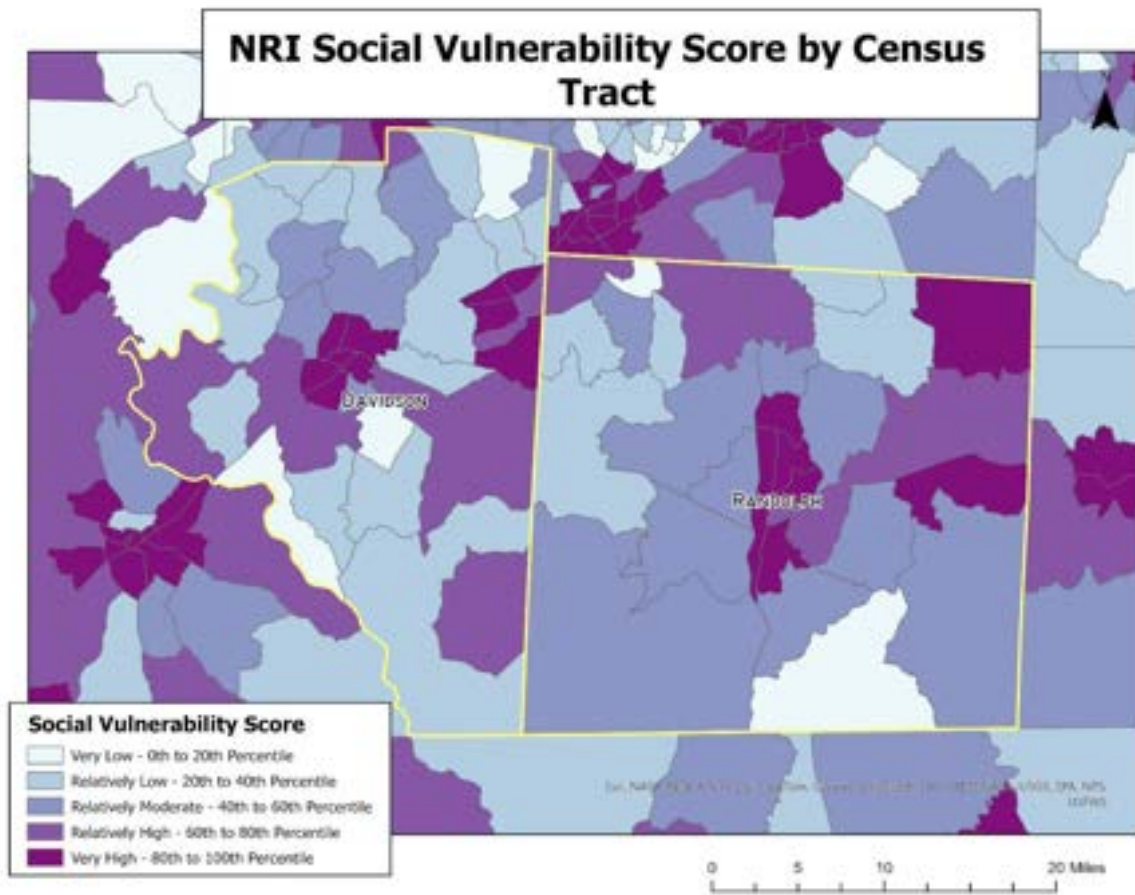


Figure 5- 3: NRI Social Vulnerability Score by Census Tract

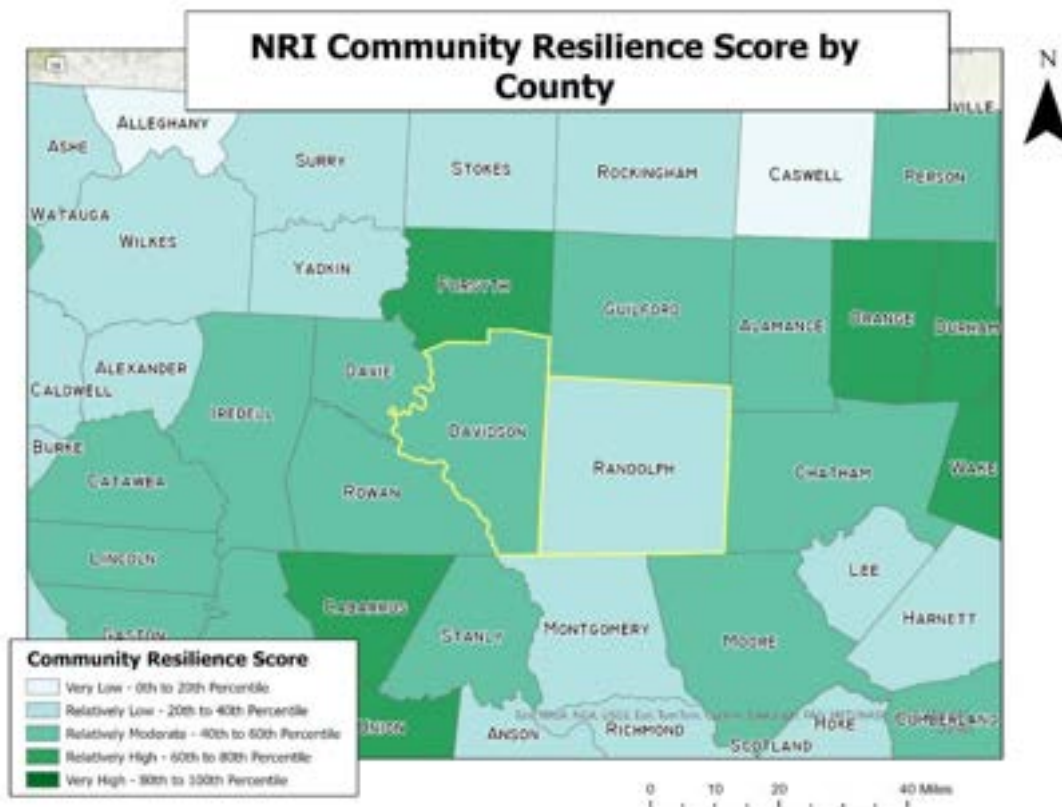


Figure 5- 2: NRI Community Resilience Score by Census Tract

Davidson-Randolph

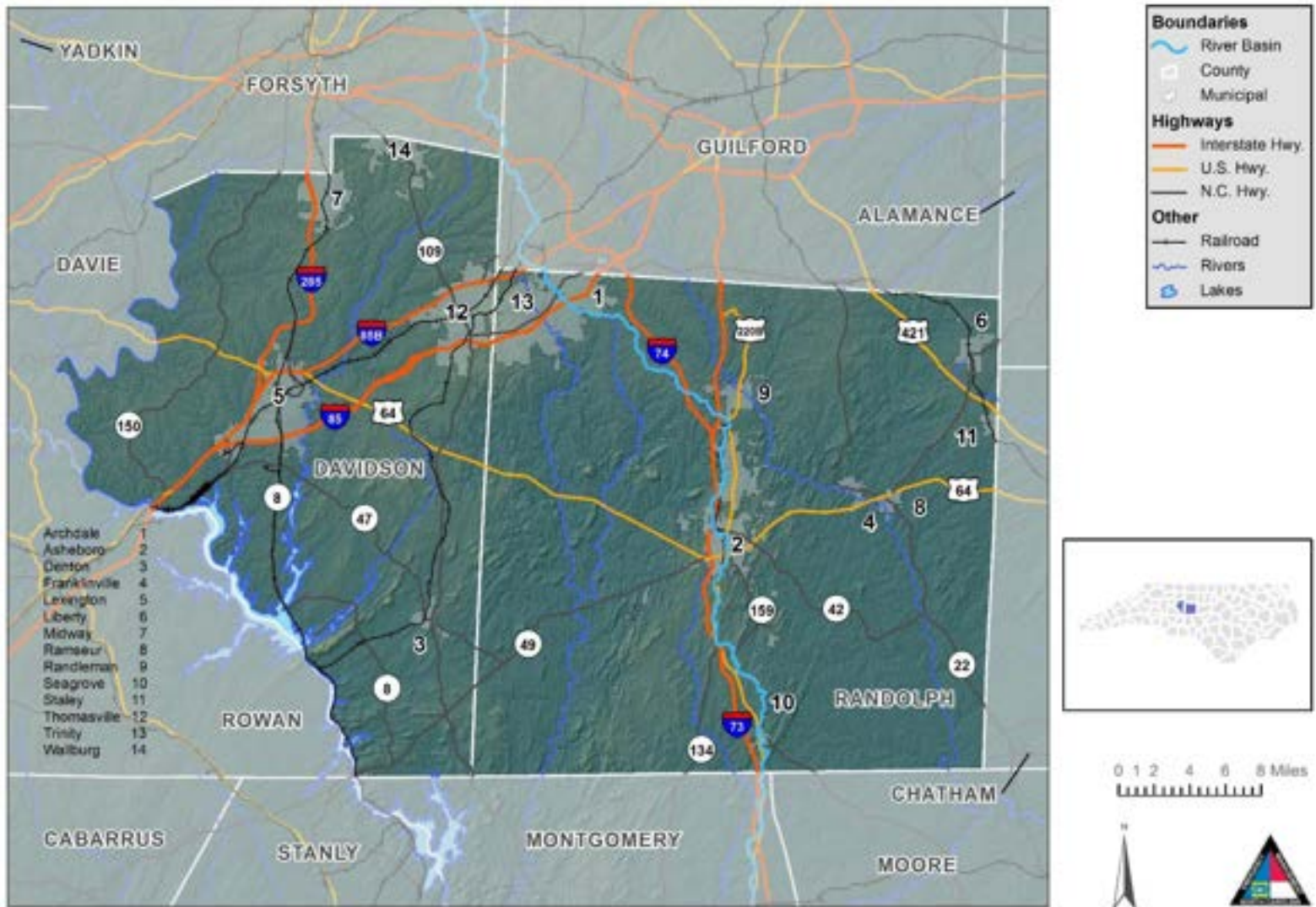


Figure 5- 4: Davidson and Randolph County Base Map

ATMOSPHERIC HAZARDS

5.3 Drought

5.3.1 Background

Drought is a normal part of all climatic regions, including areas with high and low average rainfall. Drought is the consequence of a natural reduction in the amount of precipitation expected over an extended period, usually a season or more in length. High temperatures, high winds, and low humidity can exacerbate drought conditions. In addition, human actions and

demands for water resources can hasten drought-related impacts. Drought may also lead to more severe wildfires.

Droughts are typically classified into one of four types: 1) meteorological, 2) hydrologic, 3) agricultural, or 4) socioeconomic. Table 5- 7 presents definitions for these types of droughts.

Table 5- 7: Drought Classification Definitions

Meteorological Drought	The degree of dryness or departure of actual precipitation from an expected average or normal amount based on monthly, seasonal, or annual time scales.
Hydrologic Drought	The effects of precipitation shortfalls on stream flows and reservoir, lake, and groundwater levels.
Agricultural Drought	Soil moisture deficiencies are relative to water demands of plant life, usually crops.
Socioeconomic Drought	The effect of demands for water exceeding the supply as a result of a weather-related supply shortfall.
Source: Federal Emergency Management Agency, Multi-Hazard Identification and Risk Assessment: A Cornerstone of the National Mitigation Strategy, https://www.fema.gov/media-library/assets/documents/7251	

Droughts are slow-onset hazards but, over time, can have very damaging effects on crops, municipal water supplies, recreational uses, and wildlife. If drought conditions extend over several years, the direct and indirect economic impact can be significant.

The Palmer Drought Severity Index (PDSI) is based on observed drought conditions and range from -0.5 (incipient dry spell) to -4.0 (extreme drought). Evident in Figure 5- 5, the Palmer Drought Severity Index Summary Map for the United States, drought affects most areas of the United States but is less severe in the Eastern United States.

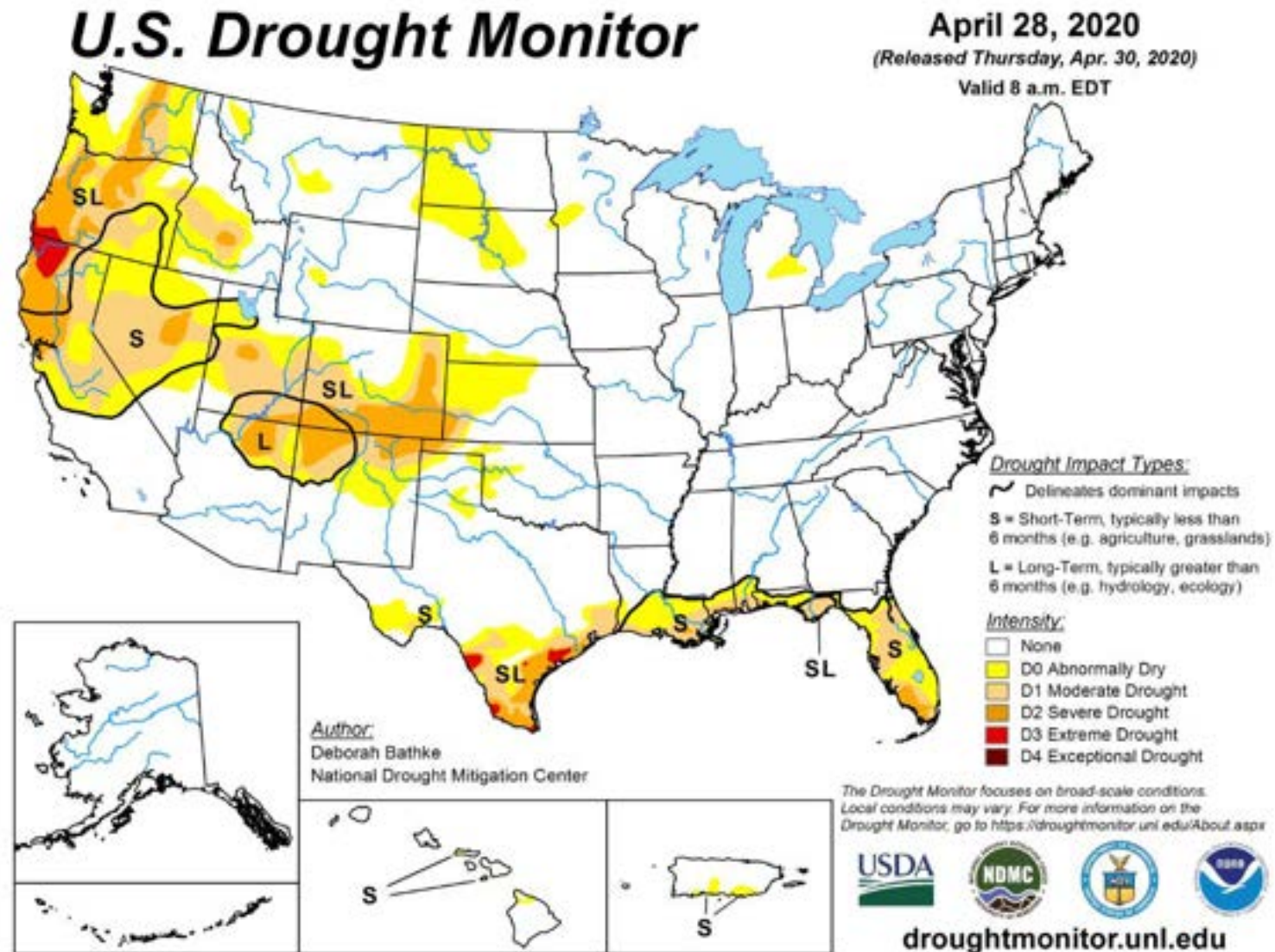


Figure 5- 5 Palmer Drought Severity Index Summary Map for the United States

5.3.2 Location and Spatial Extent

Drought typically covers a large area and cannot be confined to any geographic or political boundaries. According to the PDSI (Figure 5- 5) North Carolina has a relatively low risk for drought hazard. However, local areas may experience much more severe and/or frequent drought events than what is represented on the PDSI map. Furthermore, it is assumed that the Region would be uniformly exposed to drought, making the spatial extent potentially widespread. It is also notable that drought conditions typically do not cause significant damage to the built environment.

The United States Drought Monitor reports data on North Carolina drought conditions from 2000 to 2025. It classifies drought by County on a scale of D0 to D4 where:

Table 5- 8: Drought classification descriptions and impacts

Category	Rating	Impact
D0	Abnormally Dry	Pastures are dry; mild crop stress is noted; irrigation increases
		Lawns are brown
D1	Moderate Drought	Crop stress increases
		Hay production is reduced; producers feed hay to cattle early
		Wildfire danger is higher than the seasonal normal
		Increased signs of wildlife; trees and landscape are drought stressed
		Streamflow is reduced; lake and reservoirs levels decline
		Voluntary water conservation begins
D2	Severe Drought	Dryland crop yields are low
		Wildfires are difficult to extinguish
		Swimming areas and boat ramps begin to close
		Voluntary and mandatory water use restrictions are implemented; people are asked to refrain from nonessential water use
D3	Extreme Drought	Hay is scarce, producers are purchasing outside of state; nitrate levels in forage are high

Category	Rating	Impact
		Outdoor burn bans are implemented; wildfires are widespread
		Landscaping and greenhouse businesses lose revenue
		Aquatic wildlife is dying; fewer trout are stocked
		Hydropower generation decreases
		Voluntary conservation is requested even in sufficient water level areas; mandatory restrictions become more severe, and fines are given to violators; stream levels are extremely low
D4	Exceptional Drought.	Producers sell cattle; hay shortages and crop loss occur; farmers are stressed
		Daily life is affected by all citizens; people pray for rain; drought education seminars increase
		Epizootic hemorrhagic disease is widespread in deer
		Reservoirs are low; officials are counting the days of remaining water supply; well water is low; residents are hauling water

Figure 5- 6, Figure 5- 7, and Figure 5- 8 depict weekly drought data from 2000 to 2024 from the US Drought monitor⁵. This data is in the form of data with 6 drought classifications, ranging from No Drought to Exceptional Drought (D4). Each week of data was clipped to the study area and any overlapping occurrences of drought for each week of the planning area were joined together. This provided a summary based on the areas impacted by the different drought classifications and a pie chart was created to show the map user the percentage of each drought classification the study area experienced from the year 2000 to present. The maps below depict the location, severity, and impact of drought in the Region:

⁵ U.S. Drought Monitor (USDM) | Drought.gov. (n.d.). Drought.gov. <https://www.drought.gov/data-maps-tools/us-drought-monitor>

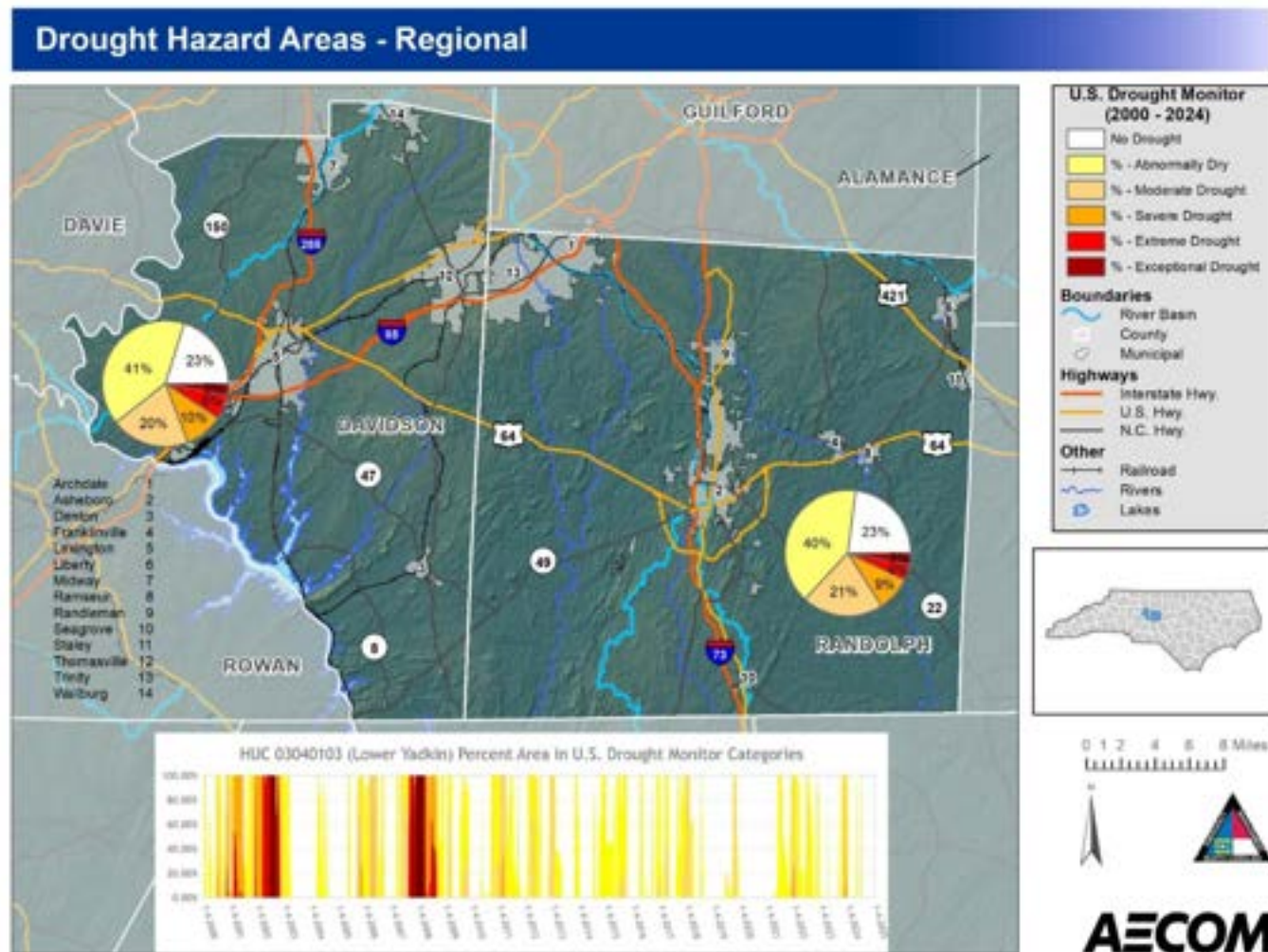


Figure 5- 6: Drought Hazard Areas - Regional

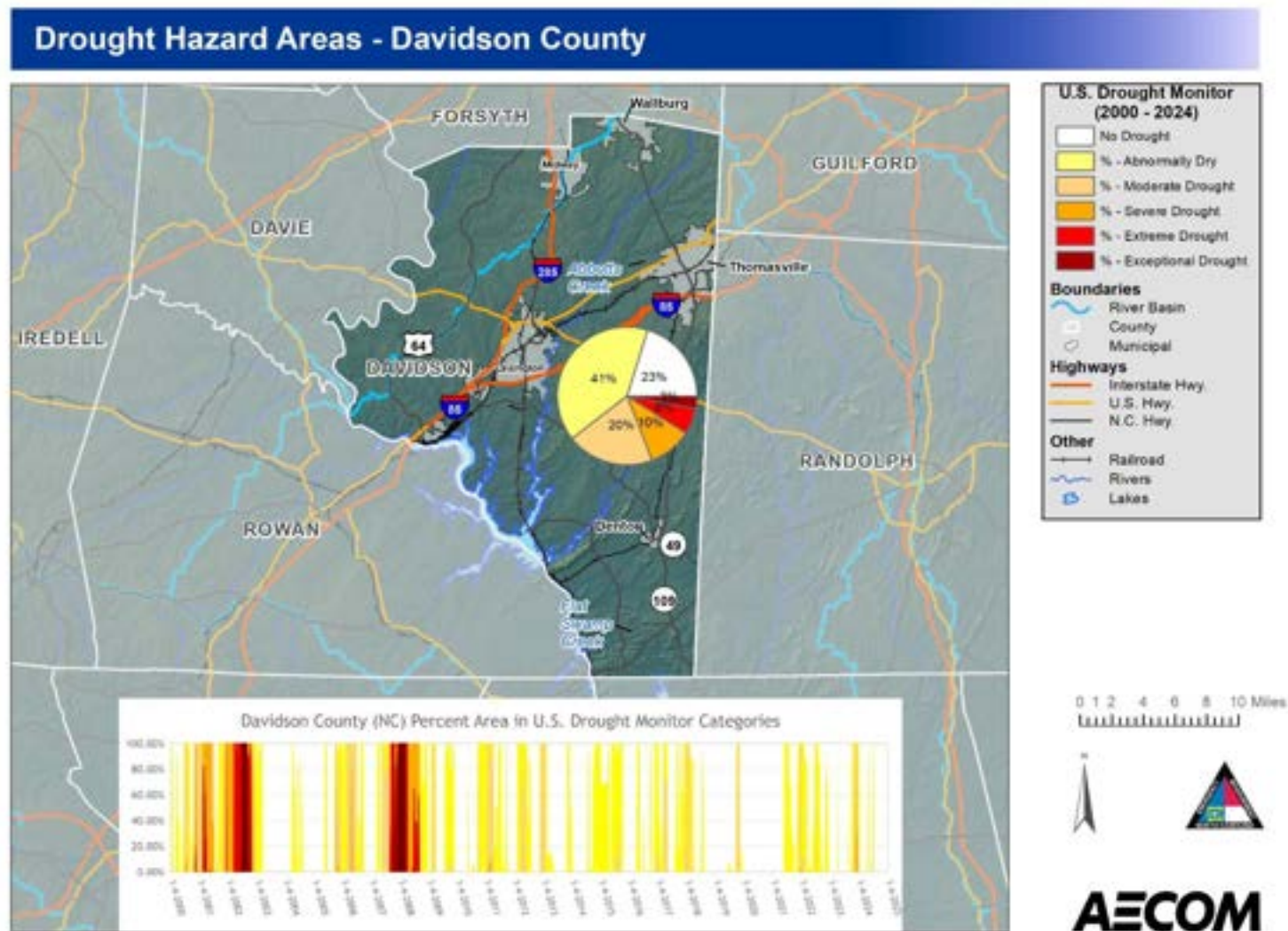


Figure 5- 7: Drought Hazard Areas – Davidson County

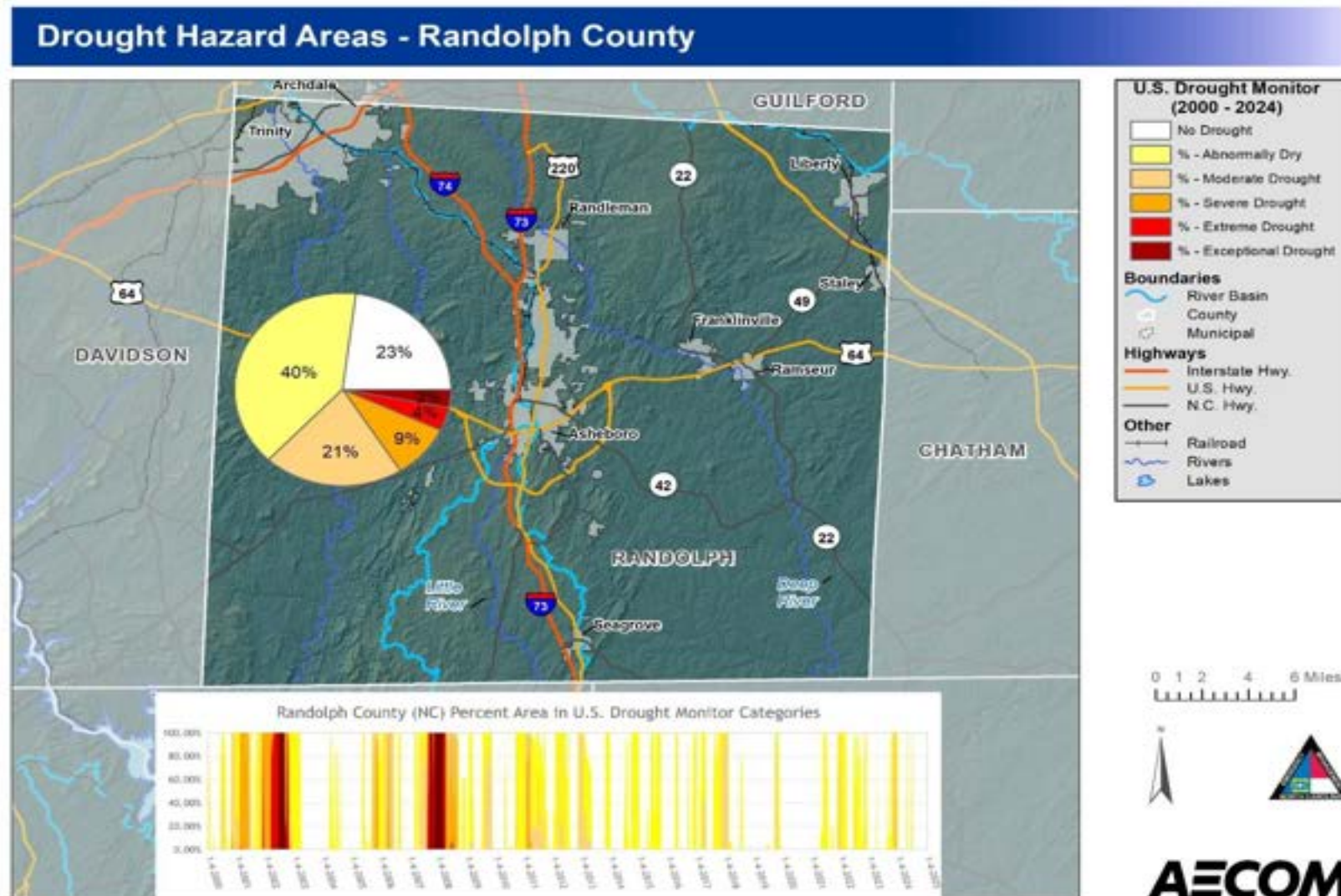


Figure 5- 8: Drought Hazard Areas – Randolph County

5.3.3 Extent

According to the North Carolina Drought Monitor, both counties and all jurisdictions in the planning area in the Region had drought occurrences in all the last 24 years (2000-2024). It should be noted that the North Carolina Drought Monitor also estimates what percentage of the county is in each classification of drought severity. For example, the most severe classification reported may be exceptional, but most of the county may be in a less severe condition.

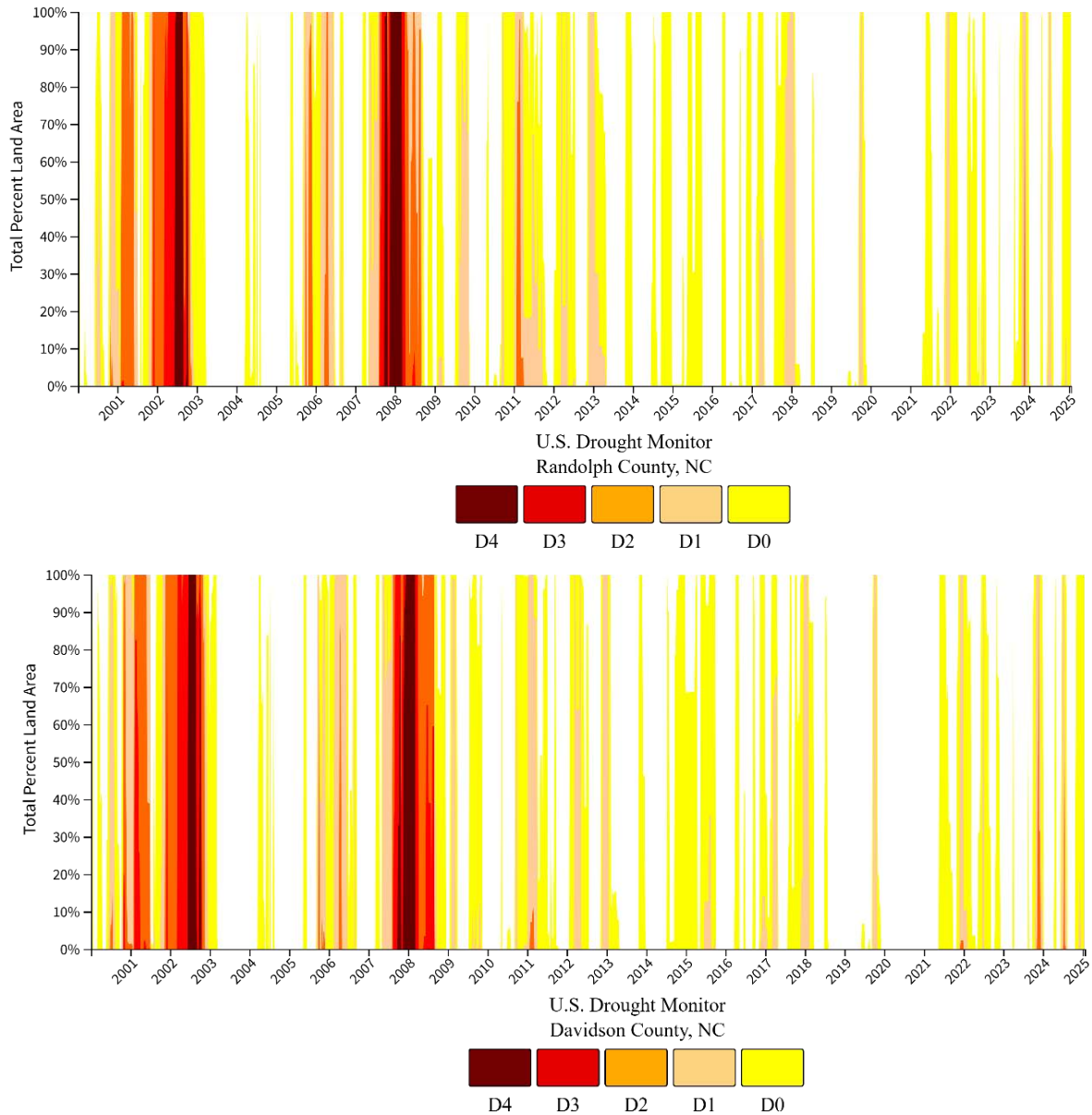


Figure 5- 9: US Drought Monitor from 2000 to January 2025

5.3.4 Historical Occurrences

Data from the United States Drought Monitor and North Carolina State Climate Office was used to ascertain historical drought events in the Region. Figure 5- 9 shows the percentage land area of drought and type of drought from 2000 to January 2025⁶.

5.3.5 Probability of Future Occurrences

The NRI determines risk data based on the University of Nebraska-Lincoln National Drought Mitigation Center⁷ which utilizes drought data from January 1, 2000, to November 9, 2021. The NRI EAL total for drought is based on agricultural losses from drought. All census tracts in the planning area are expected to experience an average of 22.12 incidents of drought per year, a total EAL value of \$609,520.94, an EAL rating of 70.41, and a Risk Score Rating of 70.43.

In Davidson County, the areas that have the 3 highest EAL scores are Denton (94.07), Unincorporated areas (89.82), and Wallburg (88.29). But the areas in Davidson County that have the highest total EAL Value are Unincorporated areas (\$105,982), Lexington (\$67,684.42), and Denton (\$17,980). According to census tract level data, Davidson County is expected to experience a total of \$217,159.96 loss attributed to drought annually, or approximately \$9,003.32 loss per drought event annually. The overall average EAL score for census tracts in Davidson County is 71.31 (relatively high percentile) and average risk score for census tracts in the county is 71.27 (relatively high percentile).

In Randolph County, the 3 areas with the highest EAL Scores are Staley (95.38), Liberty (95.15), and Unincorporated areas (93.56). The jurisdictional areas within Randolph County with the highest total EAL Values by census tract include Asheboro (\$169,124.70), Franklinville (\$60,255.76), and Unincorporated areas (\$57,825.65). Randolph County is expected to experience a total of \$384,562.05 EAL, an average of 19.77 events per year, and 70.75 (relatively high percentile) EAL score. While Randolph County is likely to experience a higher EAL due to drought than Davidson County (\$217,159.96), when compared, census tracts within Randolph County are at a slightly lower EAL score and risk score than census tracts in Davidson County.

See

Table 5- 9 for more detailed jurisdictional summaries.

⁶ NOAA, National Integrated Drought Information System [NIDIS], National Drought Mitigation Center [NDMC], & U.S. Department of Agriculture [USDA]. (2025). Historical Conditions [Dataset]. In Drought.gov. NIDIS. <https://www.drought.gov/states/north-carolina/county/>

⁷ National Drought Mitigation Center [NDMC], University of Nebraska-Lincoln, United States Department of Agriculture [USDA], & National Oceanic and Atmospheric Administration [NOAA]. (n.d.). Current Map | U.S. Drought Monitor. U.S. Drought Monitor. Retrieved March 5, 2025, from <https://droughtmonitor.unl.edu/CurrentMap.aspx>

Table 5- 9: Drought NRI Risk Data by Jurisdiction

Drought						
Jurisdictions	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	24.12	\$217,159.96	71.31	Relatively High	71.27	Relatively High
Denton	23.23	\$17,980.18	94.07	Very High	94.41	Very High
Lexington	25.38	\$67,684.42	67.16	Relatively High	67.32	Relatively High
Midway	22.59	\$11,164.44	87.59	Very High	87.39	Very High
Thomasville	21.69	\$12,234.59	46.18	Relatively Moderate	46.28	Relatively Moderate
Wallburg	22.11	\$15,166.17	88.29	Very High	87.99	Very High
Unincorporated	25.31	\$105,982.46	89.82	Very High	89.62	Very High
Randolph County	19.77	\$384,562.05	70.75	Relatively High	70.83	Relatively High
Archdale	20.15	\$51,667.73	59.63	Relatively Moderate	59.64	Relatively Moderate
Asheboro	19.88	\$169,124.70	57.59	Relatively Moderate	57.76	Relatively Moderate
Franklinville	19.09	\$60,255.76	90.43	Very High	90.77	Very High
Liberty	18.77	\$53,645.95	95.15	Very High	95.77	Very High
Ramseur	18.98	\$48,500.05	90.95	Very High	91.52	Very High
Randleman	19.60	\$31,428.71	85.69	Very High	85.91	Very High
Seagrove	19.41	\$11,106.16	92.62	Very High	91.79	Very High
Staley	18.77	\$29,127.73	95.38	Very High	95.60	Very High
Trinity	20.76	\$11,699.59	87.07	Very High	87.38	Very High
Unincorporated	19.41	\$57,825.65	93.56	Very High	93.17	Very High
Total	22.12	\$609,520.94	70.41	Relatively High	70.43	Relatively High

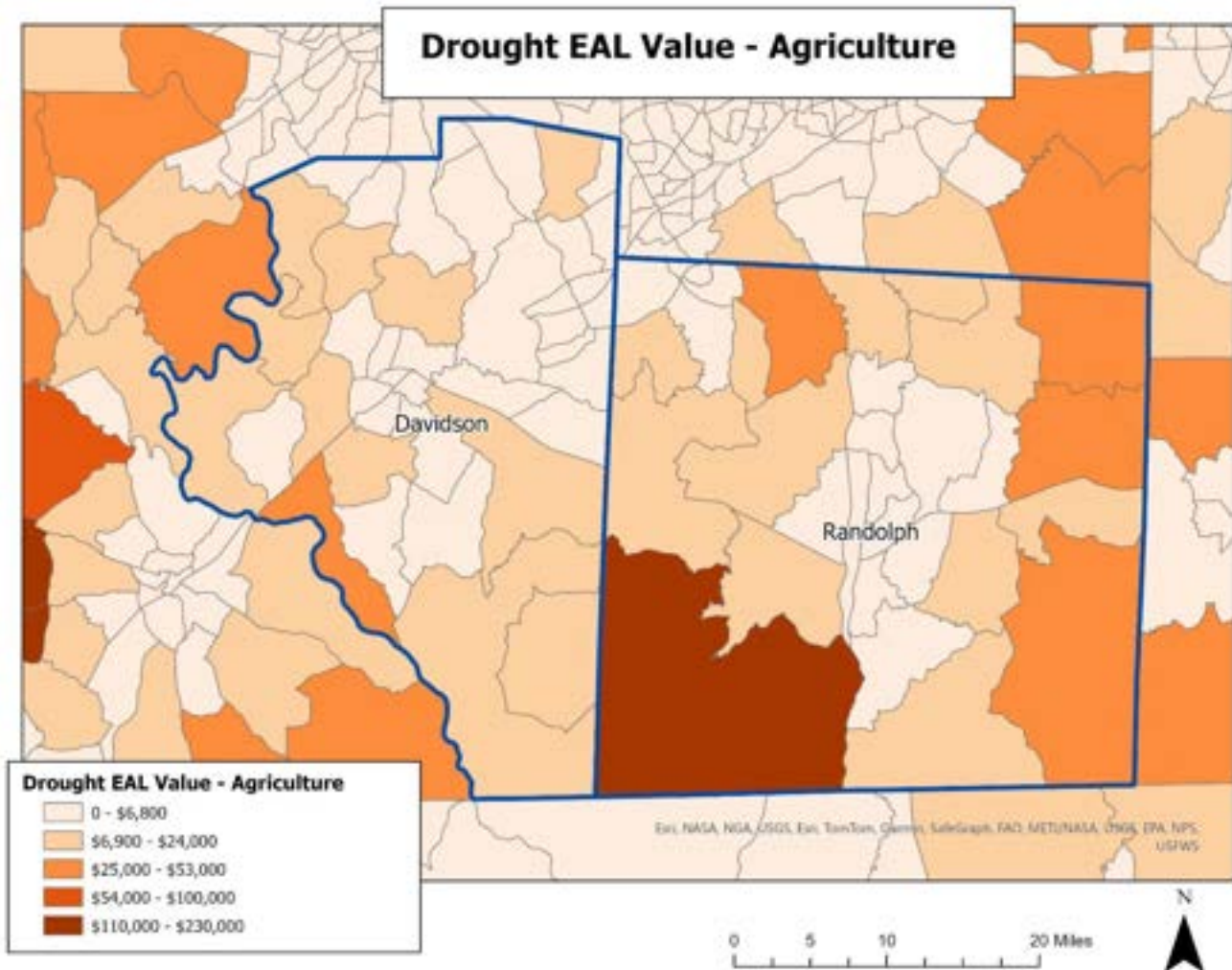


Figure 5- 10: NRI EAL Value for Drought in the planning area by census tract

5.3.6 Impact

People

Drought can affect people's health and safety and impact on all jurisdictions. Examples of drought impacts on society include anxiety or depression about economic losses, conflicts when there is not enough water, reduced incomes, fewer recreational activities, higher incidents of heat stroke, and even loss of human life. As a result of drought, there may be less water available for residents in the planning area and water that is available may be of a lesser quality than residents in the planning area are used to. This may result in water shutoffs and even boil-water advisories in the event of low water quality, which may lead to dehydration and heat related illnesses in the planning area, if the drought is accompanied by a period of prolonged and excessive heat. Without access to adequate hydration, heat related illnesses are expected to lead to more incidents, including hospitalization and death, for individuals with disabilities (14.8% of residents in Davidson County and 15% of residents in Randolph County), along with

those who have limited mobility and those without access to a vehicle (5.3% of residents in Davidson County and 2.9% of residents in Randolph County)⁸.

It is estimated that 3.3% of residents in Davidson County and 4.9% Randolph County report that they speak English “Less than well.” Due to the importance of public outreach and awareness, it is important that the planning area develops educational materials in multiple languages and multiple formats to ensure that all residents understand their risks, how to prepare, and how to mitigate the impact of drought on their household.

Technology has become a crucial method of communicating drought occurrences, risks, and preparedness. Residents in the planning area without a computer (5.7% of residents in Davidson County and 4.7% of residents in Randolph County), telephone service (0.6% of residents in Davidson County and 0.8% of residents in Randolph County), or internet access (0.6% of residents in Davidson County and 0.8% of residents in Randolph County) in their households may not be able to receive important messages about drought conditions, including notifications about water quality or water shortages. Emergency information may not be able to reach those with limited communication methods or those with disabilities that reduce the methods of communications. To reduce disproportionate impacts, the planning area should consider developing public outreach that highlights disproportionate impacts on the community and develop ways to mitigate those impacts. The planning area should also ensure that all residents are able to receive emergency notifications in a method that is timely and adheres to the needs of residents with different abilities.

Changes in Development or Housing Characteristics

Drought has the potential to affect water supply for residential, commercial, institutional, industrial, and government-owned areas. Drought can reduce water supply in wells and reservoirs. When drought conditions persist with no relief, local or State governments must often institute water restrictions. As the planning area increases the number of residents and development, there could be more of a strain on water supply in the planning area. As a result, the planning area may experience more frequent drought conditions.

Economy

Drought impacts businesses who rely on consistent, low cost, and abundant water supply in the planning area may be economically impacted by drought conditions. Water is necessary for agricultural operations, and water shortages can result in a reduced crop yield or crop failure. Reduction in agricultural success could create increased costs of food and reduce the positive economic impact that agriculture has on the community, in terms of employment, food availability, and overall wellbeing of residents. Drought may also cause water to become more expensive, and this could be an excess financial burden for residents in the planning area who must pay more for lower quality water.

⁸ Environmental Protection Agency. (2025, January 17). Climate Change and the Health of People with Disabilities. EPA. <https://www.epa.gov/climateimpacts/climate-change-and-health-people-disabilities>

Natural Environment

Plants and animals depend on water, just as people do. Drought can shrink their food supplies and damage their habitats. Sometimes this damage is only temporary, and other times it is irreversible. Drought conditions can also create a substantial increase in wildfire risk. As plants and trees wither and die from a lack of precipitation, increased insect infestations, and diseases all of which are associated with drought they become fuel for wildfires. Long periods of drought can equate to more wildfires and more intense wildfires, which affect the economy, the environment, and society in many ways such as by destroying neighborhoods, crops, and habitats.

First Responders

The overall effect on first responders would be limited when compared to other hazards. Exceptional drought conditions may impact the amount of water immediately available to respond to wildfires.

Climate change

According to the North Carolina Climate Science Report (NCCSR)⁹, major droughts are likely to become more frequent and more severe because of climate change due to higher temperatures and increased evaporation rates. The NCCSR also reports that future droughts are very likely to be warmer, which will increase the drying rate of fuels for wildfires, such as dead vegetation and leaves, which will also increase wildfire occurrences.

5.4 Extreme Heat

5.4.1 Background

Extreme heat, like drought, poses little risk to property. However, extreme heat can have devastating effects on health. Extreme heat is often referred to as a “heat wave.” According to the National Weather Service, there is no universal definition for a heat wave, but the standard U.S. definition is any event lasting at least three days where temperatures reach ninety degrees Fahrenheit or higher. However, it may also be defined as an event at least three days long where temperatures are ten degrees greater than the normal temperature for the affected area. Heat waves are typically accompanied by humidity but may also be very dry. These conditions can pose serious health threats causing an average of 1,500 deaths each summer in the United States.

According to the National Oceanic and Atmospheric Administration, heat is the number one weather-related killer among natural hazards, followed by frigid winter temperatures. The National Weather Service devised the Heat Index as a mechanism to better inform the public of

⁹ North Carolina Institute for Climate Studies [NCICS]. (2020). North Carolina Climate Science Report. NCICS. Retrieved January 29, 2025, from https://ncics.org/wp-content/uploads/2020/10/NC_Climate_Science_Report_FullReport_Final_revised_September2020.pdf

heat dangers. The Heat Index Chart, shown in Figure 5- 11, uses air temperature and humidity to determine the heat index or apparent temperature.

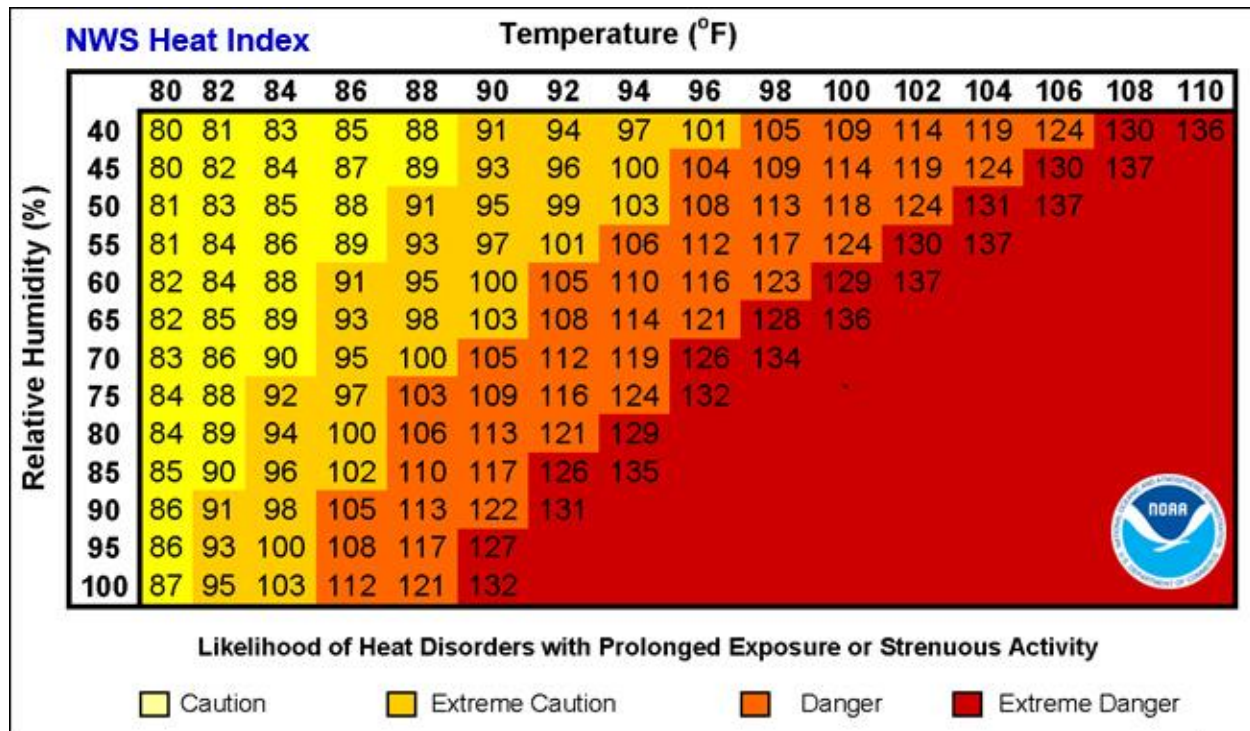


Figure 5- 11: Heat Index Chart

Source: National Weather Service, National Oceanic and Atmospheric Administration, http://www.nws.noaa.gov/om/heat/heat_index.shtml

Table 5- 10 shows the dangers associated with different heat index temperatures. Some populations, such as the elderly and young, are more susceptible to heat danger than other segments of the population.

Table 5- 10: Heat Disorders Associated with Heat Index Temperature

HEAT INDEX TEMPERATURE (FAHRENHEIT)	DESCRIPTION OF RISKS
80°- 90°	Fatigue is possible with prolonged exposure and/or physical activity.
90°- 105°	Sunstroke, heat cramps, and heat exhaustion are possible with prolonged exposure and/or physical activity.
105°- 130°	Sunstroke, heat cramps, and heat exhaustion likely, and heatstroke possible with prolonged exposure and/or physical activity.
130° or higher	Heatstroke or sunstroke is highly likely with continued exposure.

Source: National Weather Service, National Oceanic and Atmospheric Administration

Finally, NOAA has seventeen metropolitan areas participating in the Heat HealthWatch/Warning System to better inform and warn the public. A HealthWatch is issued when conditions are

favorable for an excessive heat event in the next 12 to 48 hours. It should be noted that stagnant atmospheric conditions trap pollutants, thus adding unhealthy air to excessively hot temperatures. In addition, the “urban heat island effect” can produce significantly higher nighttime temperatures because asphalt and concrete (which store heat longer) gradually release heat at night. Thus, urban areas tend to be at greater risk of heat effects.

5.4.2 Location and Spatial Extent

Excessive heat typically impacts a large area and cannot be confined to any geographic or political boundaries. The entire Region is susceptible to extreme heat conditions.

5.4.3 Extent

The extent of extreme heat can be defined by the maximum temperature reached. The highest temperature recorded in the Region is 107 degrees Fahrenheit (reported July 29, 1952) in the Region.

- Davidson County: 107°F (July 1952)
- Randolph County: 105°F (August 1988)

5.4.4 Historical Occurrences

July 22, 1998 – Heat – According to NCDC, excessive heat plagued central North Carolina during July 22 through July 23, 1998. Maximum temperatures reached the 98 to 103-degree range combined with dew points in the 78 to 80-degree range with little wind to give heat index values of around 110 degrees for several hours each afternoon. To make matters worse, the minimum temperatures did not fall below 80 at several locations and those that did achieved that feat in only an hour or two. Strong thunderstorms ended the 2-day excessive heat ordeal on the evening of the twenty-third when rain cooled the environment enough to send temperatures into the lower 70’s at most locations.

In addition, information from the State Climate Office of North Carolina was reviewed to obtain historical temperature records in the Region. Temperature information has been recorded in Davidson County since 1902 and Randolph County since 1905. The recorded maximum for the Region can be found below in Table 5- 11:

Table 5- 11: Highest Recorded Temperatures in the Region¹⁰

LOCATION	DATE	TEMPERATURE (°F)
Lexington	07/29/1952	107
Asheboro 2W Station (City Water Plant)	08/18/1988	105

Source: State Climate Office of North Carolina

¹⁰ N.C. State Climate Office. (n.d.). Weather Extremes (By N.C. State University). Retrieved January 23, 2025, from <https://products.climate.ncsu.edu/extremes/>

The State Climate Office also reports average maximum temperatures at various stations in the County. The most centralized location in Davidson County is Lexington and in Randolph County is Asheboro. Table 5- 12 shows the average maximum temperatures recorded per month from 1905 to January 2025.

Table 5- 12: Highest Temperature in the Region¹¹

Counties	MONTH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
Davidson	High Temp (°F)	79	83	93	95	100	105	107	105	103	98	86	79
	Low Temp (°F)	-6	2	5	21	29	41	45	46	35	25	13	1
Randolph	High Temp (°F)	79	82	92	93	97	103	103	105	100	96	87	79
	Low Temp (°F)	-8	2	8	23	32	40	51	46	36	21	10	-1

5.4.5 Probability of Future Occurrences

The NRI refers to extreme heat events as “Heat Wave” events, and therefore probability from the NRI which is for “heat wave” is equivalent to the label of “extreme heat” within this plan. The period of record for the heat wave NRI data is from November 12, 2005, to October 6, 2022, and data is retrieved from the National Weather Service (NWS) Weather Alerts¹² and the Iowa State University: Iowa Environmental Mesonet NWS Archived Watches, Warnings, and Advisories¹³. Davidson County and Randolph County are at a relatively low risk of experiencing a heat wave and relatively low risk of experiencing financial losses due to heat waves.

The average annual frequency of heat waves in census tracts within Davidson County and Randolph County is 0.1238, or one extreme heat event approximately every eight years. The total EAL planning area is \$274,581.81, and the average EAL score and average Risk Score for census tracts in the planning area are in a relatively low percentile. This means that when compared to other communities in the U.S., the planning area is in a relatively low percentile chance of experiencing and a relatively low percentile chance of incurring economic losses from a heat wave, or extreme heat, events.

¹¹ N.C. State Climate Office. (n.d.). Weather Extremes (By N.C. State University). Retrieved January 23, 2025, from <https://products.climate.ncsu.edu/extremes/>

¹² National Weather Service [NWS]. (n.d.). Past Weather Alerts (By National Oceanic and Atmospheric Administration [NOAA]). National Weather Service. Retrieved March 5, 2025, from <https://www.weather.gov/>

¹³ Archived NWS Watch, Warnings, Advisories (By Iowa State University [ISU] & Iowa Environment Mesonet [IEM]). (n.d.). Iowa State University: Iowa Environment Mesonet. Retrieved March 5, 2025, from <https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml>

Table 5- 13: NRI Heat Wave EAL and Risk Index Values

Heat Wave						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	0.1238	\$145,296.01	36.03	Relatively Low	36.72	Relatively Low
Denton	0.1238	\$3,250.45	35.47	Relatively Low	37.48	Relatively Low
Lexington	0.1238	\$38,313.90	33.83	Relatively Low	36.10	Relatively Low
Midway	0.1238	\$15,922.15	37.92	Relatively Low	36.88	Relatively Low
Thomasville	0.1238	\$43,590.30	38.16	Relatively Low	39.89	Relatively Low
Wallburg	0.1238	\$13,454.99	35.48	Relatively Low	34.25	Relatively Low
Unincorporated	1.6099	\$46,136.27	36.47	Relatively Low	35.72	Relatively Low
Randolph County	0.1238	\$123,732.55	36.66	Relatively Low	38.28	Relatively Low
Archdale	0.1238	\$28,506.85	34.74	Relatively Low	35.94	Relatively Low
Asheboro	0.1238	\$58,917.84	37.74	Relatively Low	40.72	Relatively Moderate
Franklinville	0.1238	\$14,730.17	33.96	Relatively Low	35.73	Relatively Low
Liberty	0.1238	\$8,311.74	39.11	Relatively Low	43.20	Relatively Moderate
Ramseur	0.1238	\$8,366.49	33.16	Relatively Low	36.14	Relatively Moderate
Randleman	0.1238	\$19,095.05	37.55	Relatively Moderate	38.95	Relatively Moderate
Seagrove	0.1238	\$3,371.16	35.97	Relatively Low	32.59	Relatively Low
Staley	0.1238	\$3,832.29	37.91	Relatively Low	39.47	Relatively Low
Trinity	0.1238	\$15,758.68	38.03	Relatively Low	39.32	Relatively Low

Heat Wave						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Unincorporated	0.3715	\$9,029.57	34.29	Relatively Low	32.71	Relatively Low
Total	0.1238	\$274,581.81	36.23	Relatively Low	37.40	Relatively Low

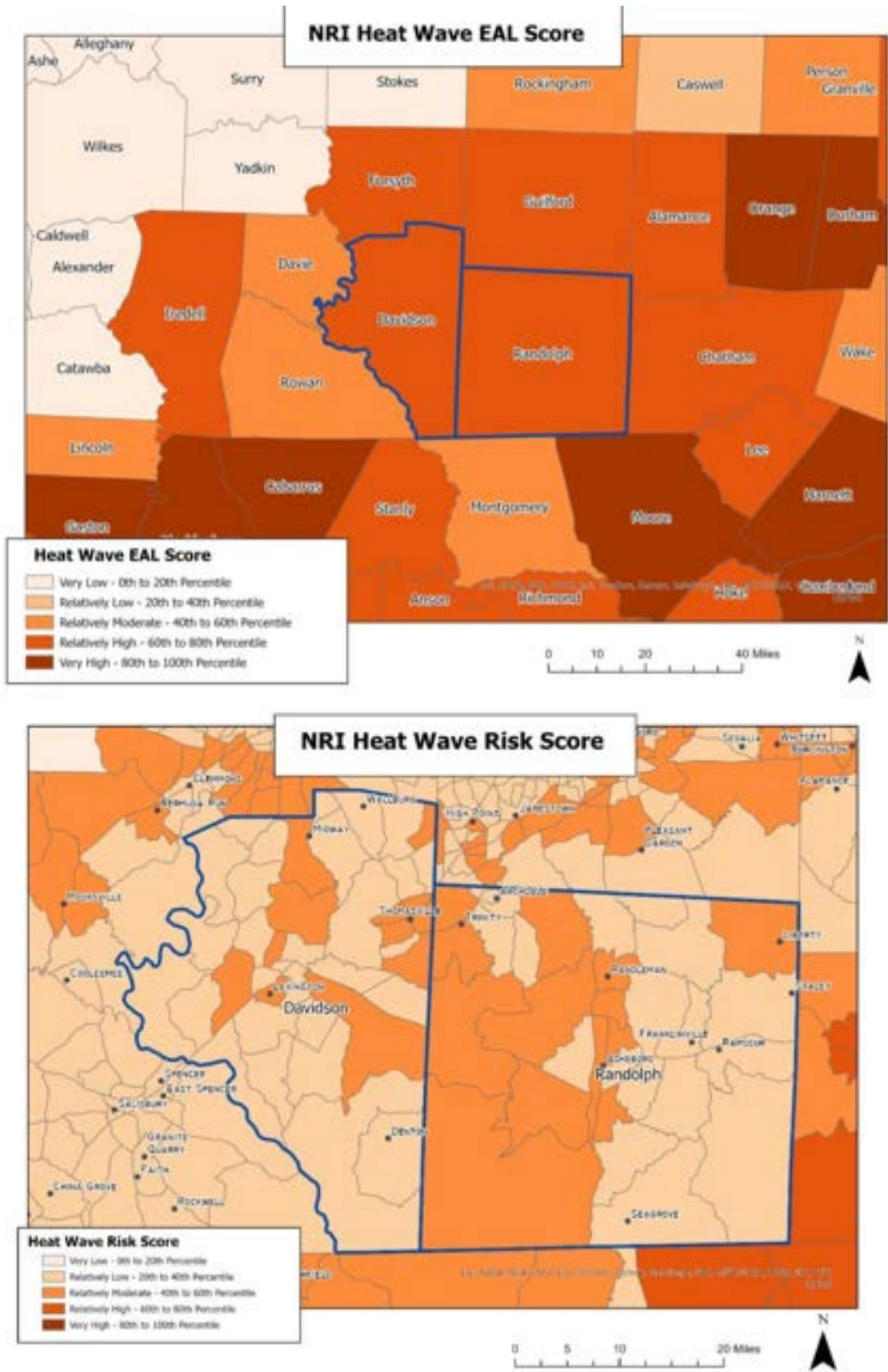


Figure 5- 12: NRI Heat Wave Risk Score

5.4.6 Impact

5.4.6.1 People

Extreme heat can affect people's health and safety and impact on all jurisdictions. Extreme heat creates a multitude of health issues for those located in extreme heat areas including heat related illnesses and dehydration. Without access to adequate hydration, heat related illnesses are expected to lead to more incidents, including hospitalization and death, for individuals with disabilities (14.8% of residents in Davidson County and 15% of residents in Randolph County), along with those who have limited mobility and those without access to a vehicle (5.3% of residents in Davidson County and 2.9% of residents in Randolph County)¹⁴. Those with limited mobility and those without access to transportation are at an increased risk of heat related illness. Due to the increased strain on power supply during extreme heat events, power outages may occur causing individuals to not have access to adequate electricity to power cooling devices which prevent heat related illnesses.

Although technology has become a crucial resource in the communication of extreme heat impacts, occurrences, preparedness and safety, not all residents in the area have access to the internet, a computer, or even telephone service in their housing units. Residents in the planning area without a computer (5.7% of residents in Davidson County and 4.7% of residents in Randolph County), telephone service (0.6% of residents in Davidson County and 0.8% of residents in Randolph County), or internet access (0.6% of residents in Davidson County and 0.8% of residents in Randolph County) in their households may not be able to receive important messages about extreme conditions, including notifications about cooling centers and preventing negative health impacts.

It is estimated that 3.3% of residents in Davidson County and 4.9% Randolph County report that they speak English "Less than well." Due to the importance of public outreach and awareness, it is important that the planning area develops educational materials in multiple languages and multiple formats to ensure that all residents understand their risks, how to prepare, and how to mitigate the impact of extreme heat on their household.

To prepare for extreme heat hazard impacts on the planning area and reduce disproportionate impacts, the planning area should consider developing public outreach that highlights disproportionate impacts on the community and develop ways to mitigate those impacts.

5.4.6.2 Changes in Development or Housing Characteristics

Both counties experienced an increase in the number of housing units between 2020 and 2023, with Davidson County experiencing a 19.88% increase in housing units and Randolph County experiencing a 101.01% increase in housing units. The number of occupied housing units built after 2020 comprises an estimated 2.9% of all housing units in Davidson County and 2.8% of all housing units in Randolph County, which suggests that new housing units have increased as a

¹⁴ Environmental Protection Agency. (2025, January 17). Climate Change and the Health of People with Disabilities. EPA. <https://www.epa.gov/climateimpacts/climate-change-and-health-people-disabilities>

result of increase in residents and is expected continue to increase along with the increase of available housing units experienced by both the counties in the planning area. Increasing the number of residents in the planning area without increasing the capability of utilities to support strain on power during extreme heat events could negatively impact the health and safety of residents in the planning area with limited mobility, limited access to transportation, or disabilities, who rely on cooling devices powered by electricity to remain cool during heat events.

5.4.6.3 Economy

Industries that rely on power, which represent all the major industries in the planning area may be negatively impacted by disruption of power during extreme heat events caused by excessive power demand in the planning area. This may also create an increase in the cost of power during peak periods of power usage, which negatively impacts residents and businesses in the planning area by increasing the cost of utilities.

5.4.6.4 Natural Environment

Extreme heat impacts on the environment in many ways, including damaging sensitive vegetation. As extreme heat events become more frequent, it is expected that there will be increased negative impacts on the natural environment.

5.4.6.5 First Responders

Extreme heat events may lead to increased occurrence of wildfire which would impact first responders in the planning area. First responders may also experience an increase in emergencies related to heat-related illnesses resulting from extreme heat events, particularly in vulnerable residents who are more likely to experience heat related illnesses.

5.4.6.6 Climate Change

According to the NCCSR¹⁵, the years between 2009 and 2018 have been the warmest 10-year period in North Carolina (NC), with an average of 0.6 degrees Fahrenheit warmer than the warmest decade of the 20th century, which was 1930 to 1939. Temperatures in NC are very likely to increase, according to the NCCSR, in all seasons, and projected temperature increases are projected to be around 6-10 degrees Fahrenheit in a higher scenario and 2-6 degrees Fahrenheit in a lower scenario. Other notable projections include the very likely increase in number of (nighttime minimum temperature of 70°F or higher) and very warm nights (nighttime minimum temperature of 75°F or higher), the very likely summer heat index value increases because of increases in absolute humidity, and the likely possibility that the number of hot (daytime maximum temperature of 90°F or higher) and very hot (daytime maximum temperature of 95°F or higher) will increase.

¹⁵ North Carolina Institute for Climate Studies [NCICS]. (2020). North Carolina Climate Science Report. NCICS. Retrieved January 29, 2025, from https://ncics.org/wp-content/uploads/2020/10/NC_Climate_Science_Report_FullReport_Final_revised_September2020.pdf

5.5 Hurricane/Tropical Storm

5.5.1 Background

Hurricanes and tropical storms are classified as tropical cyclones and defined as any closed circulation developing around a low-pressure center in which the winds rotate counterclockwise in the Northern Hemisphere (or clockwise in the Southern Hemisphere) and whose diameter averages 10 to 30 miles across. A tropical cyclone refers to any such circulation that develops over tropical waters. Tropical cyclones act as a “safety-valve,” limiting the continued build-up of heat and energy in tropical regions by maintaining the atmospheric heat and moisture balance between the tropics and the pole-ward latitudes. The primary damaging forces associated with these storms are high-level sustained winds, heavy precipitation, and tornadoes.

The key energy source for a tropical cyclone is the release of latent heat from the condensation of warm water. Their formation requires a low-pressure disturbance, warm sea surface temperature, rotational force from the spinning of the earth, and the absence of wind shear in the lowest 50,000 feet of the atmosphere. Most hurricanes and tropical storms form in the Atlantic Ocean, Caribbean Sea, and Gulf of Mexico during the official Atlantic hurricane season, which encompasses the months of June through November. The peak of the Atlantic hurricane season is in early to mid-September and the average number of storms that reach hurricane intensity per year in the Atlantic basin is about six.

As an incipient hurricane develops, barometric pressure (measured in millibars or inches) at its center falls and winds increase. If the atmospheric and oceanic conditions are favorable, it can intensify into a tropical depression. When maximum sustained winds reach or exceed 39 miles per hour, the system is designated a tropical storm, given a name, and is closely monitored by the National Hurricane Center in Miami, Florida. When sustained winds reach or exceed 74 miles per hour the storm is deemed a hurricane. Hurricane intensity is further classified by the Saffir-Simpson Scale (Table 5- 14), which rates hurricane intensity on a scale of 1 to 5, with 5 being the most intense.

Table 5- 14: Saffir-Simpson Scale

CATEGORY	MAXIMUM SUSTAINED WIND SPEED (MPH)	MINIMUM SURFACE PRESSURE (MILLIBARS)
1	74–95	Greater than 980
2	96–110	979–965
3	111–129	964–945
4	130–156	944–920
5	157 +	Less than 920

The Saffir-Simpson Scale categorizes hurricane intensity linearly based upon maximum sustained winds and barometric pressure, which are combined to estimate potential damage. Categories 3, 4, and 5 are classified as “major” hurricanes and, while hurricanes within this range comprise only 20 percent of total tropical cyclone landfalls, they account for over 70 percent of the damage in the United States. Table 5- 15 describes the damage that could be

expected for each category of hurricane. Damage during hurricanes may also result from spawned tornadoes, storm surge, and inland flooding associated with heavy rainfall that usually accompanies these storms.

Table 5- 15: Hurricane Damage Classifications

STORM CATEGORY	DAMAGE LEVEL	DESCRIPTION OF DAMAGES	PHOTO EXAMPLE
1	MINIMAL	No real damage to building structures. Damage primarily to unanchored mobile homes, shrubbery, and trees. Also, some coastal flooding and minor pier damage.	
2	MODERATE	Some roofing material, door, and window damage. Considerable damage to vegetation, mobile homes, etc. Flooding damages piers and small crafts in unprotected moorings may break their moorings.	
3	EXTENSIVE	Some structural damage to small residences and utility buildings, with a minor amount of curtainwall failures. Mobile homes are destroyed. Flooding near the coast destroys smaller structures, with larger structures damaged by floating debris. Terrain may be flooded well inland.	
4	EXTREME	More extensive curtainwall failures with some complete roof structure failure on small residences. Major erosion of beach areas. Terrain may be flooded well inland.	
5	CATASTROPHIC	Complete roof failure on many residences and industrial buildings. Some complete building failures with small utility buildings blown over or away. Flooding causes major damage to lower floors of all structures near the shoreline. Massive evacuation of residential areas may be required.	

Source: National Hurricane Center, <http://www.nhc.noaa.gov/aboutsshws.php>

5.5.2 Location and Spatial Extent

Hurricanes and tropical storms threaten the entire Atlantic and Gulf seaboard of the United States. While coastal areas are most directly exposed to the brunt of landfalling storms, their impact is often felt hundreds of miles inland and they can affect the Region. All areas in the Region are equally susceptible to hurricane and tropical storms. Figure 5- 13, Figure 5- 14, and Figure 5- 15 depict data from NOAA's National Centers for Environmental Information that represents path of each hurricane or tropical storm event in the planning area between 1955 and 2022. Varied colors were used to differentiate the various storm types that occurred in the region.

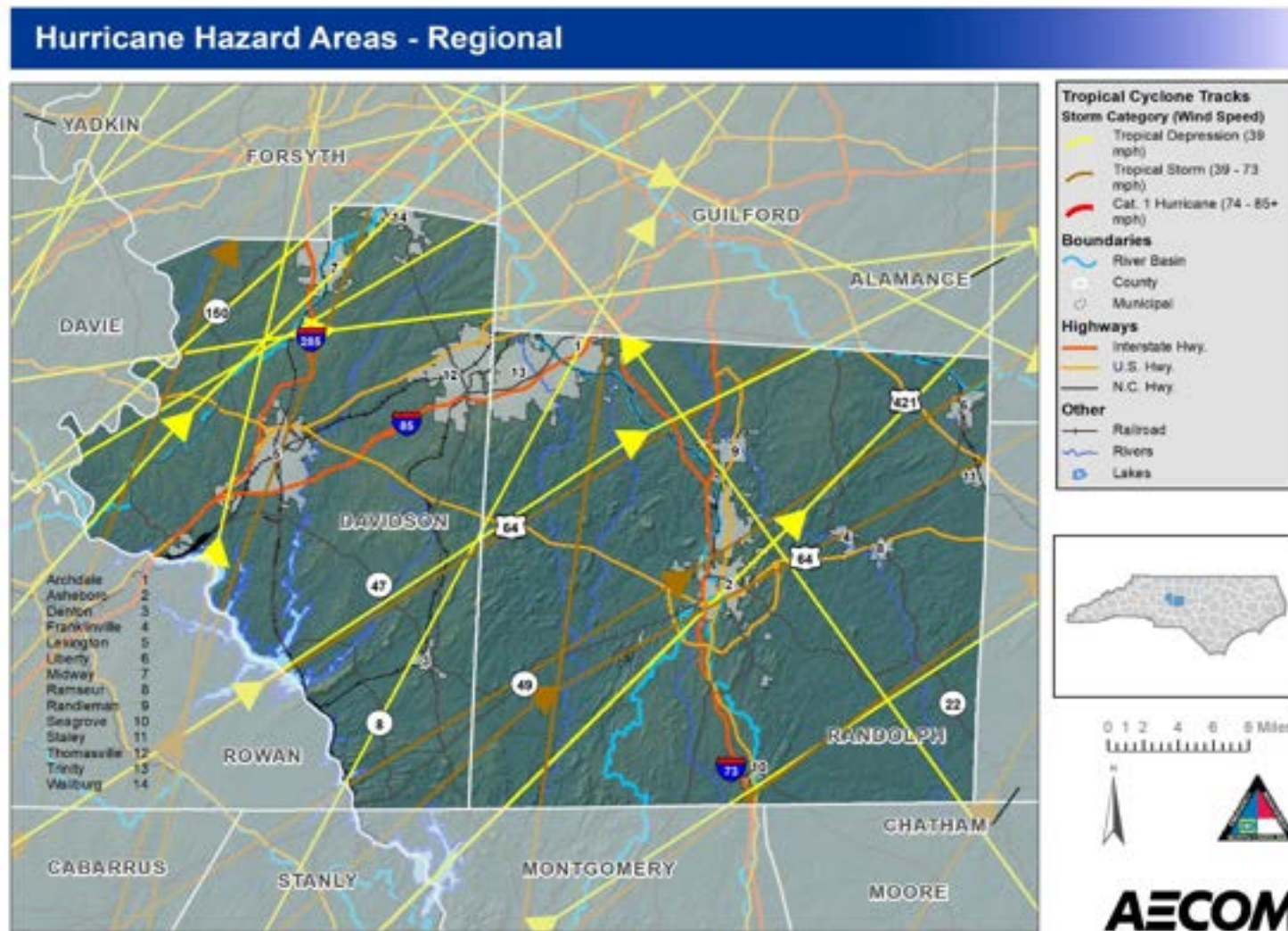


Figure 5- 13: Hurricane Hazard Areas - Regional

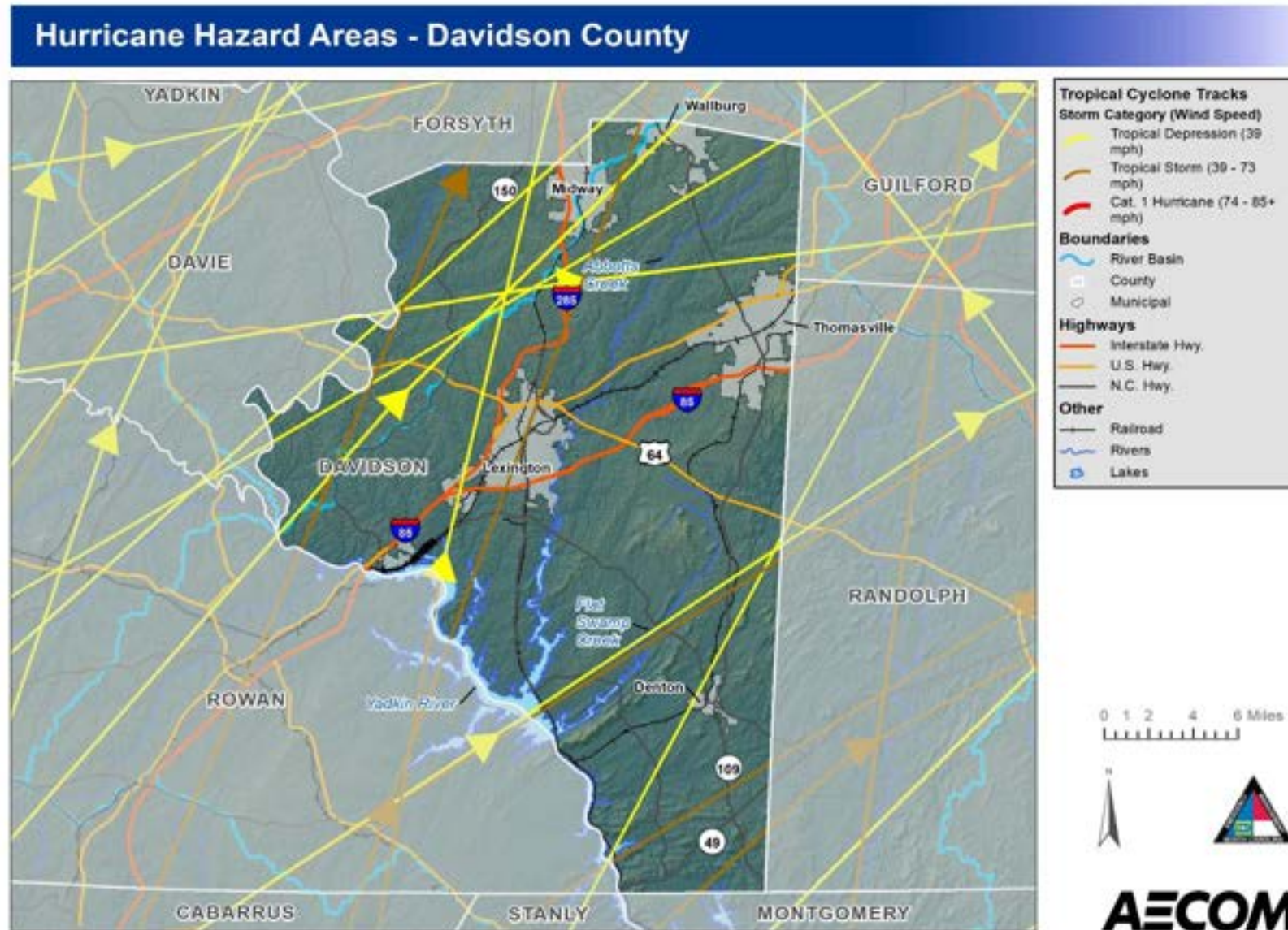


Figure 5- 14: Hurricane Hazard Areas – Davidson County

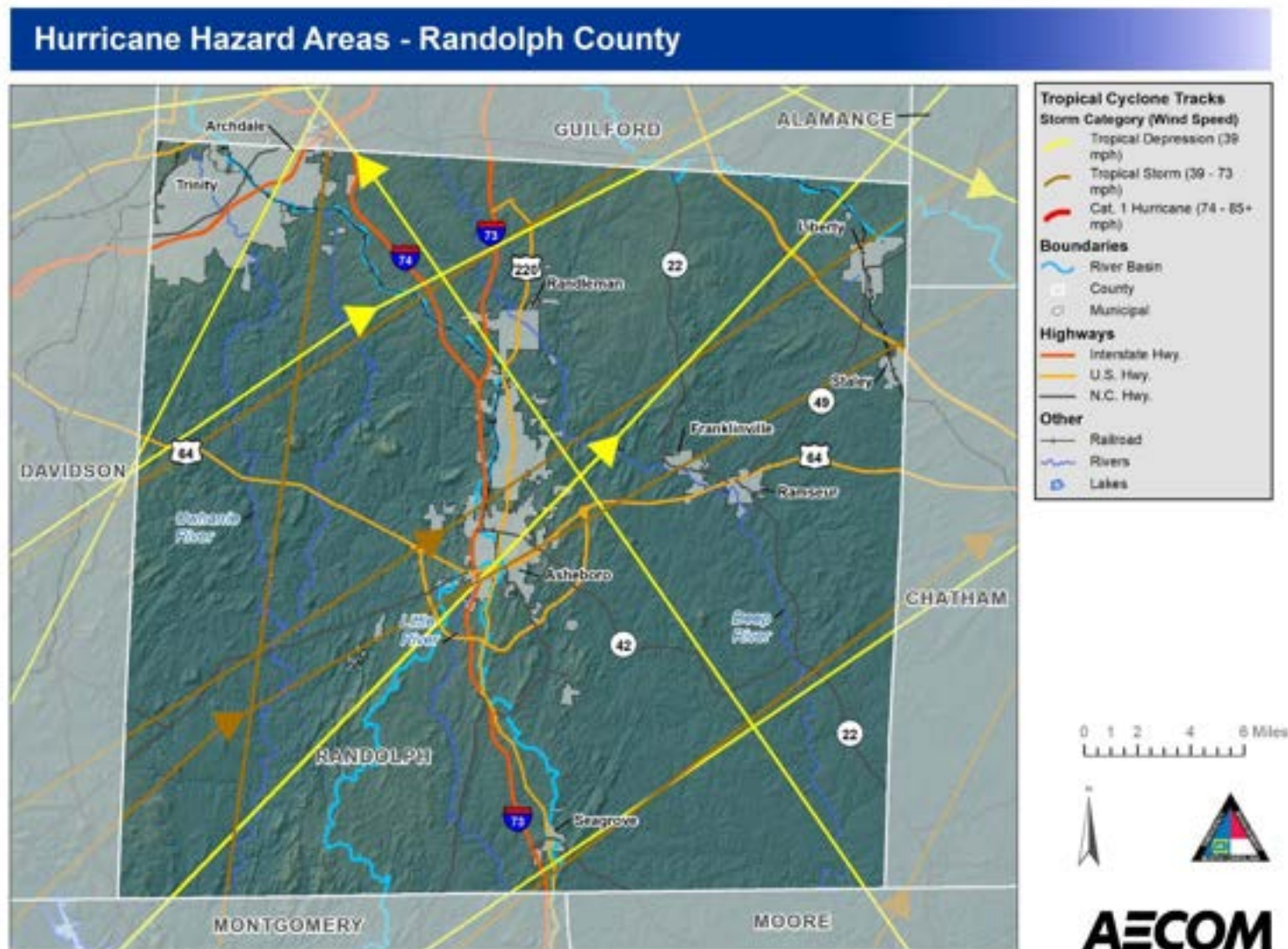


Figure 5- 15: Hurricane Hazard Areas – Randolph County

5.5.3 Extent

Hurricane extent is defined by the Saffir-Simpson Scale which classifies hurricanes into Category 1 through Category 5 (Table 5- 14) The greatest classification of hurricane to traverse directly through the Region was a tropical storm (Michael 2018) which carried tropical force winds of 40-60 knots upon arrival in the region. The following list is the greatest extent of hurricane winds to pass through the area, though it should be noted that stronger storms could impact the region without a direct hit:

- Davidson County: Michael (45 knots) (2018)
- Randolph County: Michael (45 knots) (2018)

5.5.4 Historical Occurrences

According to the National Hurricane Center's historical storm track records, fifty-nine hurricane/tropical storm tracks have passed within seventy-five miles of the Region since 1854.¹⁶ Of the recorded storm events, eleven have traversed through Davidson County and eight through Randolph County.

Figure 5- 13, Figure 5- 14, and Figure 5- 15 depict data from NOAAs National Centers for Environmental Information that represents path of each hurricane or tropical storm event in the planning area between 1955 and 2022. Varied colors were used to differentiate the various storm types that occurred in the region.

Table 5- 16 provide the date of occurrence, name (if applicable), maximum wind speed (as recorded within seventy-five miles of the Region), and category of the storm based on the wind speed within the seventy-five-mile buffer according to the Saffir-Simpson Scale.

Table 5- 16: Historical Storm Tracks Within 75 Miles of the Region (1850–2019)

DATE OF OCCURRENCE	STORM NAME	MAXIMUM WIND SPEED (KNOTS)	STORM CATEGORY
9/9/1854	UNNAMED	50	Tropical Storm
9/17/1859	UNNAMED	40	Tropical Storm
6/23/1867	UNNAMED	40	Tropical Storm
10/4/1877	UNNAMED	50	Tropical Storm
9/12/1878	UNNAMED	60	Tropical Storm
9/11/1882	UNNAMED	40	Tropical Storm
10/12/1885	UNNAMED	40	Tropical Storm
6/22/1886	UNNAMED	35	Tropical Storm

¹⁶ These storm track statistics do not include extra-tropical storms. Though these related hazard events are less severe in intensity, they may cause significant local impact in terms of rainfall and high winds.

DATE OF OCCURRENCE	STORM NAME	MAXIMUM WIND SPEED (KNOTS)	STORM CATEGORY
7/1/1886	UNNAMED	45	Tropical Storm
9/10/1888	UNNAMED	35	Tropical Storm
9/24/1889	UNNAMED	45	Tropical Storm
8/28/1893	UNNAMED	75	Category 1
10/13/1893	UNNAMED	80	Category 1
10/4/1893	UNNAMED	40	Tropical Storm
9/29/1896	UNNAMED	85	Category 2
10/31/1899	UNNAMED	75	Category 1
7/13/1901	UNNAMED	35	Tropical Storm
6/16/1902	UNNAMED	35	Tropical Storm
9/14/1904	UNNAMED	60	Tropical Storm
9/23/1907	UNNAMED	35	Tropical Storm
8/31/1911	UNNAMED	25	Tropical Depression
6/14/1912	UNNAMED	35	Tropical Storm
9/3/1913	UNNAMED	40	Tropical Storm
8/3/1915	UNNAMED	35	Tropical Storm
9/23/1920	UNNAMED	35	Tropical Storm
10/3/1927	UNNAMED	40	Tropical Storm
8/11/1928	UNNAMED	30	Tropical Depression
10/2/1929	UNNAMED	50	Tropical Storm
9/6/1935	UNNAMED	45	Tropical Storm
10/20/1944	UNNAMED	50	Tropical Storm
9/18/1945	UNNAMED	50	Tropical Storm
10/9/1946	UNNAMED	30	Tropical Depression
9/24/1947	UNNAMED	30	Tropical Depression
8/28/1949	UNNAMED	40	Tropical Storm
8/31/1952	ABLE	45	Tropical Storm
8/17/1955	DIANE	60	Tropical Storm
7/10/1959	CINDY	30	Tropical Depression
8/31/1964	CLEO	25	Tropical Depression
6/9/1968	ABBY	25	Tropical Depression
5/26/1970	ALMA	25	Tropical Depression
9/15/1976	UNNAMED	30	Tropical Depression
9/8/1977	BABE	25	Tropical Depression

DATE OF OCCURRENCE	STORM NAME	MAXIMUM WIND SPEED (KNOTS)	STORM CATEGORY
9/5/1979	DAVID	55	Tropical Storm
7/25/1985	BOB	55	Tropical Storm
8/18/1985	DANNY	25	Tropical Depression
9/8/1987	UNNAMED	Not Available	Tropical Depression
8/29/1988	CHRIS	25	Tropical Depression
9/6/1996	FRAN	100	Category 3
7/24/1997	DANNY	30	Tropical Depression
9/5/1999	DENNIS	35	Tropical Storm
9/16/1999	FLOYD*	90	Category 2
9/19/2000	GORDON	25	Tropical Depression
9/23/2000	HELENE	25	Tropical Depression
9/18/2003	ISABEL	105	Category 2
8/30/2004	GASTON	30	Tropical Depression
9/16/2004	IVAN*	20	Tropical Depression
9/28/2004	JEANNE	20	Tropical Depression
7/7/2005	CINDY	20	Tropical Depression
6/14/2006	ALBERTO	35	Tropical Storm
6/5/2013	ANDREA	40	Tropical Storm
9/14/2018	FLORENCE	90	Category 1
10/6/2018	MICHAEL	45	Tropical Storm

* Although the storm track was outside of the seventy-five-mile buffer, this event was considered significant enough to include.

Source: National Hurricane Center

Table 5- 17: Hurricanes and tropical storms reported by the NCDc in the planning area between 2020 and 2024.

Type of Event	Name	Date	Maximum Reported Magnitude (mph)
Tropical Storm	Hurricane Zeta	10/29/2020	55
Tropical Storm	Hurricane Ian	9/30/2022	60

Flooding is the greatest hazard of concern with hurricane and tropical storm events in the Region. Some anecdotal information is available for the major storms that have impacted the area as found below, with narratives from the NCDC Storm Events Database¹⁷.

Hurricane Florence – September 2018

Hurricane Florence began as a tropical storm September 1st over the Cape Verde islands off the coast of West Africa. It peaked as a Category 4 hurricane with sustained winds of 140 mph. It made landfall as a Category 1 hurricane on Friday, September 14 over Wrightsville Beach, North Carolina. Florence produced extensive wind damage along the North Carolina coast from Cape Lookout, across Carteret, Onslow, Pender, and New Hanover Counties. Thousands of downed trees caused widespread power outages to all eastern North Carolina. The historic legacy of Hurricane Florence will be recording a breaking storm surge of 9 to 14 feet devastating rainfall of 20 to 30 inches, which produced catastrophic and life-threatening flooding.

Hurricane Michael – October 8, 2018

Michael originated as a Category 5 hurricane that came up the Gulf of Mexico and first hit land around the Florida/Georgia border. Tropical storm Michael gradually weakened as it tracked from the South Carolina Midlands through portions of the South Carolina and North Carolina Piedmont throughout the 11th. Gusty winds increased during the daylight hours on the east side of the storm track, with numerous trees blown, especially across the Piedmont. Flooding continued east for days after the storm hit. Davidson and Randolph counties were included in the Presidential Disaster Declaration. Hurricane Michael caused multiple flash flooding events and multiple power outages in the region due to high winds.

Hurricane Zeta – October 29, 2020

Hurricane Zeta made landfall along the Louisiana coast during the afternoon of October 28th and quickly lifted off to the north and northeast, moving across the southern Appalachians and southern Mid-Atlantic region on October 29th while transitioning to an extra-tropical cyclone. This resulted in numerous reports of wind damage across the area, especially across northern Piedmont of central North Carolina. Frequent wind gusts of 40 to 55 mph resulted in scattered to numerous trees and power lines down across Davidson County, including some on homes. Numerous customers lost power in Davidson County because of the tropical storm force winds.

Hurricane Ian – September 30, 2022

Hurricane Ian made landfall along the South Carolina coast near Georgetown during the early afternoon hours of September 30, 2022. Widespread wind gusts over tropical storm force and heavy rainfall occurred across much of central North Carolina through the afternoon and evening hours. There were numerous reports of wind damage and power outages because of

¹⁷ National Oceanic and Atmospheric Administration [NOAA]. (n.d.-b). Storm Events Database (By National Center for Environmental Information [NCEI]). National Center for Environmental Information. <https://www.ncdc.noaa.gov/stormevents/>

the storm. Frequent wind gusts of 40 to 60 mph resulted in scattered numerous trees and power lines down across Randolph County, including some on homes. Numerous customers lost power in Randolph County because of the tropical storm force wind gusts. Frequent wind gusts of 35 to 55 mph resulted in scattering numerous trees and power lines down across Davidson County, including some on homes. Numerous customers lost power in Davidson County because of the tropical storm force wind gusts.

5.5.5 Probability of Future Occurrences

The NRI Data used for hurricane and tropical storm probability is from the “hurricane” events data, but the NRI does include tropical storms and hurricanes into data sets used to determine losses, probability, and event history. The NRI defines a hurricane as a tropical cyclone or localized, low-pressure system of organized thunderstorms with a maximum sustained wind of at least 74 mph, and the NRI considers tropical storms as related weather events that have wind speeds from 39mph to 74 mph. The NRI utilizes the National Hurricane Center (NHC) Data Archive¹⁸ with maximum wind speed, track information, central pressure, and cyclone size from January 1, 1851 to November 18, 2020.

According to the NRI, the planning area will experience approximately 1 event around every 10 years. The expected annual loss from hurricanes and tropical storm impacts in the planning area is expected to be approximately \$4,100,000 in Davidson County and \$3,400,000 in Randolph County. The total EAL expected in the planning area attributed to hurricanes is \$7,646,530.71.

The three jurisdictions that are expected to have the highest loss values in Davidson County are Unincorporated areas (\$1,190,266.78), Thomasville (\$1,151,263.76), and Lexington (\$1,089,546.57), with an overall county EAL of \$4,085,780.71 and EAL Score of 62.03. The three jurisdictions that are expected to have the highest loss values in Randolph County are Asheboro (\$1,519,081.38), Archdale (\$695,669.39), and Randleman (\$440,849.07), with an overall county EAL of \$3,431,928.53 and EAL Score of 61.87.

Table 5- 18: NRI Hurricane Losses Data by Jurisdiction.

Hurricane						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	0.0881	\$4,085,780.71	62.03	Relatively High	63.60	Relatively High
Denton	0.1015	\$133,404.92	67.32	Relatively High	70.72	Relatively High

¹⁸ National Hurricane Center [NHC]. (n.d.). NHC Data Archive [Dataset]. In Central Pacific Hurricane Center [CPHC], National Oceanic and Atmospheric Administration [NOAA], & National Weather Service, National Hurricane Center and Central Pacific Hurricane Center. https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf

Hurricane						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Lexington	0.0876	\$1,089,546.57	60.19	Relatively High	63.25	Relatively High
Midway	0.0877	\$525,005.85	65.26	Relatively High	65.39	Relatively High
Thomasville	0.0866	\$1,151,263.76	63.49	Relatively High	66.14	Relatively High
Wallburg	0.0877	\$392,331.21	61.84	Relatively High	61.38	Relatively High
Unincorporated	1.1435	\$1,190,266.78	61.33	Relatively High	61.43	Relatively High
Randolph County	0.0848	\$3,431,928.53	61.87	Relatively High	64.30	Relatively High
Archdale	0.0819	\$695,669.39	58.65	Relatively Moderate	60.74	Relatively High
Asheboro	0.0851	\$1,519,081.38	62.02	Relatively High	65.60	Relatively High
Franklinville	0.0818	\$407,533.26	59.67	Relatively Moderate	62.41	Relatively High
Liberty	0.0818	\$301,211.17	68.93	Relatively High	73.97	Relatively High
Ramseur	0.0818	\$260,426.39	60.22	Relatively High	64.31	Relatively High
Randleman	0.0818	\$440,849.07	61.08	Relatively High	63.22	Relatively High
Seagrove	0.1178	\$187,738.65	72.08	Relatively High	69.97	Relatively High
Staley	0.0818	\$131,932.53	67.15	Relatively High	69.94	Relatively High
Trinity	0.0834	\$389,530.75	62.26	Relatively High	64.57	Relatively High
Unincorporated	0.2611	\$380,261.48	63.98	Relatively High	63.61	Relatively High
Total	0.0865	\$7,646,530.71	61.83	Relatively High	63.85	Relatively High

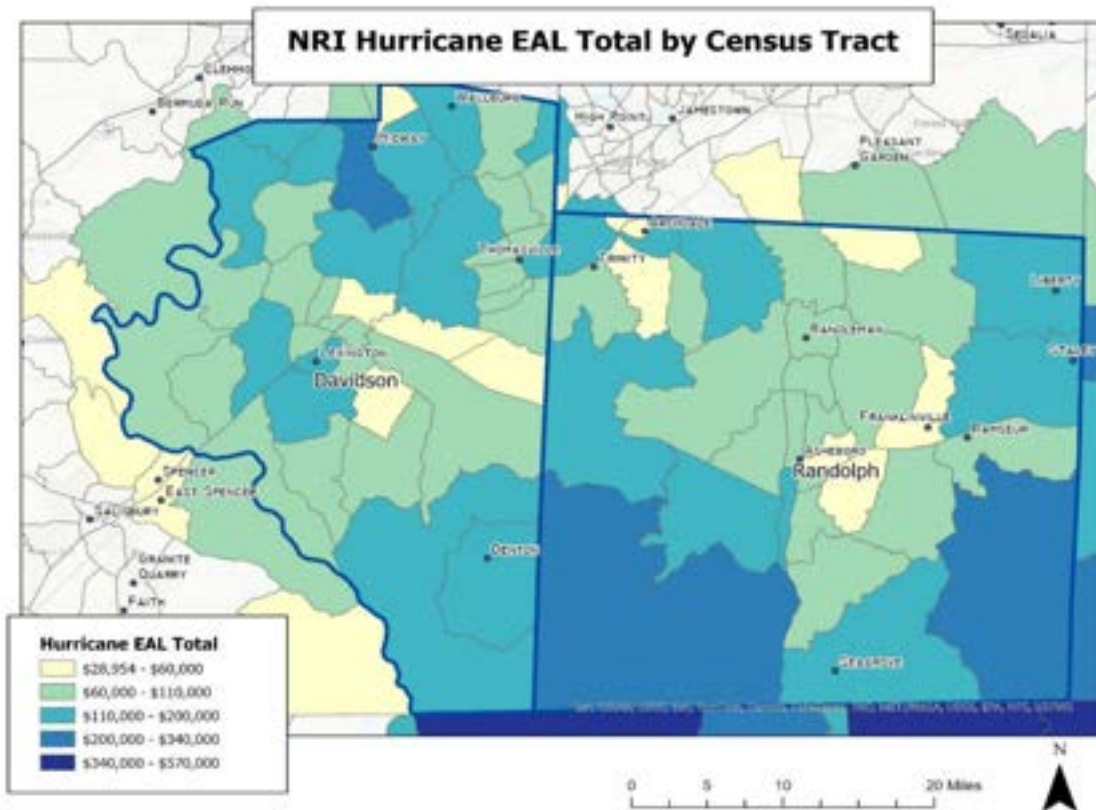


Figure 5- 17: NRI Hurricane EAL Value Total

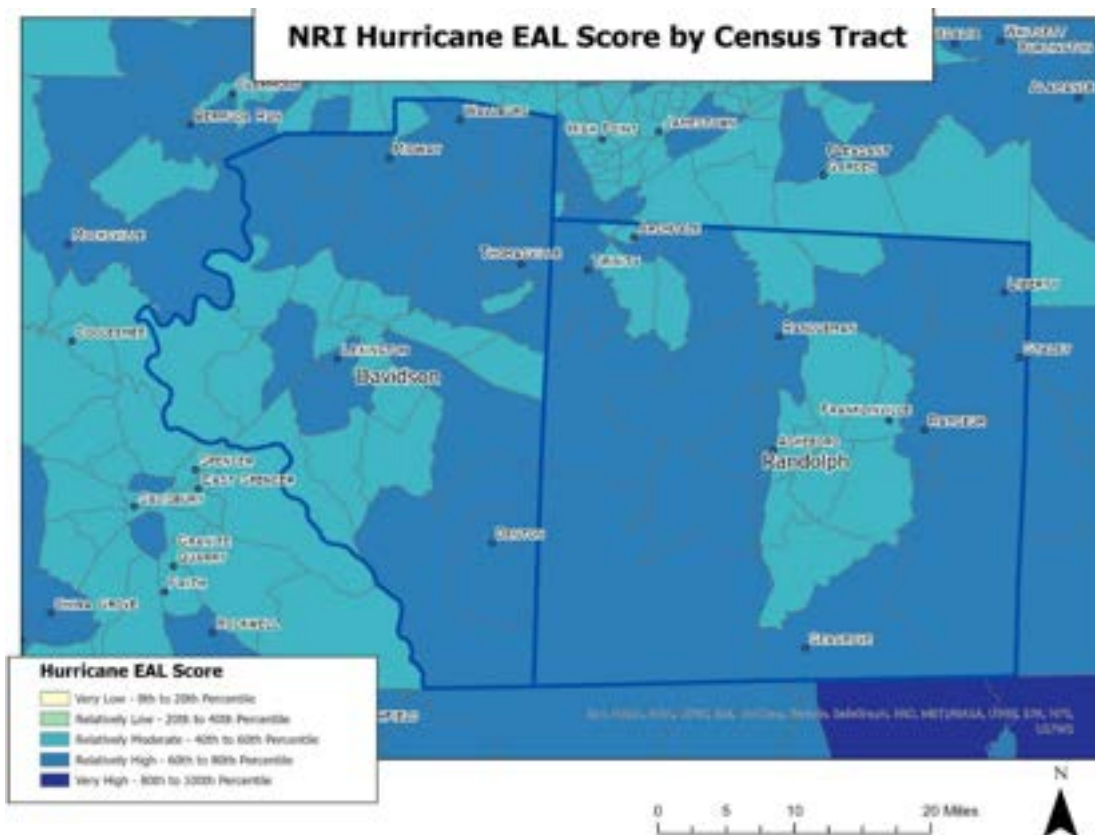


Figure 5- 16: Hurricane EAL Score

5.5.6 Impact

People

Hurricanes may affect humans in many ways including causing deaths, injury, loss of property, outbreak of diseases, mental trauma and destroying livelihoods in all jurisdictions. During a hurricane, residential, commercial, and public buildings, as well as critical infrastructure such as transportation, water, energy, and communication systems may be damaged or destroyed by several hurricane impacts. The wind and flooding hazards associated with hurricanes can be tremendously destructive and deadly. Power outages and flooding are likely to displace people from their homes. Furthermore, water can become polluted making it undrinkable, and if consumed, diseases and infection can be easily spread.

Evacuation may also occur due to hurricane impacts, which would disproportionately impact vulnerable communities and socially vulnerable residents. In Davidson County 14.8% and In Randolph County 15.0% of residents reported that they had a disability, which is a significant portion of the planning area that may require extra assistance to prepare for and recover from hurricane or tropical storm events. In Davidson County it is estimated that 5.3% of residents do not have access to or live in a housing unit with someone who has access to a vehicle, and in Randolph County, 2.9% of residents do not have access to a vehicle. To ensure that each resident can evacuate, if necessary, the planning area should consider developing an evacuation plan to assist with those who have disabilities, those without access to vehicles, and those who have limited mobility.

Preparing for hurricane events is crucial for residents to avoid loss of property, potentially life-threatening injuries, or loss of life. As access to the internet becomes more common, it is likely that resources to prepare for hazards such as hurricane winds will begin to be located primarily through the internet. In Randolph County, 4.7% of residents do not have a computer and 17.7% of the residents do not have a broadband internet connection. In Davidson County, 5.7% of residents are estimated to not have a computer and 9.7% of the planning area are estimated to not have a broadband internet subscription. A large portion of the overall planning area lacks internet access, which makes it important to consider public awareness and preparedness initiatives that are communicated with multiple different media types, such as radio ads, newspaper ads, flyers, and commercials.

- ◆ Communication of emergency alerts through telephone messages and reverse 911 systems have become a crucial tool to alert residents of imminent hazardous conditions, which can also include periodic educational messages on how to prepare and how to respond in the event of an emergency. In addition to the large portion of residents who do not have access to a computer or to the internet in their housing unit, it is estimated that 0.6% of Davidson County and 0.8% of Randolph County residents do not have telephone access in their housing unit as of 2023. Therefore, it is critical that the planning area ensures that all residents have access to emergency alerts, via internet, phone, radio, or other methods so that the entire planning area can receive alerts.

Changes in Development or Housing Characteristics

- Both counties experienced an increase in number of housing units, with Davidson County experiencing a 19.88% increase in housing units and Randolph County experiencing a 101.01% increase in housing units between 2020 and 2023. The number of occupied housing units built after 2020 comprises an estimated 2.9% of all housing units in Davidson County and 2.8% of all housing units in Randolph County, which suggests that new housing units will continue to increase along with the increase of available housing units experienced by both the counties in the planning area.

These housing units, depending on the strength of a tropical storm or hurricane, may experience structural damage to buildings may occur. A weak tropical storm may cause no damage whatsoever. The impact from a category 1 or greater hurricane is the loss of glass windows and doors by high winds and debris. Loss of roof coverings, partial wall collapses, and other damage requiring significant repairs are possible in a major (category 3 to 5) hurricane. The level of damage is equal with the strength of the storm, as explained by the Saffir-Simpson Hurricane Wind Scale. Loss of electric power, potable water, telecommunications, wastewater, and other critical utilities are very possible during a hurricane. Some damage can be so severe that it may take days to weeks to restore.

- In Davidson County and Randolph County there are 10,032 and 12,491 housing units, respectively, that are mobile homes which may present a significant vulnerability, as mobile homes are more likely to experience damage from hurricanes and tropical storms than a traditional home.

Economy

Economic damages include property damage from wind, rain and flood and intangibles like business interruption and additional living expenses. This may create a financial burden on residents of the planning area from having to relocate, repair housing units, replace personal items, and general unexpected costs from interruption of day-to-day life.

Hurricane impacts may include economic strain on individuals, businesses, government, and overall operations associated with damage of critical infrastructure, replacement or repair of property, damages to buildings, and damages to critical facilities.

Natural Environment

Hurricanes can devastate wooded ecosystems. Wind can cause damage to the natural environment by carrying debris and knocking down trees. Animals within the impacted areas can be impacted by the changes in the natural habitat and vegetation that is impacted by hurricane winds can be impacted by high winds, leading to trees being uprooted and forests losing significant amounts of foliage due to the strong winds. They can change habitats so drastically that the indigenous animal populations suffer as a result. Specific foods can be taken away as high winds will often strip fruits, seeds and berries from bushes and trees.

Additional secondary impacts from hurricane or tropical storm events also create potential for hazardous materials to contaminate surrounding environments due to flooding or damage to hazardous material containers. For example, high winds and debris may result in damage to an above-ground fuel tank, resulting in a significant chemical spill.

First Responders

First responders responding to the impacts of a tropical storm or hurricane face many risks to their health and life safety. Responders face risk of injury or death during a storm event by flooding and high winds. Personnel or families of personnel may be harmed which would limit their response capability. Downed trees, power lines and flood waters may prevent access to areas in need which prolongs response time. Furthermore, hurricanes typically affect a large area which amplifies the number of emergency responses needed.

Hurricane events can significantly interrupt the ability of first responders to respond to emergencies by potentially limiting communication capabilities, damaging critical infrastructure required to travel, interrupting power supply, and potentially damaging critical emergency facilities.

Climate Change

It is likely that climate change will create an increase in frequency, intensity, and severity of hurricane and tropical storm events in NC. According to the NCCSR¹⁹, it is very likely that heavy precipitation associated with hurricanes in NC will increase, which also increases the potential for flooding.

5.6 Severe Weather: Thunderstorm/Lightning/Hail

5.6.1 Background

Severe Weather can produce a variety of accompanying hazards including wind (discussed here), thunderstorms hail, and lightning. Although severe weather affects a small area, it is extremely dangerous and may cause substantial property damage.

Thunderstorms

Three conditions need to occur for a thunderstorm to form. First, it needs moisture to form clouds and rain. Second, it needs unstable air, such as warm air that can rise rapidly (this often referred to as the “engine” of the storm). Third, thunderstorms need lift, which comes in the form of cold or warm fronts, sea breezes, mountains, or the sun’s heat. When these conditions occur simultaneously, air masses of varying temperatures meet, and a thunderstorm is formed. These storm events can occur singularly, in lines, or in clusters. Furthermore, they can move through an area very quickly or linger for several hours.

According to the National Weather Service, more than 100,000 thunderstorms occur each year, though only about 10 percent of these storms are classified as “severe.” A severe thunderstorm occurs when the storm produces at least one of these three elements: 1) hail at least one inch in diameter, 2) a tornado, or 3) winds of at least fifty-eight miles per hour.

¹⁹ North Carolina Institute for Climate Studies [NCICS]. (2020). North Carolina Climate Science Report. NCICS. Retrieved January 29, 2025, from https://ncics.org/wp-content/uploads/2020/10/NC_Climate_Science_Report_FullReport_Final_revised_September2020.pdf

Thunderstorm events have the capability of producing straight-line winds that can cause severe destruction to communities and threaten the safety of a population. Such wind events, sometimes separate from a thunderstorm event, are common throughout the Region. Therefore, high winds are also reported in this section.

High winds can form due to pressure of the Northeast coast that combines with intense pressure moving through the Ohio Valley. This creates a tight pressure gradient across the region, resulting in high winds which increase with elevation. It is common for gusts of thirty to sixty miles per hour to occur.

Downbursts are also possible with thunderstorm events. Such events are an excessive burst of wind more than 125 miles per hour. They are often confused by tornadoes. Downbursts are caused by down drafts from the base of a convective thunderstorm cloud. It occurs when rain-cooled air within the cloud becomes heavier than its surroundings. Thus, air rushes towards the ground in a destructive yet isolated manner. There are two types of downbursts. Downbursts less than 2.5 miles wide, duration less than five minutes, and winds up to 168 miles per hour are called “microbursts.” Larger events greater than 2.5 miles at the surface and longer than five minutes with winds up to 130 miles per hour are referred to as “macrobursts.”

Lightning

Lightning is a discharge of electrical energy resulting from the buildup of positive and negative charges within a thunderstorm, creating a “bolt” when the buildup of charges becomes strong enough. This flash of light usually occurs within the clouds or between the clouds and the ground. A bolt of lightning can reach temperatures approaching 50,000 degrees Fahrenheit. Lightning rapidly heats the sky as it flashes but the surrounding air cools following the bolt. This rapid heating and cooling of the surrounding air causes thunder which often accompanies lightning strikes. While most often affiliated with severe thunderstorms, lightning may also strike outside of heavy rain and might occur as far as ten miles away from any rainfall.

Lightning strikes occur in very small, localized areas. For example, they may strike a building, electrical transformer, or even a person. According to FEMA, lightning injures an average of three hundred people and kills people each year in the United States. Direct lightning strikes also can cause significant damage to buildings, critical facilities, and infrastructure largely by igniting a fire. Lightning is also responsible for igniting wildfires that can result in widespread damage to property.

Figure 5- 18 shows a lightning flash density map for the years 2005-2017 based upon data provided by Vaisala’s U.S. National Lightning Detection Network (NLDN®).

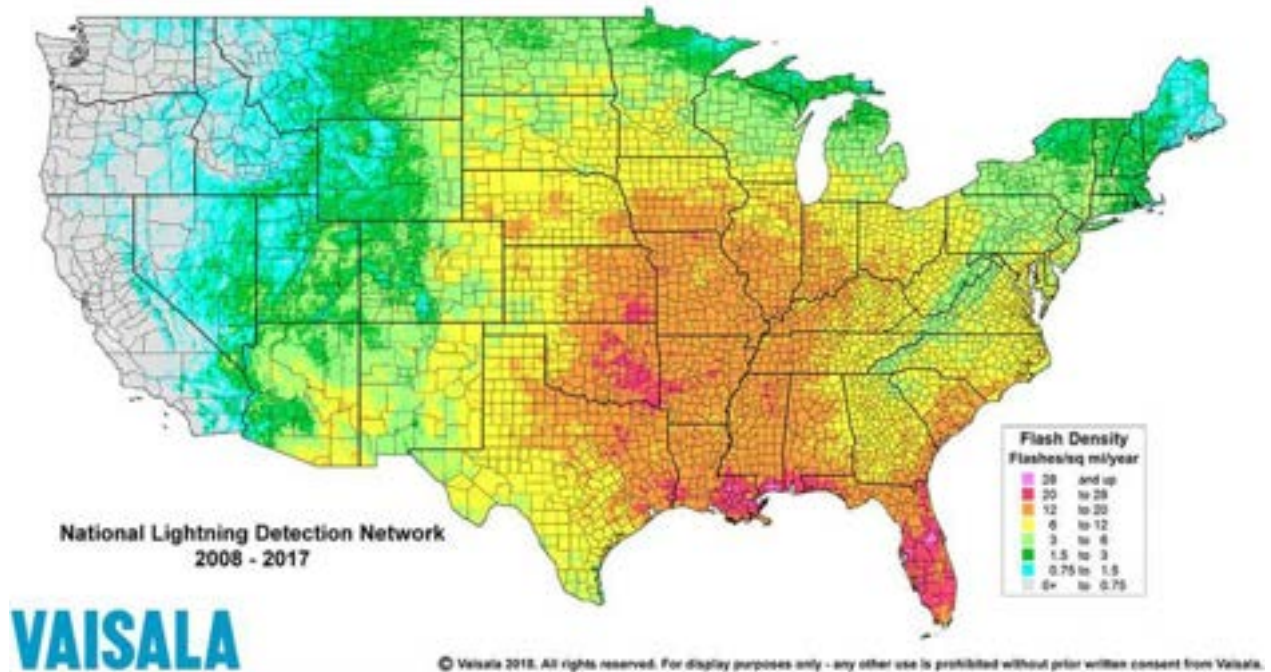


Figure 5- 18: Lightning Flash Density in the United States

Source: Vaisala United States National Lightning Detection Network,
<http://www.vaisala.com/en/products/thunderstormandlightningdetectionsystems/Pages/NLDN.aspx>

Hail

Hailstorms are a potentially damaging outgrowth of severe thunderstorms (thunderstorms are discussed separately). Early in the developmental stages of a hailstorm, ice crystals form within a low-pressure front due to the rapid rising of warm air into the upper atmosphere and the subsequent cooling of the air mass. Frozen droplets gradually accumulate on the ice crystals until they develop to a sufficient weight and fall as precipitation. Hail typically takes the form of spheres or irregularly shaped masses greater than 0.75 inches in diameter. The size of hailstones is a direct function of the size and severity of the storm. High velocity updraft winds are required to keep hail in suspension in thunderclouds. The strength of the updraft is a function of the intensity of heating at the Earth's surface. Higher temperature gradients relative to elevation above the surface result in increased suspension time and hailstone size. Table 5-19 shows the Tornado and Storm Research Organization (TORRO) Hailstorm Intensity Scale which is a way of measuring hail severity.

Table 5- 19: TORRO Hailstorm Intensity Scale

	INTENSITY CATEGORY	TYPICAL HAIL DIAMETER (MM)*	PROBABLE KINETIC ENERGY (J-M ²)	MM TO INCH CONVERSION (INCHES)	TYPICAL DAMAGE IMPACTS
H0	Hard Hail	5	0-20	0-0.2	No damage
H1	Potentially Damage	5-15	>20	0.2-0.6	Slight general damage to plants, crops

	INTENSITY CATEGORY	TYPICAL HAIL DIAMETER (MM)*	PROBABLE KINETIC ENERGY (J-M ²)	MM TO INCH CONVERSION (INCHES)	TYPICAL DAMAGE IMPACTS
H2	Significant	10-20	>100	0.4-0.8	Significant damage to fruit and crops, vegetation
H3	Severe	20-30	>300	0.8-1.2	Severe damage to fruit and crops, damage to glass and plastic structures, paint and wood scored
H4	Severe	25-40	>500	1.0-1.6	Widespread glass damage, vehicle bodywork damage
H5	Destructive	30-50	>800	1.2-2.0	Wholesale destruction of glass, damage to tiled roofs, significant risk of injuries
H6	Destructive	40-60		1.6-2.4	Bodywork of grounded aircraft dented; brick walls pitted
H7	Destructive	50-75		2.0-3.0	Severe roof damage, risk of serious injuries
H8	Destructive	60-90		1.6-3.5	(Severest recorded in the British Isles) Severe damage to aircraft bodywork
H9	Super Hailstorms	75-100		3.0-3.9	Extensive structural damage. Risk of severe or even fatal injuries to people caught in the open
H10	Super Hailstorms	>100			Extensive structural damage. Risk of severe or even fatal injuries to people caught in the open

Source: Tornado and Storm Research Organization, <http://www.torro.org.uk/site/hscale.php>

5.6.2 Location and Spatial Extent

A wind event is an atmospheric hazard and thus has no geographic boundaries. It is typically a widespread event that can occur in all regions of the United States. However, thunderstorms are most common in the central and southern states because atmospheric conditions in those regions are favorable for generating these powerful storms. Also, the Region typically experiences several straight-line wind events each year. These wind events can and have caused significant damage. It is assumed that the Region has uniform exposure to a thunderstorm/wind event and the spatial extent of an impact could be large.

A thunderstorm event is an atmospheric hazard and, thus, has no geographic boundaries. It is typically a widespread event that can occur in all regions of the United States. However, thunderstorms are most common in the central and southern states because atmospheric conditions in those regions are favorable for generating these powerful storms. In addition to

thunderstorms, the Region typically experiences several straight-line winds events each year. These wind events can and have caused significant damage. It is assumed that the Region has uniform exposure to a thunderstorm/wind event and the spatial extent of an impact could be large.

Lightning occurs randomly; therefore, it is impossible to predict where and with what frequency it will strike. It is assumed that all the Region is uniformly exposed to lightning. The figures below show the average annual cloud-to-ground lightning strikes in the Region with “High” being <100 strikes per year, “Medium” 99-50 strikes per year and “Low” being >50 strikes per year.

Data regarding severe weather occurrences in Figure 5- 20, Figure 5- 19, and Figure 5- 21 was downloaded from National Severe Weather Data in NOAAs National Centers for Environmental Information. The data collection is from 1955 to 2023.

National Hail Data in Figure 5- 22, Figure 5- 23, and Figure 5- 24 is downloaded from NOAAs National Centers for Environmental Information and the occurrences are symbolized using graduated symbols based on the largest diameter hail reported during the event. This range of data spans from 1955 to 2022.

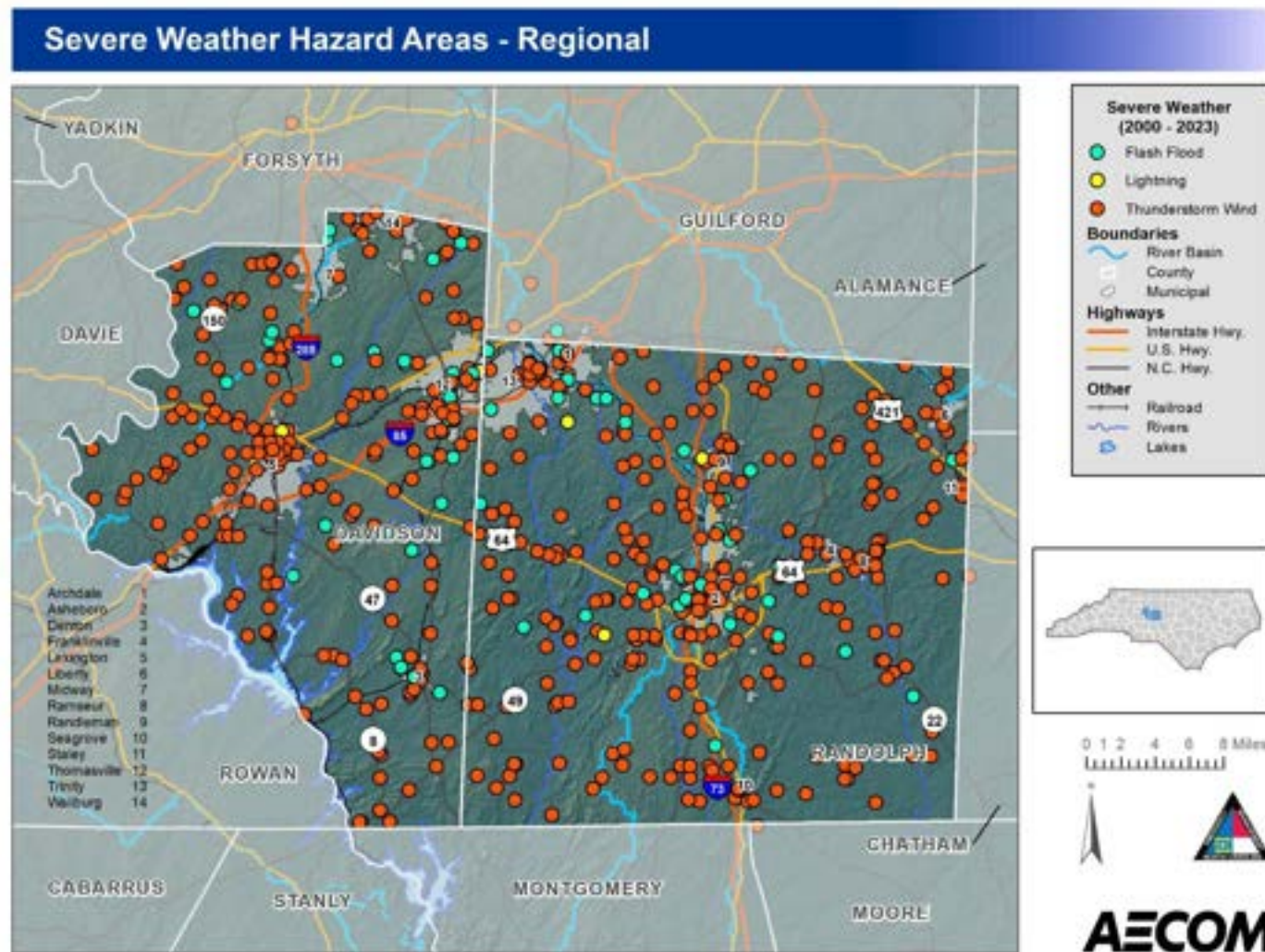


Figure 5- 19: Severe weather hazard areas regional

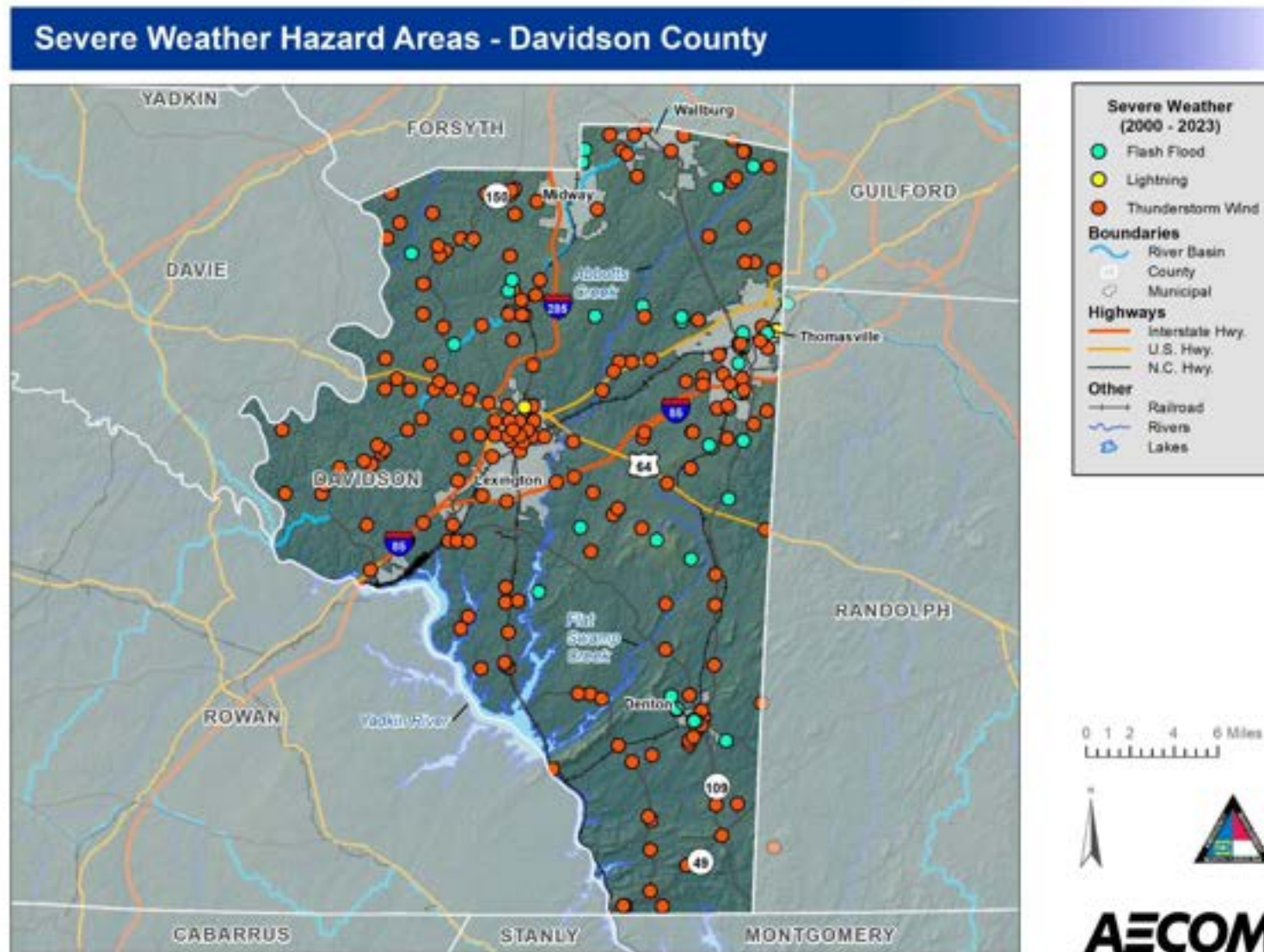


Figure 5- 20: Severe weather hazard areas in Davidson County

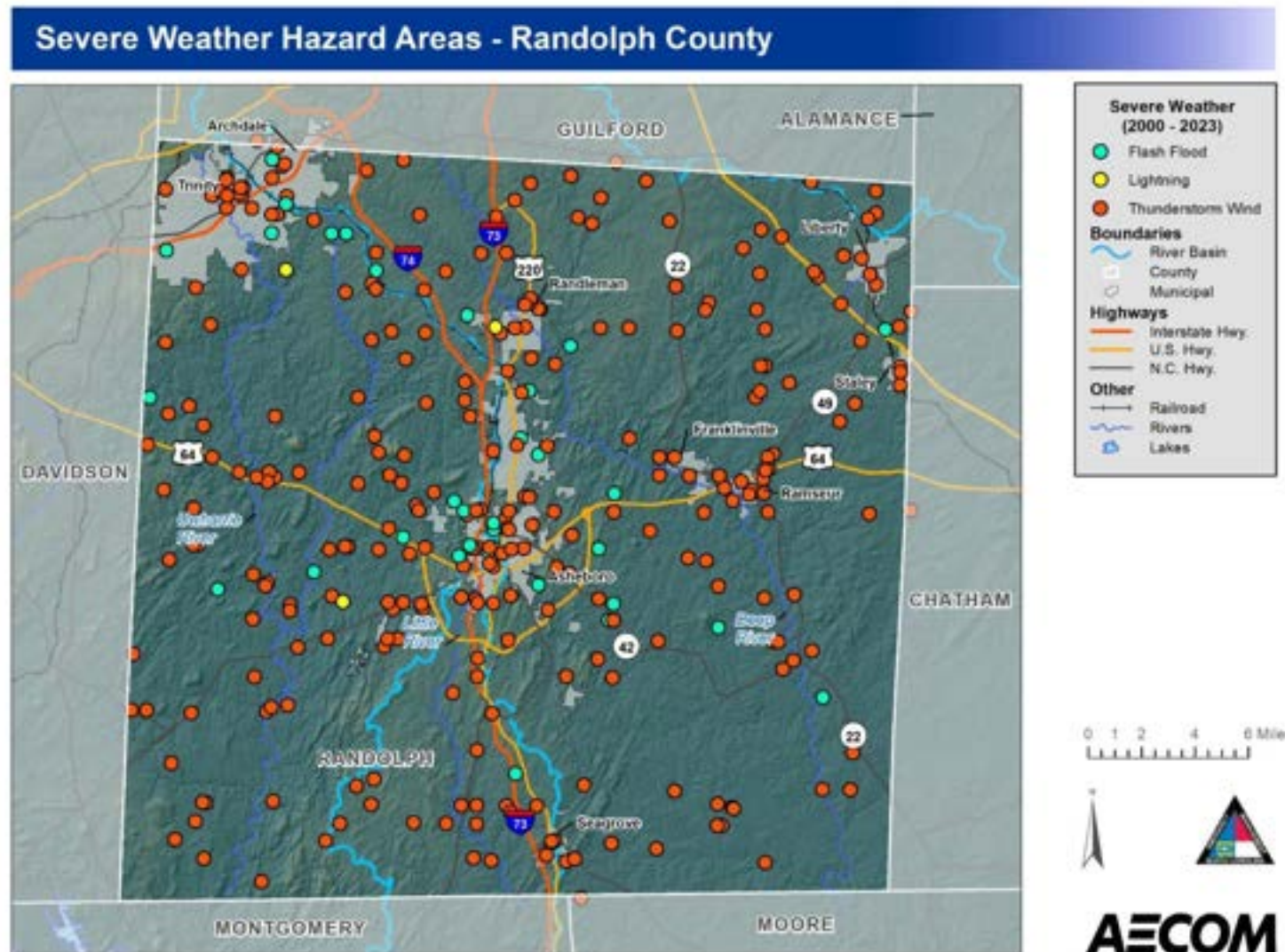


Figure 5- 21: Severe weather hazard areas in Randolph County

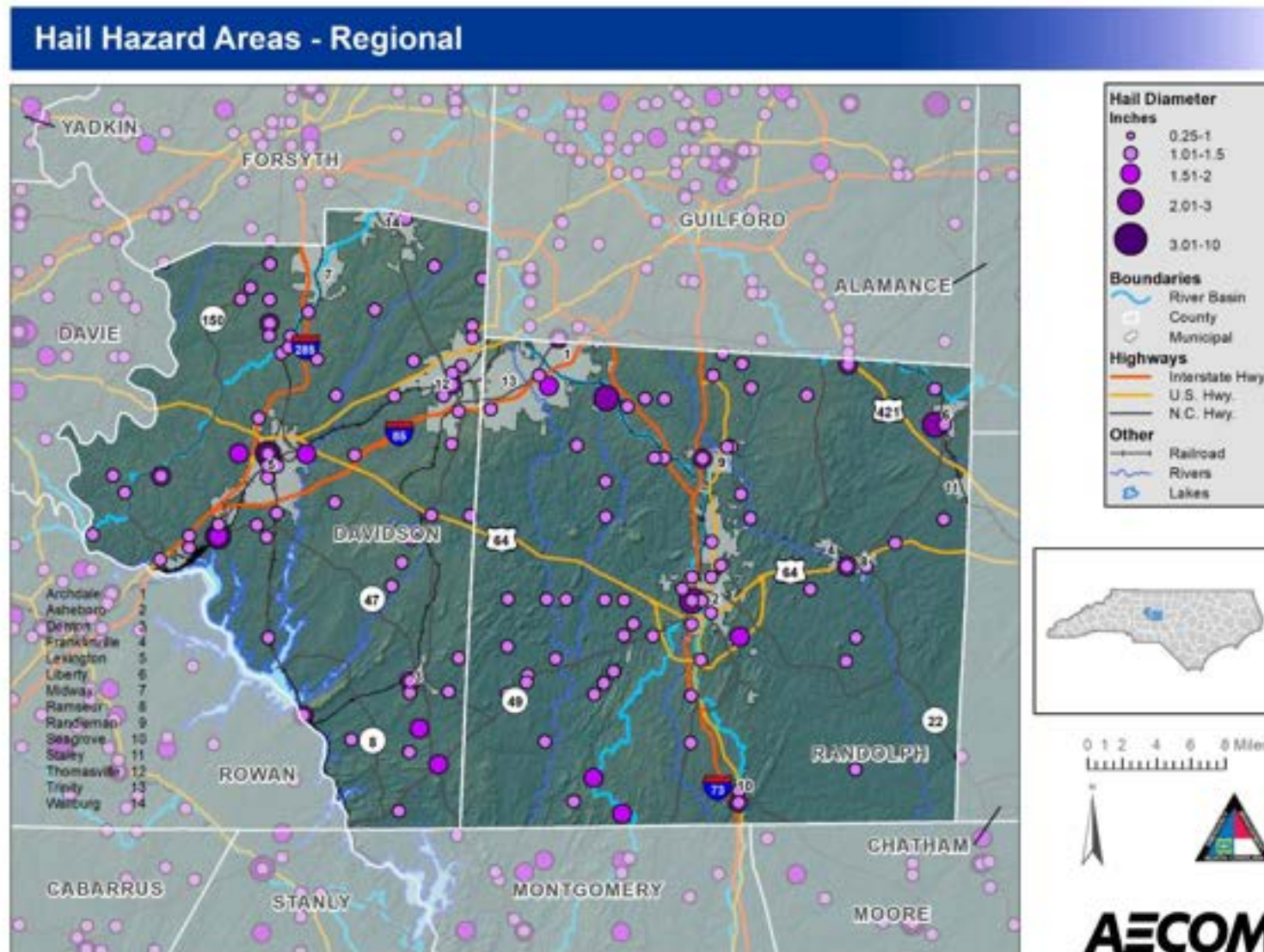


Figure 5- 22: regional hail hazard occurrences

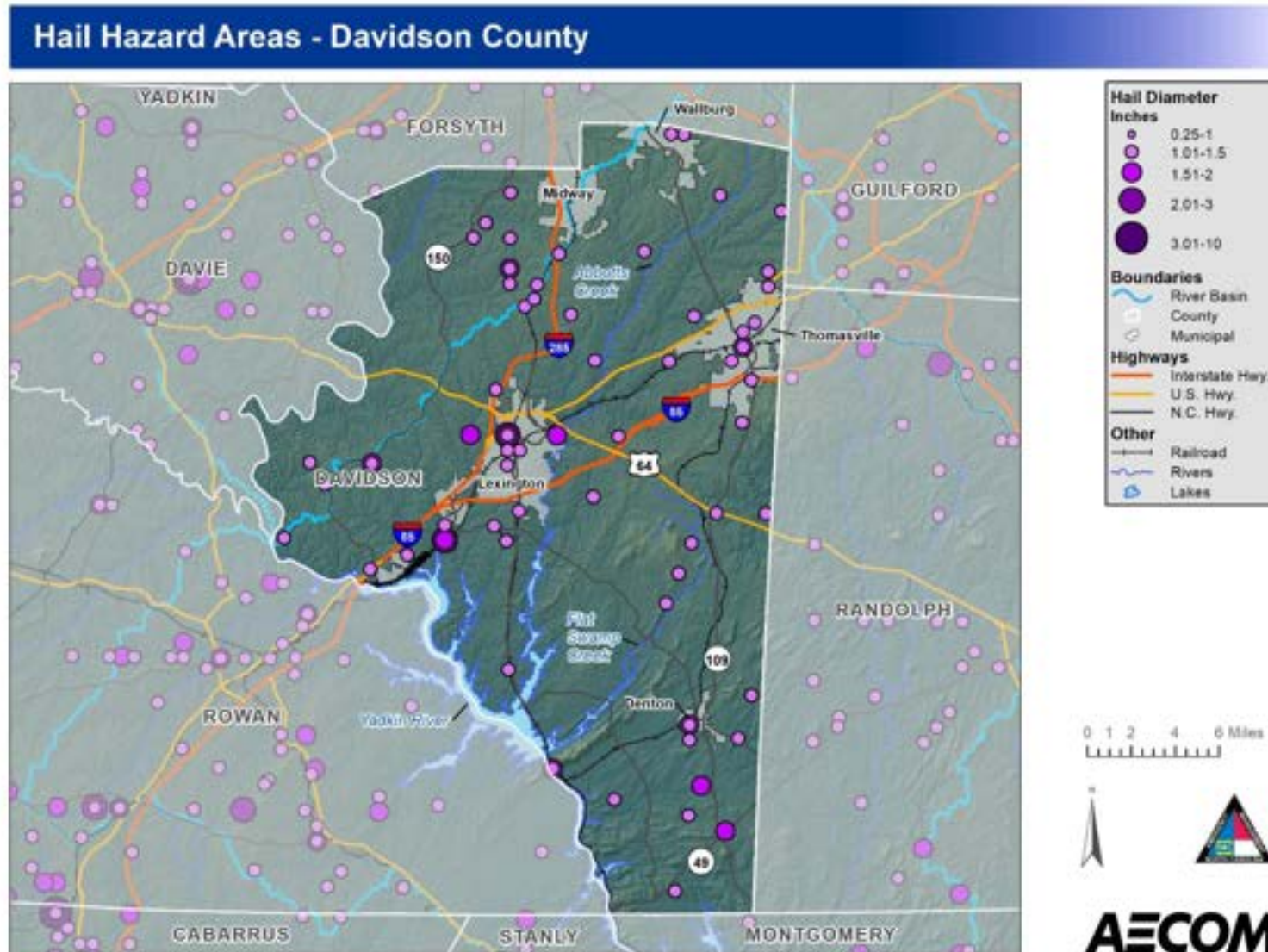


Figure 5- 23: Hail hazard areas in Davidson County

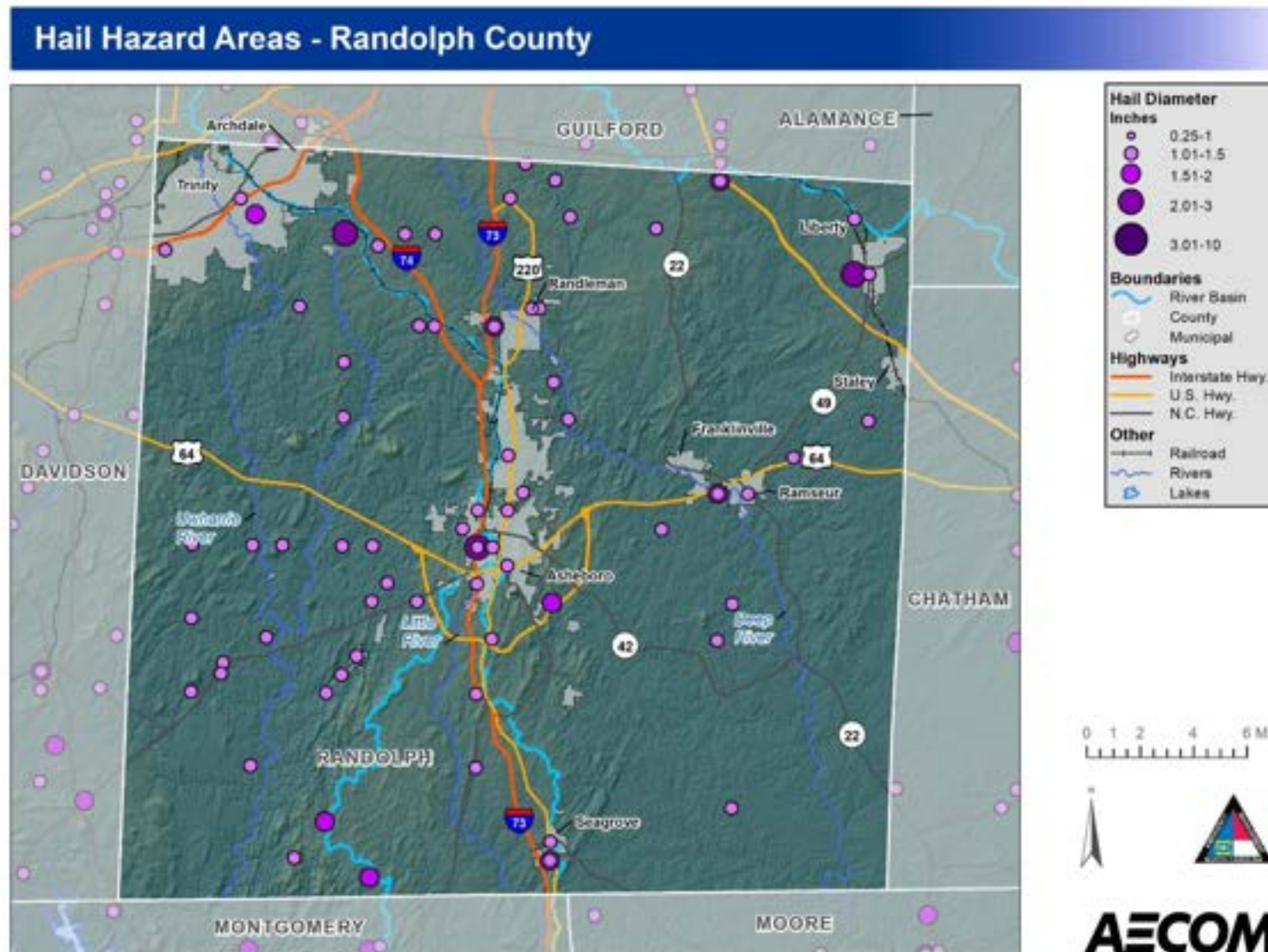


Figure 5- 24: Hail hazard areas in Randolph County

5.6.3 Extent

According to the Vaisala flash density map Figure 5- 18 the Region is in an area that experiences 3 to 6 lightning flashes per square kilometer per year. According to NCDC the worst lightning event to occur in the Region was on June 25, 2007, in the City of Lexington where scattered thunderstorms developed in the mountains and foothills during peak diurnal heating and then moved east into the western piedmont. Lightning struck the Southern Lunch restaurant on South Railroad Street burning the building down resulting in a total loss of approximately \$250,000 in damage. It should be noted that future lightning occurrences may exceed these figures.

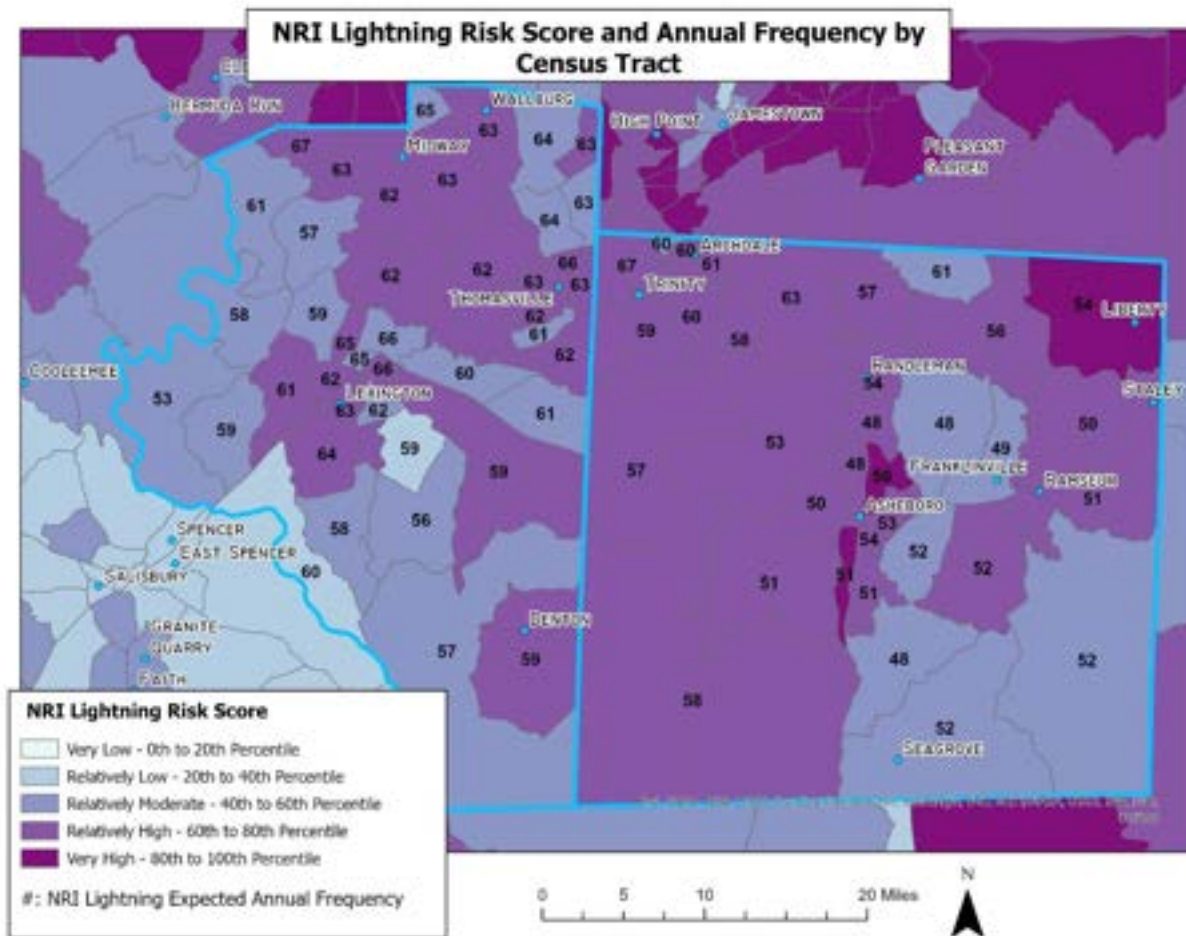


Figure 5- 25: NRI Lightning Risk Score and Expected Annual Frequency of Lightning Events

Figure 5- 28 shows the lightning expected annual frequency for each census tract, indicated by the black numbers in each census tract. According to the NC Lightning Report²⁰ Davidson

²⁰ Earth Networks. (2020). NORTH CAROLINA LIGHTNING REPORT.

https://get.earthnetworks.com/hubfs/2021%20State%20Lightning%20Reports/Lightning_Report_NorthCarolina.pdf

County experienced 97,334 total lightning pulses and 80 total thunder days in 2020. The NC Lightning Report for 2020 reported that Randolph County experienced 161,477 total lightning pulses and 80 total thunder days in 2020.

One of the worst hail events in the Region was on May 5, 2003, in the unincorporated Davidson County. A trained storm spotter reported to NCDC that, “A business near Highway 8 and 47 was damaged by baseball sized hail causing approximately \$1 million in damages.”

The table below describes the extent and characteristics of the hazard:

Table 5- 20: Hail events reported by the NCDC Storm Events Database in the planning area.

Location	County/Zone	Date	Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Asheboro South	Randolph	07/22/2018	Hail	1.00 in.	0	0	0.00K	0.00K
Asheboro West	Randolph	04/08/2020	Hail	0.75 in.	0	0	0.00K	0.00K
Eller	Davidson	03/27/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Thomasville	Davidson	03/27/2021	Hail	1.50 in.	0	0	0.00K	0.00K
Thomasville	Davidson	03/27/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Level Cross	Randolph	03/27/2021	Hail	1.50 in.	0	0	40.00K	0.00K
Level Cross	Randolph	03/27/2021	Hail	1.50 in.	0	0	0.00K	0.00K
Asheboro Muni Airport	Randolph	03/27/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Wallburg	Davidson	05/10/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Southmont	Davidson	05/29/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Healing Springs	Davidson	05/29/2021	Hail	1.00 in.	0	0	0.00K	0.00K
Ramseur	Randolph	08/01/2021	Hail	1.50 in.	0	0	0.00K	0.00K
Coleridge	Randolph	08/01/2021	Hail	0.75 in.	0	0	0.00K	0.00K
Asheboro	Randolph	04/26/2022	Hail	0.88 in.	0	0	0.00K	0.00K
Glen Anna	Davidson	05/19/2022	Hail	1.00 in.	0	0	0.00K	0.00K
Thomasville	Davidson	05/19/2022	Hail	1.00 in.	0	0	0.00K	0.00K
Fair Grove	Davidson	05/19/2022	Hail	1.00 in.	0	0	0.00K	0.00K

Location	County/Zone	Date	Type	Mag	Deaths	Injuries	Property Damage	Crop Damage
Thomasville	Davidson	05/19/2022	Hail	1.00 in.	0	0	0.00K	0.00K
Trinity	Randolph	05/19/2022	Hail	1.50 in.	0	0	0.00K	0.00K
Churchland	Davidson	05/19/2022	Hail	1.00 in.	0	0	0.00K	0.00K
Welcome	Davidson	04/06/2023	Hail	0.88 in.	0	0	0.00K	0.00K
Eller	Davidson	04/14/2023	Hail	1.25 in.	0	0	0.00K	0.00K
Lexington	Davidson	06/26/2023	Hail	1.25 in.	0	0	0.00K	0.00K
Lexington	Davidson	06/26/2023	Hail	2.00 in.	0	0	0.00K	0.00K
Glen Anna	Davidson	06/26/2023	Hail	1.50 in.	0	0	0.00K	0.00K
Glen Anna	Davidson	06/26/2023	Hail	1.00 in.	0	0	0.00K	0.00K
Fullers	Randolph	06/26/2023	Hail	1.00 in.	0	0	0.00K	0.00K
Welcome	Davidson	08/15/2023	Hail	1.00 in.	0	0	0.00K	0.00K
Wallburg	Davidson	08/15/2023	Hail	1.25 in.	0	0	0.00K	0.00K
Totals:					0	0	40.00K	0.00K

5.6.4 Historical Occurrences

According to NCDC, there have been 234 reports of thunderstorm events in the Region since 2018. These events caused around \$814,000 in damages, one injury, and one death from thunderstorm winds²¹. There were also reports of three injuries. Table 5- 21 summarizes this information.

²¹ National Oceanic and Atmospheric Administration [NOAA]. (n.d.-b). Storm Events Database (By National Center for Environmental Information [NCEI]). National Center for Environmental Information. <https://www.ncdc.noaa.gov/stormevents/>

Table 5- 21: Thunderstorm wind reports from the NCDC Storm Events Database

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
New Hope	4/15/2018	Thunderstorm Wind	50	0	0	\$1,000	\$0
New Market	4/15/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Franklinville	5/10/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Old Mill	5/21/2018	Thunderstorm Wind	50	0	0	\$1,000	\$0
Lexington	6/25/2018	Thunderstorm Wind	50	0	0	\$25,000	\$0
Lexington	6/25/2018	Thunderstorm Wind	50	0	0	\$10,000	\$0
Denton	6/25/2018	Thunderstorm Wind	50	0	0	\$10,000	\$0
Asheboro	6/25/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Asheboro	7/22/2018	Thunderstorm Wind	50	0	0	\$15,000	\$0
Asheboro South	7/22/2018	Thunderstorm Wind	50	0	0	\$10,000	\$0
Dogwood Acres	7/22/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Whites Chapel	7/22/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Whites Chapel	7/22/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur Yorks Field Airport	7/22/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Archdale	7/22/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Linwood	7/22/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Tyro	7/22/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Holly Grove	8/3/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Asheboro	8/7/2018	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Parks Crossroads	8/7/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Coleridge	8/7/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Liberty	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Franklinville	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Jackson Hill	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
High Rock	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Jackson Hill	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Pinson	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Auman Corner	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Erect	8/8/2018	Thunderstorm Wind	50	0	0	\$0	\$0
Dogwood Acres	9/27/2018	Thunderstorm Wind	50	0	0	\$5,000	\$0
Trinity	4/12/2019	Thunderstorm Wind	50	0	0	\$1,000	\$0
Ramseur Yorks Field Airport	4/12/2019	Thunderstorm Wind	50	0	0	\$3,000	\$0
Newsom	4/19/2019	Thunderstorm Wind	50	0	0	\$5,000	\$0
Jacksons Creek	4/19/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Denton Airport	4/19/2019	Thunderstorm Wind	50	0	0	\$15,000	\$0
Fullers	4/19/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Fair Grove	4/19/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Mc Laneton	5/25/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Liberty	5/25/2019	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Randleman	6/20/2019	Thunderstorm Wind	50	0	0	\$2,500	\$0
Liberty	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Martha	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Farmer	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Handy	6/20/2019	Thunderstorm Wind	50	0	0	\$2,500	\$0
New Hope	6/20/2019	Thunderstorm Wind	50	0	0	\$1,500	\$0
Ramseur	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Whynot	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Cheeks	6/20/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur	6/30/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur Allen Field Airport	6/30/2019	Thunderstorm Wind	50	0	0	\$10,000	\$0
Lexington	6/30/2019	Thunderstorm Wind	50	0	0	\$2,500	\$0
Holly Grove	7/7/2019	Thunderstorm Wind	50	0	0	\$2,000	\$0
Lexington	7/7/2019	Thunderstorm Wind	50	0	0	\$3,000	\$0
Gordontown	7/18/2019	Thunderstorm Wind	50	0	0	\$1,000	\$0
Millboro	7/22/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Staley	7/22/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Churchland	7/23/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Healing Springs	7/23/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Shale Brick	8/1/2019	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Fair Grove	8/1/2019	Thunderstorm Wind	50	0	0	\$2,000	\$0
Linwood	8/7/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Trinity	8/13/2019	Thunderstorm Wind	50	0	0	\$10,000	\$0
Redcross	8/19/2019	Thunderstorm Wind	50	0	0	\$1,000	\$0
Liberty	8/19/2019	Thunderstorm Wind	50	0	0	\$4,000	\$0
Thomasville	8/21/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Wallburg	8/21/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Thomasville	8/21/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Thomasville	8/21/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Trinity	8/21/2019	Thunderstorm Wind	50	0	0	\$15,000	\$0
Asheboro	8/21/2019	Thunderstorm Wind	50	0	0	\$1,500	\$0
Ramseur Yorks Field Airport	8/22/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Gum Tree	8/22/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Thomasville	8/22/2019	Thunderstorm Wind	50	0	0	\$10,000	\$0
Wallburg	10/31/2019	Thunderstorm Wind	50	0	0	\$1,500	\$0
Trinity	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Fullers	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Pisgah	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Salem	10/31/2019	Thunderstorm Wind	50	0	0	\$2,500	\$0
Asheboro South	10/31/2019	Thunderstorm Wind	50	0	0	\$10,000	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Whites Chapel	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur	10/31/2019	Thunderstorm Wind	50	0	0	\$3,500	\$0
Liberty	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Erect	10/31/2019	Thunderstorm Wind	50	0	0	\$0	\$0
Asheboro	1/11/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Level Cross	1/11/2020	Thunderstorm Wind	50	0	0	\$2,500	\$0
Mc Laneton	2/6/2020	Thunderstorm Wind	50	0	0	\$10,000	\$0
Grays Chapel	2/6/2020	Thunderstorm Wind	50	0	0	\$50,000	\$0
Southmont	4/13/2020	Thunderstorm Wind	50	0	0	\$50,000	\$0
Southmont	4/13/2020	Thunderstorm Wind	50	0	0	\$10,000	\$0
Southmont	4/13/2020	Thunderstorm Wind	50	1	1	\$50,000	\$0
Asheboro South	4/13/2020	Thunderstorm Wind	50	0	0	\$5,000	\$0
Cedar Falls	4/13/2020	Thunderstorm Wind	50	0	0	\$10,000	\$0
Asheboro Hinshaw Airport	4/25/2020	Thunderstorm Wind	50	0	0	\$5,000	\$0
Wallburg	7/5/2020	Thunderstorm Wind	50	0	0	\$2,500	\$0
Denton	7/10/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Lambeth	7/10/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Dogwood Acres	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Fullers	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Jacksons Creek	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Auman Corner	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Ulah	9/29/2020	Thunderstorm Wind	50	0	0	\$10,000	\$0
Asheboro South	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Coleridge	9/29/2020	Thunderstorm Wind	50	0	0	\$0	\$0
Farmer	3/18/2021	Thunderstorm Wind	50	0	0	\$5,000	\$0
Level Cross	3/27/2021	Thunderstorm Wind	50	0	0	\$5,000	\$0
Ulah	5/29/2021	Thunderstorm Wind	50	0	0	\$0	\$0
Staley	7/14/2021	Thunderstorm Wind	50	0	0	\$2,500	\$0
Old Mill	8/1/2021	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur Allen Field Airport	8/1/2021	Thunderstorm Wind	50	0	0	\$50,000	\$0
Ramseur	8/1/2021	Thunderstorm Wind	50	0	0	\$0	\$0
Silver Valley	12/11/2021	Thunderstorm Wind	50	0	0	\$5,000	\$0
Ramseur	12/11/2021	Thunderstorm Wind	50	0	0	\$1,500	\$0
Cotton Grove	4/26/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Silver Valley	4/26/2022	Thunderstorm Wind	50	0	0	\$0	\$0
New Market	4/26/2022	Thunderstorm Wind	50	0	0	\$25,000	\$0
New Market	4/26/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Martha	4/26/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Level Cross	4/26/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Asheboro South	4/26/2022	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Asheboro South	4/26/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Lexington	5/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	5/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Seagrove	5/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
North Asheboro	5/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Lineberry	5/19/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Liberty	5/19/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Asheboro	5/23/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Farmer	5/23/2022	Thunderstorm Wind	50	0	0	\$3,000	\$0
Farmer	5/23/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Silver Hill	5/27/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Denton	5/27/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Thomasville	5/27/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur	6/8/2022	Thunderstorm Wind	50	0	0	\$10,000	\$0
Mc Laneton	6/16/2022	Thunderstorm Wind	50	0	0	\$10,000	\$0
Arcadia	6/17/2022	Thunderstorm Wind	50	0	0	\$10,000	\$0
Holly Grove	7/5/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Reeds Crossroads	7/5/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Holly Grove	7/5/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Liberty	7/5/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Wallburg	7/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Wallburg	7/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Trinity	7/6/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Redcross	7/6/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Tyro	7/24/2022	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	7/24/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Jacksons Creek	8/10/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Mc Laneton	8/10/2022	Thunderstorm Wind	50	0	0	\$5,000	\$0
Jackson Hill	1/12/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Staley	1/12/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Welcome	4/6/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Archdale	4/22/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Level Cross	4/22/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Ramseur Allen Field Airport	4/22/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Arnold	6/3/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Gum Tree	6/3/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Tyro	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Reeds Crossroads	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Eller	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Newsom	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Jackson Hill	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Denton Airport	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Flint Hill	6/19/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Thomasville	6/26/2023	Thunderstorm Wind	50	0	0	\$20,000	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	6/26/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Trinity	6/26/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Asheboro	6/26/2023	Thunderstorm Wind	50	0	0	\$1,500	\$0
Mc Laneton	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Grays Chapel	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Erect	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Ulah	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Whynot	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Pisgah	7/1/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Ulah	7/5/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Midway	7/9/2023	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Midway	7/9/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Holly Grove	7/9/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Glen Anna	7/9/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Fair Grove	7/9/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Holly Grove	8/6/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Cotton Grove	8/6/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Arnold	8/6/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Arnold	8/6/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Trinity	8/6/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Asheboro	8/6/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Southmont	8/7/2023	Thunderstorm Wind	50	0	0	\$10,000	\$0
Lexington	8/7/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Asheboro West	8/7/2023	Thunderstorm Wind	50	0	0	\$1,500	\$0
Salem	8/7/2023	Thunderstorm Wind	50	0	0	\$1,500	\$0
Reeds Crossroads	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0
Lexington	8/14/2023	Thunderstorm Wind	50	0	0	\$0	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Arnold	8/14/2023	Thunderstorm Wind	50	0	0	\$10,000	\$0
Leaches Mill	8/15/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Reeds Crossroads	8/24/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Lexington Airport	8/24/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Holly Grove	8/24/2023	Thunderstorm Wind	50	0	0	\$5,000	\$0
Lexington	8/26/2023	Thunderstorm Wind	50	0	0	\$1,500	\$0
Lexington	1/9/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Thomasville	1/9/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Trinity	1/9/2024	Thunderstorm Wind	50	0	0	\$5,000	\$0
Level Cross	1/9/2024	Thunderstorm Wind	50	0	0	\$5,000	\$0
Lexington	4/11/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Farmer	4/11/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0
Dogwood Acres	4/11/2024	Thunderstorm Wind	50	0	0	\$3,000	\$0
Glen Anna	5/26/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Denton	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Martha	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Salem	5/26/2024	Thunderstorm Wind	50	0	0	\$5,000	\$0
Staley	5/26/2024	Thunderstorm Wind	50	0	0	\$5,000	\$0
Dogwood Acres	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Asheboro	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0

Report Location	Date	Event Type	Magnitude (kts. EG)	Direct Deaths	Direct Injuries	Property Damage	Crop Damage
Asheboro	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Asheboro South	5/26/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Asheboro South	5/26/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Asheboro	5/26/2024	Thunderstorm Wind	50	0	0	\$10,000	\$0
Franklinville	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Coleridge	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Erect	5/26/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Coleridge	7/18/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Cedar Falls	7/18/2024	Thunderstorm Wind	50	0	0	\$1,000	\$0
Fullers	8/18/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0
Fullers	8/18/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0
Jacksons Creek	8/18/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0
Archdale	8/30/2024	Thunderstorm Wind	50	0	0	\$4,000	\$0
Martha	9/24/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0
Auman Corner	9/24/2024	Thunderstorm Wind	50	0	0	\$2,000	\$0

Table 5- 22 provides a summary of this historical information by participating in jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

Table 5- 22: Summary of Historical Thunderstorm Winds Occurrences by Participating Jurisdiction (2000 to 2024) from the NCDC Storm Events Database

Jurisdiction	Number of Occurrences	Deaths	Injuries	Reported Property Damage	Reported Crop Damage
Davidson County					
Town of Denton	11	0	0	\$31,000	\$0
Town of Lexington	40	0	0	\$193,700	\$0
Town of Midway	5	0	0	\$13,500	\$0
City of Thomasville	15	0	0	\$10,000	\$0
Town of Wallburg	11	0	0	\$4,500	\$0
Other areas	114	1	1	\$1,464,500	\$1,000
Subtotal Davidson	196	1	1	\$1,717,200	\$1,000
Randolph County					
City of Archdale	10	0	0	\$260,000	\$0
City of Asheboro	57	0	2	\$89,500	\$7,500
Town of Franklinville	6	0	0	\$5,500	\$0
Town of Liberty	16	0	0	\$18,000	\$0
Town of Ramseur	24	0	0	\$84,000	\$0
City of Randleman	6	0	0	\$2,500	\$0
Town of Seagrove	10	0	1	\$14,000	\$0
Town of Staley	4	0	0	\$7,500	\$0
City of Trinity	12	0	0	\$31,000	\$0
Other areas	159	0	0	\$370,000	\$0
Subtotal Randolph	304	0	3	\$882,000	\$7,500
TOTAL PLAN	500	1	4	\$2,599,200	\$8,500

According to the National Climatic Data Center, there have been a total of 8 reported lightning events in Davidson County and 6 lightning events in Randolph County between 2000-2024, as listed in summary Table 5- 23 According to the 2020 U.S. Lightning Report²², Davidson County experienced 97,334 and Randolph County experienced 161,477 lightning pulses. A lightning pulse is a surge of electric current in lightning that is usually accompanied by a burst of light and is classified as in-cloud or cloud-on-ground lightning. In-cloud (IC) lightning pulses occur when

²² Earth Networks. (2020). NORTH CAROLINA LIGHTNING REPORT.
https://get.earthnetworks.com/hubfs/2021%20State%20Lightning%20Reports/Lightning_Report_NorthCarolina.pdf

opposite charges meet in a thunderstorm cloud and cloud-to-ground (CG) pulses occur when opposite charges create lightning that occurs from the cloud to the ground.

Table 5- 23: Summary of Lightning Occurrences in Davidson County and Randolph County from the NCDC Storm Events Database

Location	Number Of Occurrences	Deaths	Injuries	Property Damage
Davidson County	8	0	1	\$530,000
Randolph County	6	0	1	\$38,000
Total	14	0	2	\$568,000

It is certain that more events have impacted the Region. Many of the reported events are those that caused damage, though it should be expected that damage is much higher for this hazard than what is reported.

Table 5- 24: Summary of Hail Occurrences in Davidson and Randolph County between 2000 and 2024 according to the NCDC Storm Events Database

Location	Number of Occurrences	Deaths	Injuries	Property Damage
Town of Denton	3	0	0	\$0
Town of Lexington	22	0	0	\$250,000
Town of Midway	1	0	0	\$0
City of Thomasville	11	0	0	\$0
Town of Wallburg	4	0	0	\$0
Other Davidson County Areas	39	0	0	\$1,005,000
DAVIDSON COUNTY TOTAL	80	0	0	\$1,255,000
City of Archdale	2	0	0	\$0
City of Asheboro	27	0	0	\$0
Town of Franklinville	0	0	0	\$0
Town of Liberty	3	0	0	\$0
Town of Ramseur	5	0	0	\$0
City of Randleman	2	0	0	\$0
Town of Seagrove	3	0	0	\$0
Town of Staley	0	0	0	\$0
City of Trinity	1	0	0	\$0
Other Randolph County Areas	27	0	0	\$40,000
RANDOLPH COUNTY TOTAL	70	0	0	\$40,000

Table 5- 24 provides a detailed overview of hail occurrences within the planning area from 2000 to 2024.

5.6.5 Probability of Future Occurrences

To represent severe weather events with NRI Risk Data, the plan uses strong winds (defined by the NRI as damaging winds that exceed 58mph), hail, and lightning data, as there is no overarching severe weather category in the NRI. The strong wind and hail NRI data is based on the NWS's Storm Prediction Center Severe Weather data²³, which has a date range from January 1, 1986, to December 31, 2019. The NRI lightning data is based on the National Center for Environmental Information (NCEI) Cloud to Ground Lightning Strikes²⁴ which uses lightning data from 1991 to 2012.

Strong Wind

According to NRI data, the jurisdictions in Davidson County that have the highest EAL for strong wind are Unincorporated areas (\$294,020.95), Lexington (\$257,855.43), and Thomasville (\$246,912.03). The highest EAL jurisdictional score for strong wind in the county is Midway's, with a 73.21 EAL score and \$115,429.07 of EAL value for census tracts within Midway's jurisdictional boundaries. Davidson County is expected to experience 2.45 strong wind events per year, or roughly 5 strong wind events every two years on average, with an expected annual loss value of \$968,172.78 attributed to strong wind events. Overall, census tracts in Davidson County have an average EAL score of 69.70 (relatively high percentile) and average risk score of 70.72 (relatively high percentile). This means the county is at a relatively high risk of experiencing a strong wind event and experiencing loss from strong wind events each year.

Randolph County is expected to experience significantly less strong wind events and has an average expected annual occurrence throughout the planning area of 2.02, or roughly 2 events every year, versus the 2.45, or roughly 5 strong wind events per year, that Davidson County is expected to experience. In Randolph County the 3 jurisdictions with the highest EAL are Asheboro (\$108,338.03), Trinity (\$48,282.25), and Archdale (\$47,146.95), with Asheboro and Trinity at a Relatively Moderate (44.82 and 52.84 respectively) and Archdale at a Relatively Low (38.01) EAL Score. According to the NRI, Randolph County is expected to experience a total EAL of \$230,281.12 attributed to strong wind events, which is \$737,891.66 less than Davidson County's EAL attributed to strong winds. Census tracts in Randolph County have an average EAL score of 43.53 (relatively moderate percentile) and an average risk score of 45.87 (relatively moderate percentile).

The average annual frequency of strong wind events for census tracts in the entire planning area is 2.25 events per year, with an average EAL score of 57.13 (relatively moderate

²³ National Weather Service [NWS]. (n.d.-b). Severe Weather Maps, Graphics, and Data Page [Dataset]. In National Oceanic and Atmospheric Administration [NOAA], NOAA's National Weather Service Storm Prediction Center. <https://www.spc.noaa.gov/wcm/>

²⁴ National Center for Environmental Information [NCEI] & NOAA. (n.d.). Cloud-to-ground lightning strikes [Dataset]. In NCEI. <https://www.ncei.noaa.gov/products/lightning-products>

percentile), an average risk score of 58.76 (relatively moderate percentile), and a total EAL value of \$1,201,639.37.

Table 5- 25: NRI Strong Wind Jurisdictional Summaries

Strong Wind						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	2.45	\$968,172.78	69.70	Relatively High	70.72	Relatively High
Denton	2.16	\$21,671.11	69.50	Relatively High	72.73	Relatively High
Lexington	2.46	\$257,866.43	66.50	Relatively High	69.87	Relatively High
Midway	2.46	\$115,429.07	73.21	Relatively High	72.32	Relatively High
Thomasville	2.39	\$246,912.03	68.47	Relatively High	70.87	Relatively High
Wallburg	2.46	\$91,820.38	68.77	Relatively High	67.04	Relatively High
Unincorporated	2.44	\$294,020.95	69.51	Relatively High	68.42	Relatively High
Randolph County	2.02	\$230,281.12	43.53	Relatively Moderate	45.87	Relatively Moderate
Archdale	2.03	\$47,146.95	38.01	Relatively Low	39.22	Relatively Low
Asheboro	2.01	\$108,338.03	44.82	Relatively Moderate	48.92	Relatively Moderate
Franklinville	2.02	\$26,521.96	39.48	Relatively Low	41.98	Relatively Moderate
Liberty	2.02	\$16,835.92	48.24	Relatively Moderate	54.01	Relatively Moderate
Ramseur	2.02	\$15,801.83	39.17	Relatively Low	43.20	Relatively Moderate
Randleman	2.02	\$34,574.88	44.21	Relatively Moderate	46.31	Relatively Moderate
Seagrove	1.98	\$6,720.87	43.99	Relatively Moderate	39.84	Relatively Low
Staley	2.02	\$7,482.29	45.97	Relatively Low	48.41	Relatively Low
Trinity	2.14	\$48,282.25	52.84	Relatively Moderate	54.96	Relatively Moderate

Strong Wind						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Unincorporated	2.01	\$17,229.48	40.77	Relatively Moderate	38.86	Relatively Low
Total	2.25	\$1,201,639.37	57.13	Relatively Moderate	58.76	Relatively Moderate

Hail

Census tracts in Davidson County are expected to experience an average of 5.25 hail events annually, with a total EAL value of \$805,277.88 for all census tracts in the county and average expected loss from an expected hail event of approximately \$153,386.26. Davidson County census tracts have an average EAL score of 80.29 (relatively high percentile) and an average Risk Score of 80.52 (relatively high percentile). The three jurisdictions in the planning area with the highest EAL value are unincorporated areas (\$244,045.18), Thomasville (\$242,746.68), and Lexington (\$214,699.45).

Census tracts in Randolph County are expected to experience an average of 5.05 hail events per year and a total EAL of \$834,329.86, or \$165,213.53 of damage per hail event. The 3 jurisdictions in Randolph County with the highest EAL based on census tract are Asheboro (\$369,413.78), Archdale (\$158,272.06), and Randleman (\$116,691.33). The average expected loss from each hail event expected in Randolph County is approximately \$165,213.83.

Table 5- 26: NRI Hail Data for jurisdictions in the planning area

Hail						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	5.25	\$805,277.88	80.29	Very High	80.52	Very High
Denton	4.85	\$19,851.35	81.22	Very High	82.41	Very High
Lexington	5.26	\$214,699.45	78.90	Relatively High	80.07	Very High
Midway	5.27	\$97,657.69	81.73	Very High	81.20	Very High
Thomasville	5.24	\$242,746.68	81.97	Very High	82.84	Very High

Hail						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Wallburg	5.27	\$76,764.05	79.78	Relatively High	78.79	Relatively High
Unincorporated	5.24	\$244,045.18	80.21	Very High	79.53	Relatively High
Randolph County	5.05	\$834,329.86	82.21	Very High	83.12	Very High
Archdale	5.08	\$158,272.06	77.80	Relatively High	78.76	Relatively High
Asheboro	5.05	\$369,413.78	82.47	Very High	84.15	Very High
Franklinville	5.08	\$108,516.79	81.34	Very High	82.47	Very High
Liberty	5.08	\$74,408.41	86.66	Very High	88.64	Very High
Ramseur	5.08	\$67,059.74	81.17	Very High	83.12	Very High
Randleman	5.08	\$116,691.33	82.54	Very High	83.32	Very High
Seagrove	4.75	\$30,081.10	84.96	Very High	82.72	Very High
Staley	5.08	\$33,330.02	85.82	Very High	86.75	Very High
Trinity	5.13	\$93,112.78	82.38	Very High	83.09	Very High
Unincorporated	5.03	\$86,950.42	83.28	Very High	82.21	Very High
Total	5.16	\$1,654,056.99	80.86	Very High	81.45	Very High

Lightning

Davidson County census tracts average 61.67 lightning events per year and a total EAL of \$294,742.99. The average EAL score for the planning area is 55.42 (relatively moderate percentile) and the average risk score for the area is 58.25 (relatively moderate percentile). The top three highest average EAL scores by census tracts in each jurisdiction are Thomasville (62.28), Midway (61.27), and Wallburg (55.5), which suggests that these jurisdictions are the most likely in the county to experience economic losses from lightning events. But the top three highest average risk scores from census tracts within jurisdictional boundaries are in

Thomasville (66.71), Midway (60.71), and Denton (60.67) which are expected to experience 62.85, 63.39, and 58.88 lightning events per year, respectively. The jurisdiction with the highest expected lightning events is Walburg, which is estimated to experience 63.89 lightning events per year.

Randolph County census tracts have an average of 54.38 lightning events per year, with a total EAL value of \$305,703.99. The average EAL score for census tracts within the county is 62.59 (relatively high percentile) and average risk score for census tracts within the county is 66.79 (relatively high percentile). The three jurisdictions with the highest total EAL of census tracts within their jurisdictional boundaries are Asheboro (\$138,612.30), Archdale (\$83,610.96), and Randleman (\$45,276.22), but the three jurisdictions with the highest EAL score are Trinity (67.22), Liberty (66.61), and Archdale/Randleman (63.40). The jurisdictions with the three highest average expected annual frequency of lightning events in Randolph County are Trinity (61.87), Archdale (60.68), and unincorporated areas (56.39), but the jurisdictions with the highest average census tract Risk Scores are Trinity (70.78), Asheboro (69.93), and Randleman (67.42).

The total EAL from lightning in the planning area is \$620,109.15 and the average EAL score of census tracts in the planning area is 58.8 (relatively moderate percentile), while the average Risk Score for census tracts in the planning area is slightly higher at 62.26 (relatively high percentile). The jurisdiction with the census tracts that have the highest average EAL score is Trinity (67.22) and the jurisdiction with the highest average Risk Score is Liberty (74.46)

Table 5- 27: NRI data for jurisdictions in the planning area

Lightning						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	61.67	\$294,742.99	55.42	Relatively Moderate	58.25	Relatively Moderate
Denton	58.88	\$6,636.93	54.74	Relatively Moderate	60.67	Relatively High
Lexington	62.44	\$78,654.72	51.33	Relatively Moderate	57.40	Relatively Moderate
Midway	63.39	\$8,716.88	61.27	Relatively High	60.71	Relatively High
Thomasville	62.85	\$96,571.31	62.28	Relatively High	66.71	Relatively High
Wallburg	63.89	\$28,596.02	55.50	Relatively Moderate	54.45	Relatively Moderate
Unincorporated	59.53	\$88,229.51	54.53	Relatively Moderate	54.60	Relatively Moderate

Lightning						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Randolph County	54.28	\$305,703.99	62.59	Relatively High	66.79	Relatively High
Archdale	60.68	\$83,610.96	63.40	Relatively High	67.03	Relatively High
Asheboro	51.39	\$138,612.30	63.37	Relatively High	69.93	Relatively High
Franklinville	49.92	\$33,472.73	54.43	Relatively Moderate	59.86	Relatively Moderate
Liberty	52.05	\$19,570.58	66.61	Relatively High	74.56	Relatively High
Ramseur	49.75	\$6,302.58	52.51	Relatively Moderate	60.46	Relatively High
Randleman	51.97	\$45,276.22	63.40	Relatively High	67.42	Relatively High
Seagrove	51.60	\$8,039.87	60.64	Relatively High	54.96	Relatively Moderate
Staley	49.85	\$8,628.76	62.91	Relatively High	67.37	Relatively High
Trinity	61.87	\$41,227.68	67.22	Relatively High	70.78	Relatively High
Unincorporated	56.39	\$22,882.30	58.70	Relatively Moderate	56.89	Relatively Moderate
Total	58.38	\$620,109.15	58.80	Relatively Moderate	62.36	Relatively High

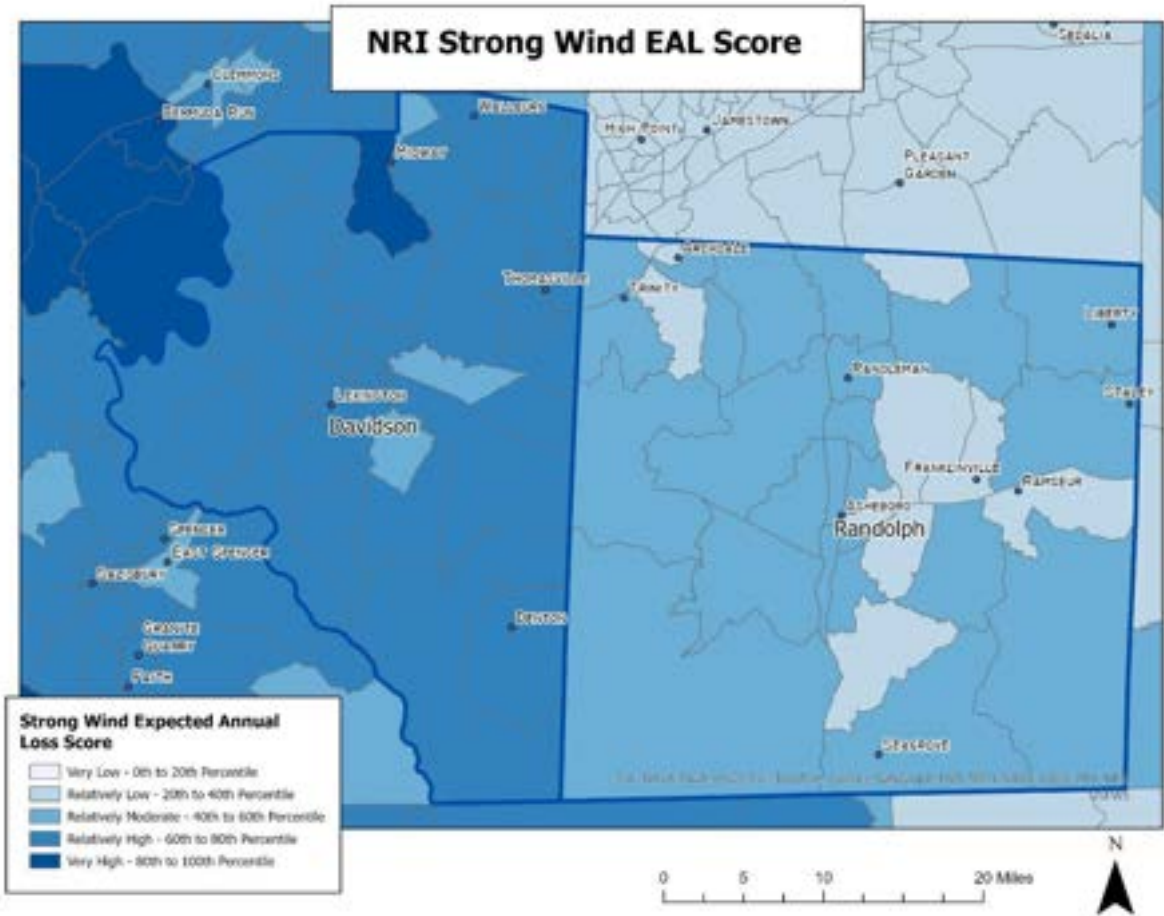


Figure 5- 26: NRI Strong Wind EAL Score by Census Tract

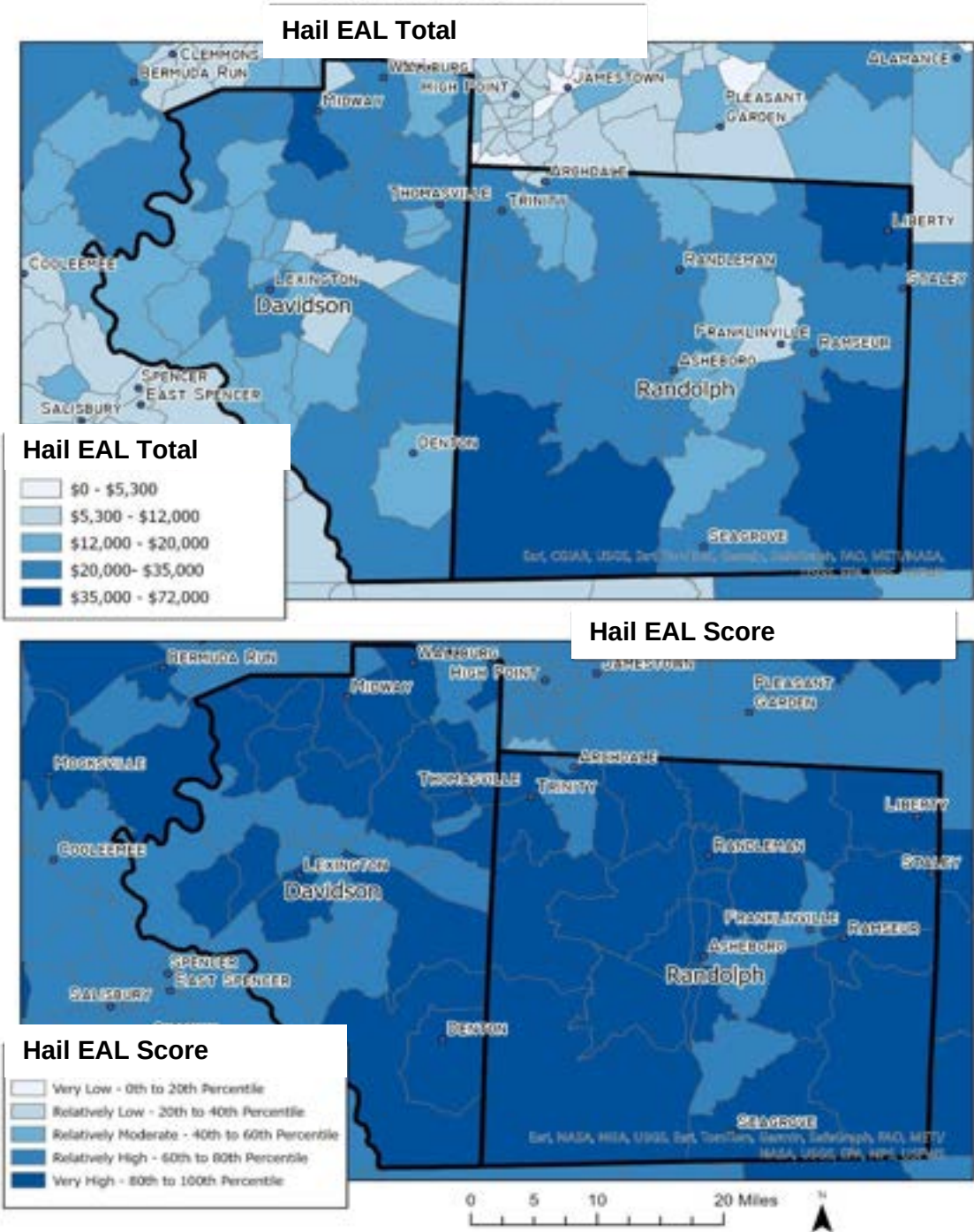


Figure 5- 27: Hail EAL Total and Score

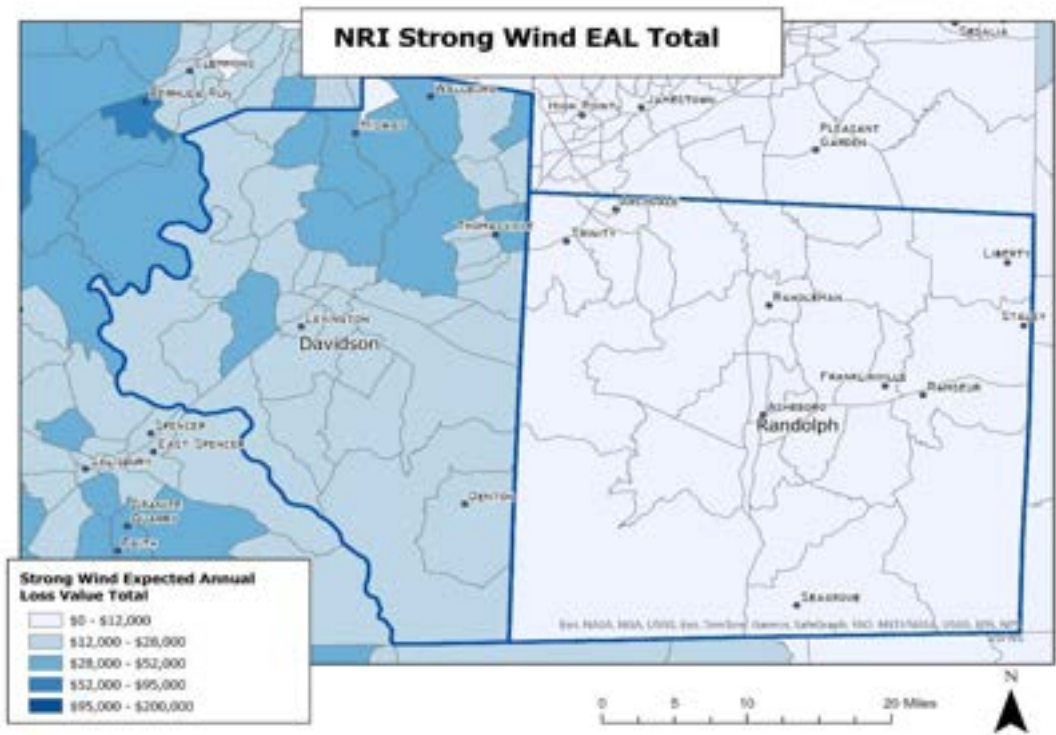


Figure 5- 29: NRI Strong Wind EAL Total Value

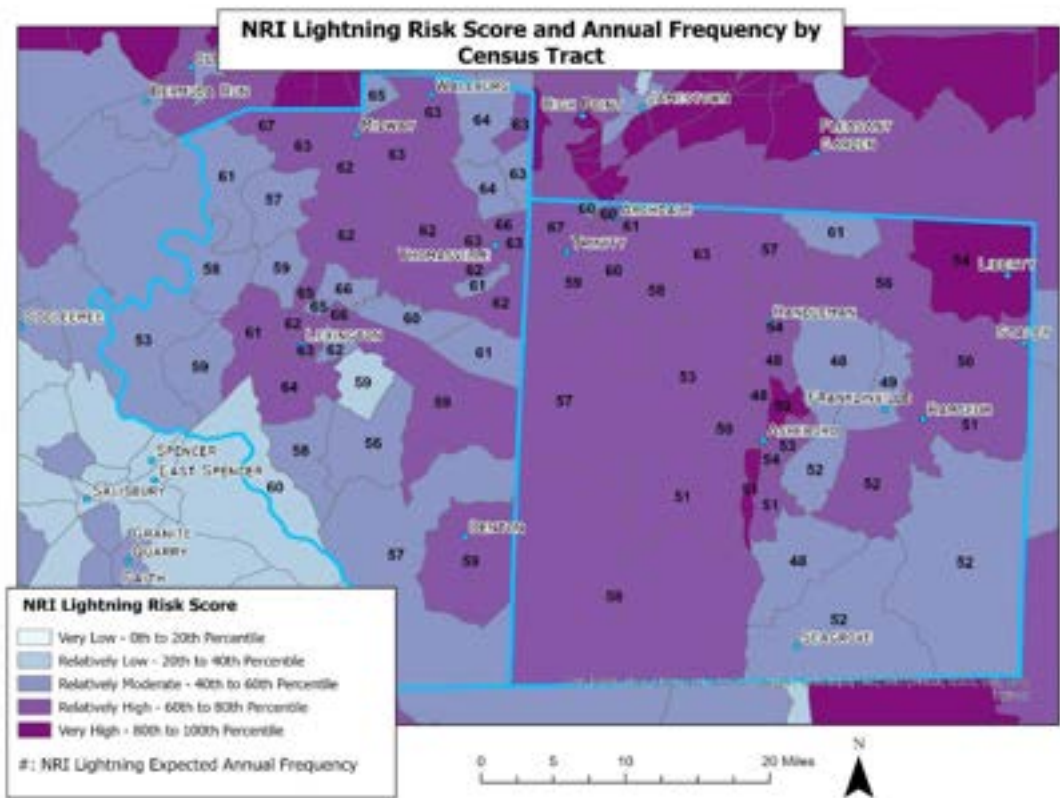


Figure 5- 28: NRI Lightning Risk Score with Annual Expected Annual Frequency indicated by the numbers within each census tract

5.6.6 Impact

Given the high number of previous events, it is certain that severe weather events will occur in the future. Lightning can occur with all thunderstorms, making all the Region and all jurisdictions susceptible. Although there were not a high number of historical lightning events reported throughout the Region via NCDC data, it is a regular occurrence accompanied by thunderstorms. According to the 2020 U.S. Lightning Report²⁵, Davidson County experienced 97,334 and Randolph County experienced 161,477 lightning pulses in 2020, which include CG and IC lightning pulses.

People

It can be expected that future lightning events will continue to threaten life and cause minor property damage throughout the region. The potential for lightning strikes will continue to exist for all jurisdictions in the Region. Different geographic areas could experience varying event frequencies, but in all cases lightning strikes and associated fatalities occur primarily during the summer months. The direct and indirect impacted losses associated with these events include injury and loss of life, damage to structures and infrastructure, agricultural losses, utility failure (power outages), and stress on community resources.

Severe Weather is associated with hazards such as high wind, lightning, and hail. High wind can cause trees to fall and potentially result in injuries or death and lightning can lead to house fires and serious injury. Hail can cause injury as well as severe property damage to homes and automobiles.

It is important that residents are prepared and alerted to severe weather such as thunderstorms, lightning, and hail events. Residents in the planning area without a computer (5.7% of residents in Davidson County and 4.7% of residents in Randolph County), telephone service (0.6% of residents in Davidson County and 0.8% of residents in Randolph County), or internet access (0.6% of residents in Davidson County and 0.8% of residents in Randolph County) in their households may not be able to receive important messages about severe weather conditions, including notifications about associated flash flooding and urgent emergency messages. Those without access to online resources for preparedness may be at an increased risk of severe weather impacts, and it is important that the planning area considers multiple forms of communication to prepare the planning area and its residents for their inevitable occurrence.

Changes in Development or Housing Characteristics

Although both counties have experienced overall increases in the number of housing units, it is not expected that the risk of severe weather will impact or be impacted by the housing units in the planning area. In Davidson County and Randolph County there are 10,032 and 12,491 housing units that are mobile homes, respectively, which may present a significant vulnerability

²⁵ Earth Networks. (2020). NORTH CAROLINA LIGHTNING REPORT.
https://get.earthnetworks.com/hubfs/2021%20State%20Lightning%20Reports/Lightning_Report_NorthCarolina.pdf

because mobile homes are more likely to experience damage from fallen trees, debris, and strong winds than a traditional home.

Economy

Economic damage includes property damage from wind, lightning, and hail, and include intangibles such as business interruption and additional living expenses. Economic damage may involve property damage of homes, businesses, buildings, and critical infrastructure which could negatively impact the planning area. This also includes interruption of business operations and additional living expenses for residents.

Natural Environment

The natural environment can be significantly impacted by wind, which has the potential to damage crops or vegetation. Wind can also damage or knock down trees which have the potential to bring down power lines and cause fires. Additional consequences are associated with other natural hazards that occur with thunderstorm events, which include lightning that may start wildfires.

First Responders

First responders can be impacted in the same way as other residents in the planning area. Downed trees, power lines and flood waters may prevent access to areas in need which prolongs response time. Loss of power and limitation of communications may impact first responder operations and ability to communicate emergency information, which could increase response times and increase the likelihood of first responder injury or death when responding to emergencies in severe weather events.

Hail events can result in a loss of power which may impact operations. Downed trees and power lines may prevent access to critical facilities and/or emergency equipment. Hail can cause damage to commercial buildings and homes.

Climate Change

According to the NCCR²⁶, It is likely that the frequency of severe thunderstorms in NC will increase due to climate change. This will likely increase the frequency of extreme precipitation as well, which could impact the frequency of flooding in the planning area.

5.7 Tornado

5.7.1 Background

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. Tornadoes are most often generated by thunderstorm activity (but sometimes result from hurricanes and other tropical storms) when cool, dry air intersects and overrides a layer of

²⁶ North Carolina Institute for Climate Studies [NCICS]. (2020). North Carolina Climate Science Report. NCICS. Retrieved January 29, 2025, from https://ncics.org/wp-content/uploads/2020/10/NC_Climate_Science_Report_FullReport_Final_revised_September2020.pdf

warm, moist air forcing the warm air to rise rapidly. The damage caused by a tornado is a result of the high wind velocity and wind-blown debris, also accompanied by lightning or large hail. According to the National Weather Service, tornado wind speeds normally range from forty miles per hour to more than three-hundred miles per hour. The most violent tornadoes have rotating winds of two-hundred fifty miles per hour or more and can cause extreme destruction and normally turning harmless objects into deadly missiles.

Each year, an average of over eight hundred tornadoes is reported nationwide, resulting in an average of eighty deaths and 1,500 injuries²⁷. According to the NOAA Storm Prediction Center (SPC), the highest concentration of tornadoes in the United States has been in Oklahoma, Texas, Kansas, and Florida, respectively. Although the Great Plains region of the Central United States does favor the development of the largest and most dangerous tornadoes (earning the designation of “tornado alley”), Florida experiences the greatest number of tornadoes per square mile of all U.S. states (SPC, 2002). Figure 5- 30 shows tornado activity in the United States based on the number of recorded tornadoes per 1,000 square miles.

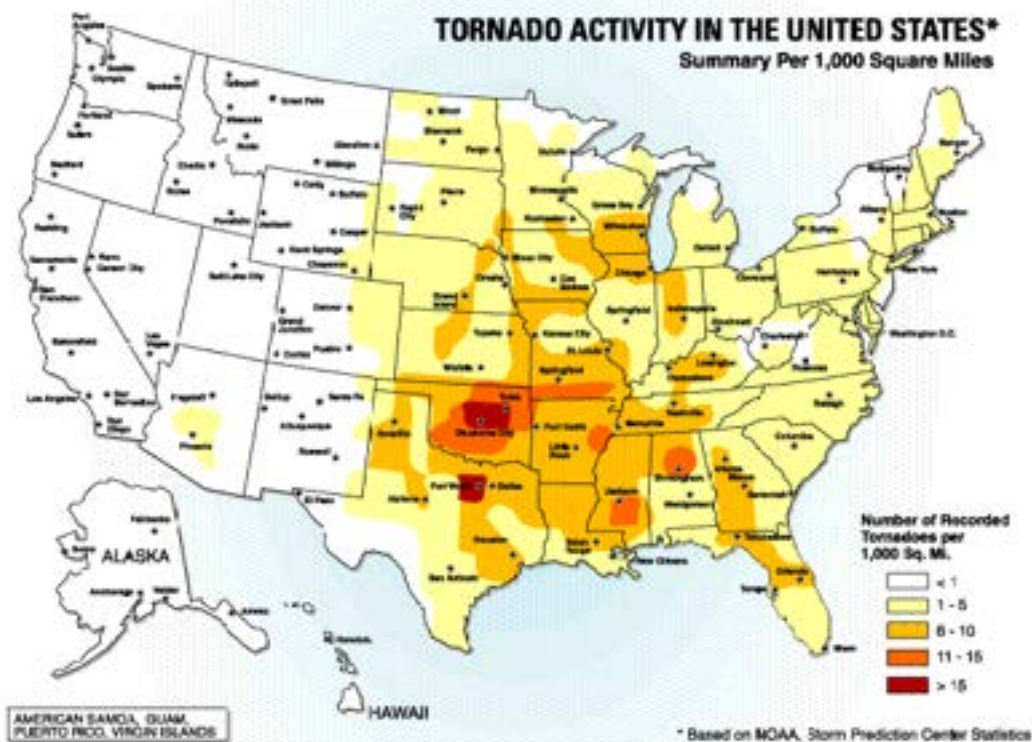


Figure 5- 30: Tornado Activity in the United States

Tornadoes are more likely to occur during the months of March through May and are most likely to form in the late afternoon and early evening. Most tornadoes are a few dozen yards wide and

²⁷ National Weather Service. (2021). Severe Weather Safety guide. In National Weather Service. National Oceanic & Atmospheric Administration. <https://www.weather.gov/media/pah/Skywarn/TORNADOsafety.pdf>

touch down briefly, but even small short-lived tornadoes can inflict tremendous damage. Highly destructive tornadoes may carve out a path over a mile wide and several miles long.

The destruction caused by tornadoes ranges from light to inconceivable depending on the intensity, size, and duration of the storm. Typically, tornadoes cause the greatest damage to structures of light construction, including residential dwellings (particularly mobile homes). Tornadoic magnitude is reported according to the Fujita (F) and Enhanced Fujita (EF) Scales. Tornado magnitudes prior to 2005 were determined using the traditional version of the Fujita Scale (Table 5- 28).

Table 5- 28: The Fujita Scale (Effective Prior to 2005)

F-SCALE NUMBER	INTENSITY	WIND SPEED	TYPE OF DAMAGE DONE
F0	GALE TORNADO	40–72 MPH	Some damage to chimneys; breaks branch off trees; pushes over shallow-rooted trees; damages to sign boards.
F1	MODERATE TORNADO	73–112 MPH	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
F2	SIGNIFICANT TORNADO	113–157 MPH	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
F3	SEVERE TORNADO	158–206 MPH	Roof and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
F4	DEVASTATING TORNADO	207–260 MPH	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
F5	INCREDIBLE TORNADO	261–318 MPH	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly through the air in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.
F6	INCONCEIVABLE TORNADO	319–379 MPH	These winds are very unlikely. The small area of damage they might produce would not be recognizable along with the mess produced by F4 and F5 wind that would surround the F6 winds. Missiles, such as cars and refrigerators would do serious secondary damage that could not be directly identified as F6 damage. If this level is ever achieved, evidence for it might only be found in some manner of ground swirl pattern, for it may never be identifiable through engineering studies.

Source: National Weather Service, <http://www.spc.noaa.gov/faq/tornado/f-scale.html>

Tornado magnitudes that were determined in 2005 and later were determined using the Enhanced Fujita Scale (Table 5- 29)

Table 5- 29: The Enhanced Fujita Scale (Effective 2005 and Later)

EF- SCALE NUMBER	INTENSITY PHRASE	3 SECOND GUST (MPH)	TYPE OF DAMAGE DONE
EF0	GALE	65–85	Some damage to chimneys; breaks branch off trees; pushes over shallow-rooted trees; damages to sign boards.
EF1	MODERATE	86–110	The lower limit is the beginning of hurricane wind speed; peels surface off roofs; mobile homes pushed off foundations or overturned; moving autos pushed off the roads; attached garages may be destroyed.
EF2	SIGNIFICANT	111–135	Considerable damage. Roofs torn off frame houses; mobile homes demolished; boxcars pushed over; large trees snapped or uprooted; light object missiles generated.
EF3	SEVERE	136–165	Roofs and some walls torn off well-constructed houses; trains overturned; most trees in forest uprooted.
EF4	DEVASTATING	166–200	Well-constructed houses leveled; structures with weak foundations blown off some distance; cars thrown and large missiles generated.
EF5	INCREDIBLE	Over 200	Strong frame houses lifted off foundations and carried considerable distances to disintegrate; automobile sized missiles fly in excess of 100 meters; trees debarked; steel re-enforced concrete structures badly damaged.

Source: National Weather Service, <http://www.spc.noaa.gov/faq/tornado/ef-scale.html>

5.7.2 Location and Spatial Extent

Tornadoes can occur throughout the State of North Carolina, and thus in Randolph and Davidson Counties. Tornadoes typically impact a small area, but damage may be extensive. Event locations are completely random, and it is extremely difficult to predict specific areas that are more susceptible to tornado strikes over time. Therefore, it is assumed that Randolph and Davidson Counties are uniformly exposed to this hazard. Figure 5- 31 shows tornado track data for many of the major tornado events that have impacted the County. While no definitive pattern emerges from this data, some areas that have been impacted in the past may be potentially more susceptible in the future.

The tornado data in Figure 5- 31, Figure 5- 32, and Figure 5- 33 represents the tornado touchdown and track points from NOAA's National Centers for Environmental Information. Each

category of tornado is depicted by a different color based on the Enhanced Fujita (EF) scale and the range of data is from 1955 to 2022.

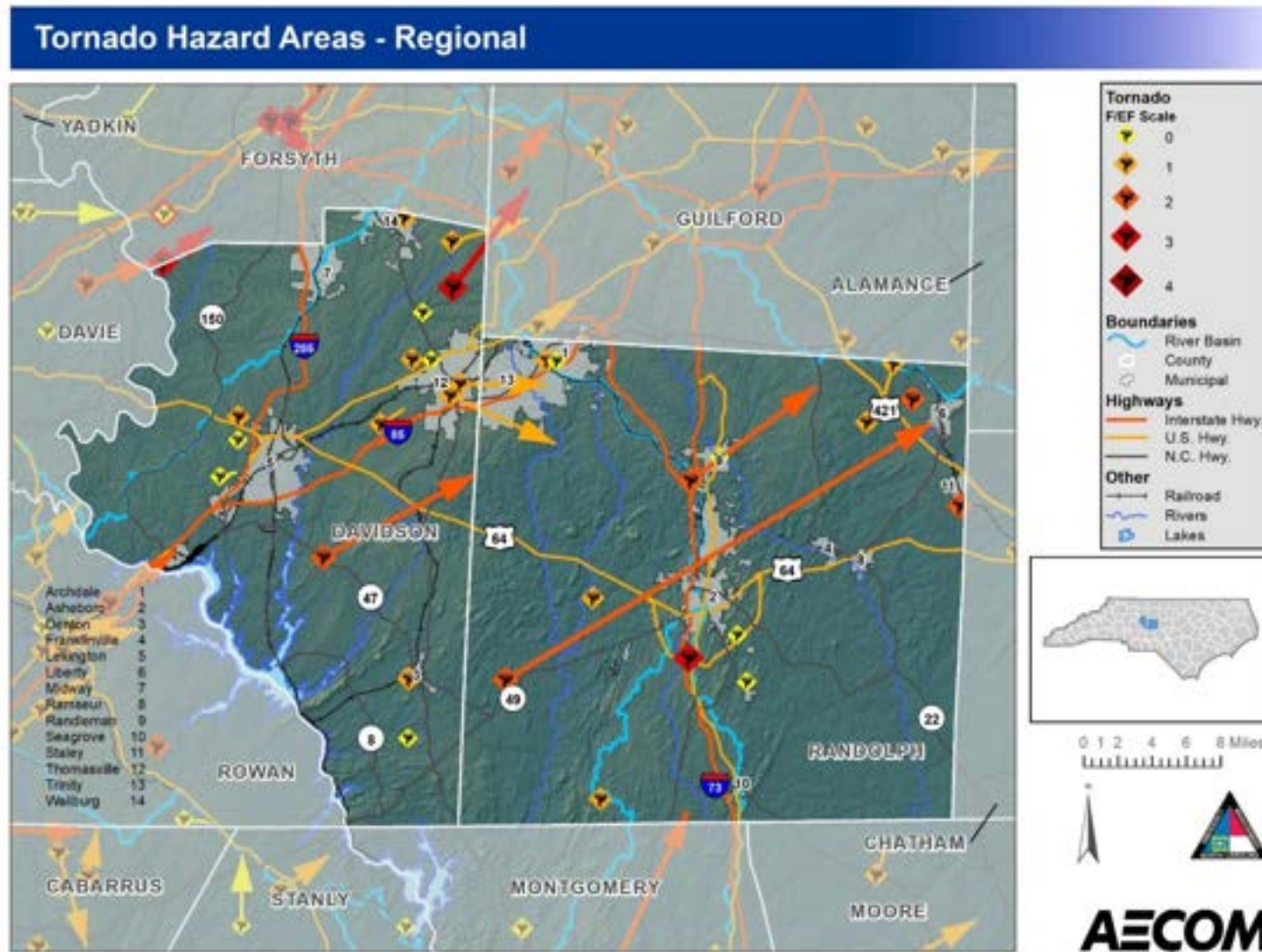


Figure 5- 31: Tornado Hazard Areas - Regional

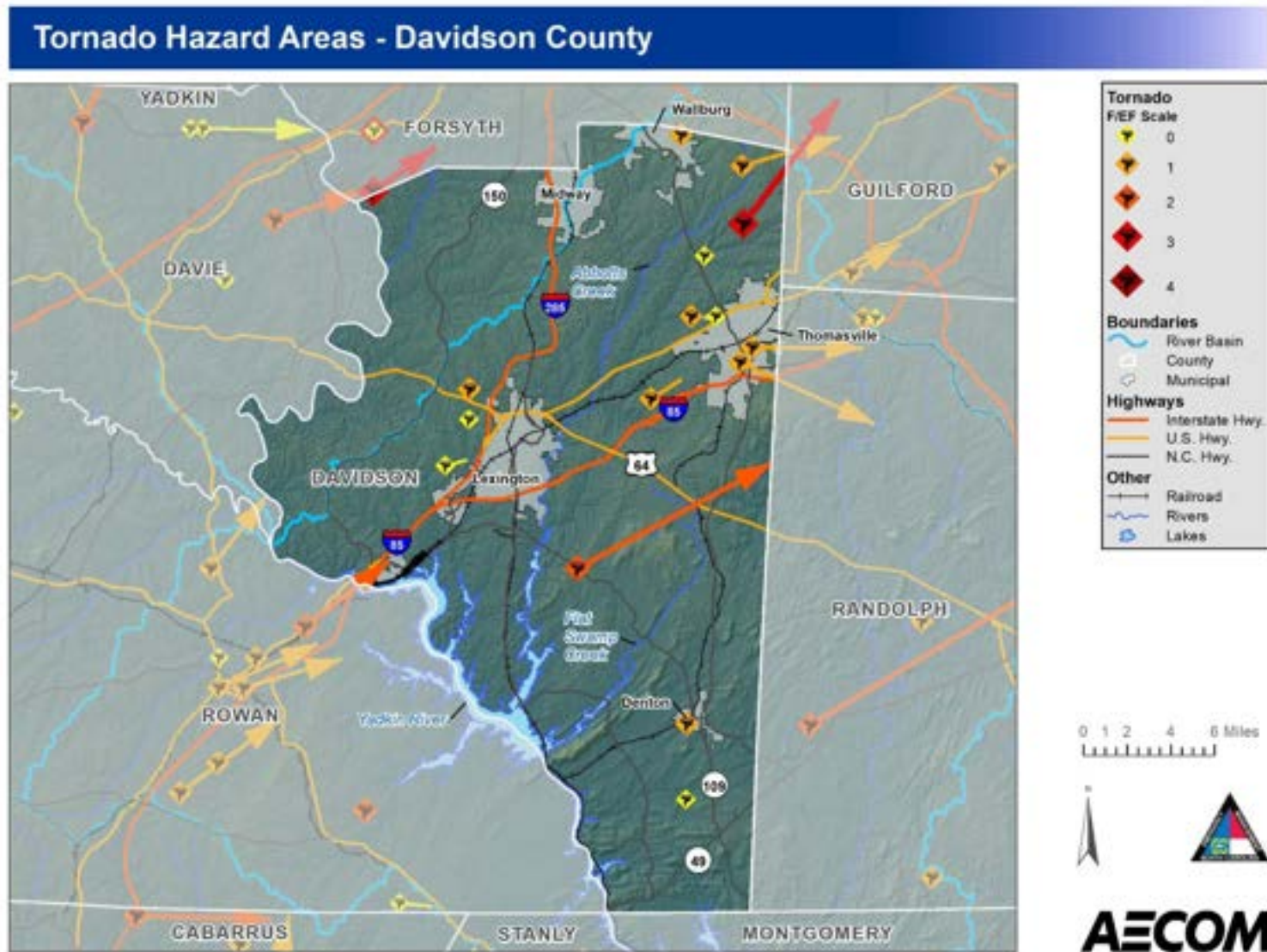


Figure 5- 32: Tornado Hazard Areas – Davidson County

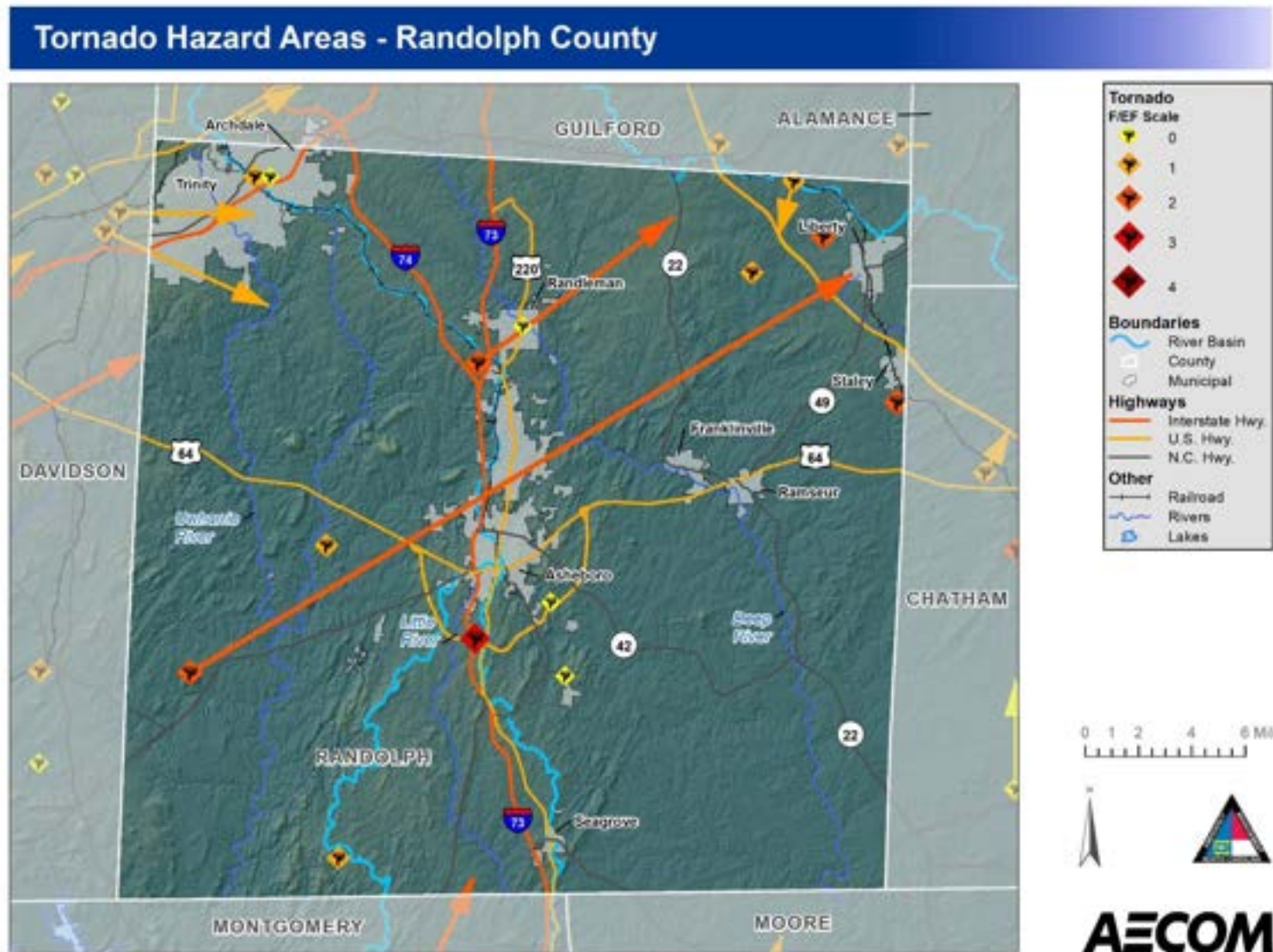


Figure 5- 33: Tornado Hazard Areas – Randolph County

5.7.3 Extent

Tornado hazard extent is measured by tornado occurrences in the US provided by FEMA (Figure 5- 30) as well as the Fujita/Enhanced Fujita Scale. According to NCDC, on May 24 November 11, 2016, A tornado with a continuous damage path of approximately 12.5 miles was found about 5 miles east of Linwood in Davidson County to about 10 miles northwest of Asheboro in Randolph County. Damage along the path was found to be EF-1 to EF-2 on the Enhanced Fujita tornado rating scale, with wind speeds between 90 and 135 mph. At approximately 6:05 pm EST, the initial tornado touchdown was in the form of snapped and uprooted trees along NC Highway 47, near the Parks Road Intersection. The first occurrence of structural damage was to single family homes in the nearby Silver Ridge Subdivision, off Allred Road. Roofs were lifted off multiple homes and mostly exterior walls were blown out. This damage was consistent with EF-2 tornado intensity. The roof of one of the homes had been carried about 150 yards into the yard of another home. An outbuilding, whose contents were swept about 50 feet into the side yard adjacent to the home was also destroyed. Trees were toppled mostly towards the center of the tornado track. Only minor injuries were noted to residents.

The tornado continued east northeastward to Old Burkhart Road where it blew a trailer a couple of hundred feet downwind, downed power lines, and toppled a tree through a residence. The tornado then tracked through a small community on Meadow Run Lane. Two homes slide off their foundations, including the home where two fatalities occurred when the home slid down the edge of a steep embankment. An automobile was also blown into an adjacent stand of trees at the top of the embankment. Damage here is consistent with EF-2 tornado intensity. The tornado traveled east northeastward and caused structural damage in the form of roof damage, to several businesses, including the roofing of a Lowes distribution center, Skippers Seafood Restaurant, and a Giddy-Kwik service station. Additionally, a nearby former marine dealer sustained extensive damage when the exterior walls and roof of this building were blown into the adjacent parking lot. The next structural damage occurred at the Laurel Drive American Automobile Association (AAA) Mobile Home Park. The most significant damage here was a tree toppled through the rear of one of the homes. Another home shifted from the foundation. Tree damage in this area appeared to be more minor than surrounding areas, and damage throughout the mobile home park was consistent with EF-1 intensity.

In total, 60 homes were damaged. Of the 60 homes damaged, 25 homes were destroyed, and at least 5 businesses were destroyed. Scattered to numerous thunderstorms developed in advance of a cold front across western North Carolina during the afternoon. Multiple severe storms produced isolated tornadoes.

The following table provides the highest recorded events in Davidson and Randolph County:

Table 5- 30: greatest tornado occurrences in Davidson and Randolph County

Location	Date	Magnitude
Davidson County (Unincorporated Area)	11/16/11	EF2

Location	Date	Magnitude
Randolph County (Unincorporated Area)	10/07/65	EF3

5.7.4 Historical Occurrences

The following historical occurrences ranging from 2000 to 2024 have been identified based on the NCDC Storm Events database Table 5- 31. It should be noted that only those historical occurrences listed in the NCDC database are shown here and that other, unrecorded, or unreported events may have occurred within the planning area during this timeframe.

Table 5- 31: Historical Occurrences of Tornado (2000 to 2024) reported by the NCDC Storm events Database.

County	Location Reported	Date	Magnitude	Deaths	Injuries	Property Damage	Crop Damage
Davidson	Holly Grove	2/3/2016	EF1	0	0	\$100,000	0
Davidson	Lakeview	3/28/2010	EF2	0	5	\$1,250,000	0
Davidson	Lexington Airport	2/3/2016	EF0	0	0	\$25,000	0
Davidson	Silver Hill	11/16/2011	EF2	2	15	\$20,000,000	0
Davidson	Thomasville	9/14/2007	EF0	0	0	0	0
Davidson	Thomasville	9/14/2007	EF0	0	0	0	0
Davidson	Wallburg	3/28/2010	EF1	0	0	\$750,000	0
Randolph	Fullers	11/16/2011	EF1	0	0	\$500,000	0
Randolph	Mc Laneton	2/6/2020	EF1	0	0	\$250,000	0
Randolph	Salem	8/27/2008	EF0	0	0	\$2,000	0
Total	----	-----	-----	2	20	\$22,877,000	0

Table 5- 31 provides a summary of this historical events reported in the participating jurisdictions. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

5.7.5 Probability of Future Occurrences

The NRI reports its tornado data based on the NWS's Severe Weather Database files and reflects hazard occurrences which were reported between January 1, 1950, and December 31, 2019. Census tracts within the planning area have an average expected annual frequency of tornadoes of 0.0068, which is approximately one tornado every 150 years within each census

tract on average. The total EAL value of all census tracts in the planning area attributed to tornado events is \$9,706,629.24, and the planning area census tracts have an average EAL score of 65.9 (relatively high percentile) and average risk score of 68.2 (relatively high percentile). The jurisdiction with the highest average risk score rating for census tracts within the jurisdictional boundaries is Liberty with an 80.62 (very high percentile) risk score. The three jurisdictions with the highest average expected annual frequency of tornadoes within the overlapping census tracts are Seagrove (0.0242), Denton (0.145), and Staley (0.0138), and each jurisdiction has a risk score that is in a relatively high percentile.

Within Davidson County, the total EAL attributed to tornadoes is \$4,878,736.49, the average EAL score for census tracts in the county is 64.68 (relatively high percentile), and the average risk score for census tracts in the county is 66.23 (relatively high percentile). The areas with the highest total EAL from census tracts that overlap each jurisdiction boundaries (or unincorporated areas) are unincorporated areas (\$1,474,147.56), Thomasville (\$1,461,121.86), and Lexington (\$1,285,659.68).

In Randolph County, the total EAL attributed to tornadoes is \$4,734,885.93, average census tract EAL score is 68.54 (relatively high percentile), and average census risk score is 71.59 (relatively high percentile). The three jurisdictions with the highest total EAL from census tracts that overlap the jurisdictional boundaries from tornadoes are Asheboro (\$2,240,766.50), Archdale (\$954,925.72), and Randleman (\$683,988.23). The area within Randolph County that has the highest expected annual frequency of tornadoes are unincorporated areas.

Table 5- 32: NRI EAL and Risk Index Values for tornadoes

Tornado						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	0.0051	\$4,878,736.49	64.68	Relatively High	66.23	Relatively High
Denton	0.0145	\$179,125.03	75.64	Relatively High	79.88	Relatively High
Lexington	0.0037	\$1,285,659.68	61.54	Relatively High	65.35	Relatively High
Midway	0.0041	\$578,487.89	68.70	Relatively High	67.60	Relatively High
Thomasville	0.0031	\$1,461,121.86	68.02	Relatively High	71.35	Relatively High
Wallburg	0.0044	\$450,420.48	63.50	Relatively High	62.10	Relatively High
Unincorporated Area	0.01	\$1,474,147.56	64.22	Relatively High	63.59	Relatively High
Randolph County	0.0092	\$4,734,885.93	68.54	Relatively High	71.59	Relatively High
Archdale	0.0034	\$954,925.72	61.36	Relatively High	63.67	Relatively High
Asheboro	0.0100	\$2,240,766.50	70.29	Relatively High	75.39	Relatively High
Franklinville	0.0090	\$523,109.14	62.72	Relatively High	66.15	Relatively High

Tornado						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Liberty	0.0135	\$332,426.67	73.61	Relatively High	80.62	Very High
Ramseur	0.0088	\$311,776.92	62.33	Relatively High	67.76	Relatively High
Randleman	0.0073	\$683,988.23	68.65	Relatively High	71.46	Relatively High
Seagrove	0.0242	\$199,227.72	78.43	Relatively High	72.83	Relatively High
Staley	0.0138	\$147,616.89	70.76	Relatively High	74.07	Relatively High
Trinity	0.0044	\$572,876.94	69.71	Relatively High	72.44	Relatively High
Unincorporated Area	0.02	\$365,937.42	65.66	Relatively High	63.70	Relatively High
Total	0.0069	\$9,706,629.24	65.90	Relatively High	68.20	Relatively High

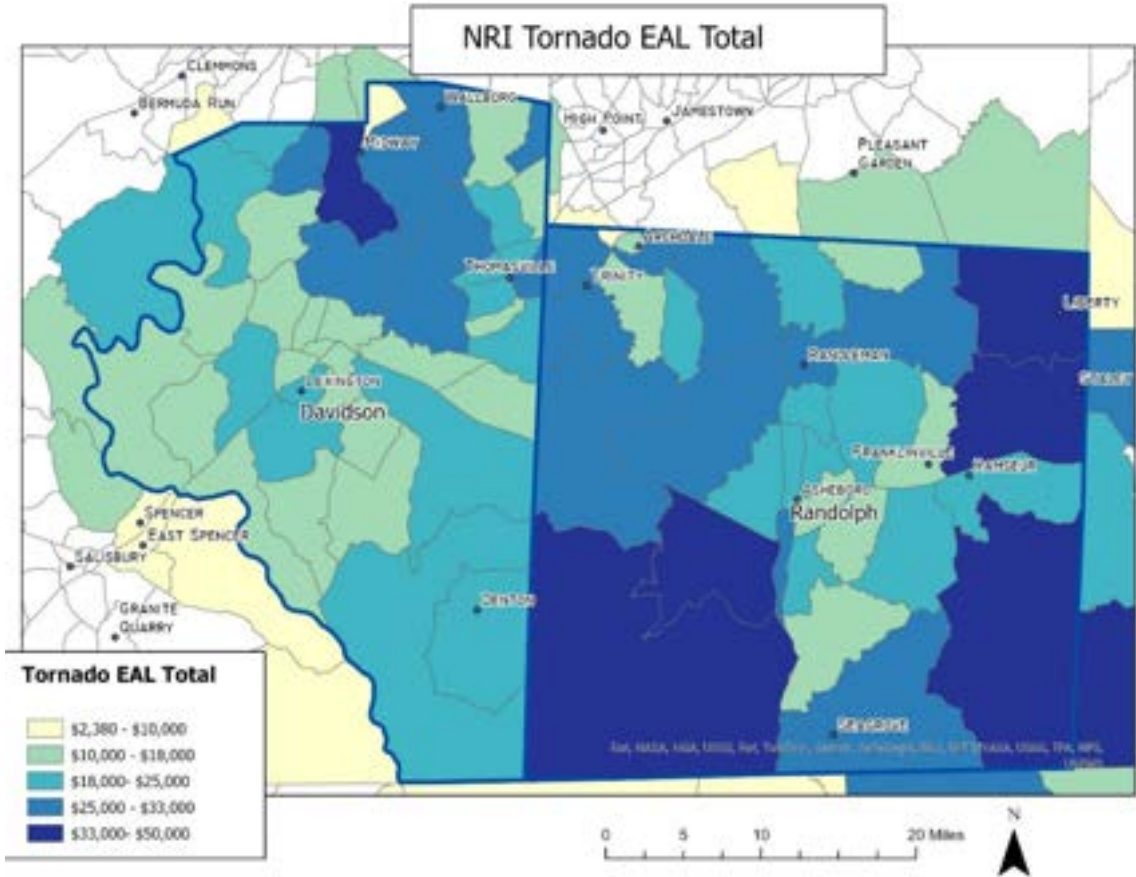


Figure 5- 34: NRI Tornado EAL Total

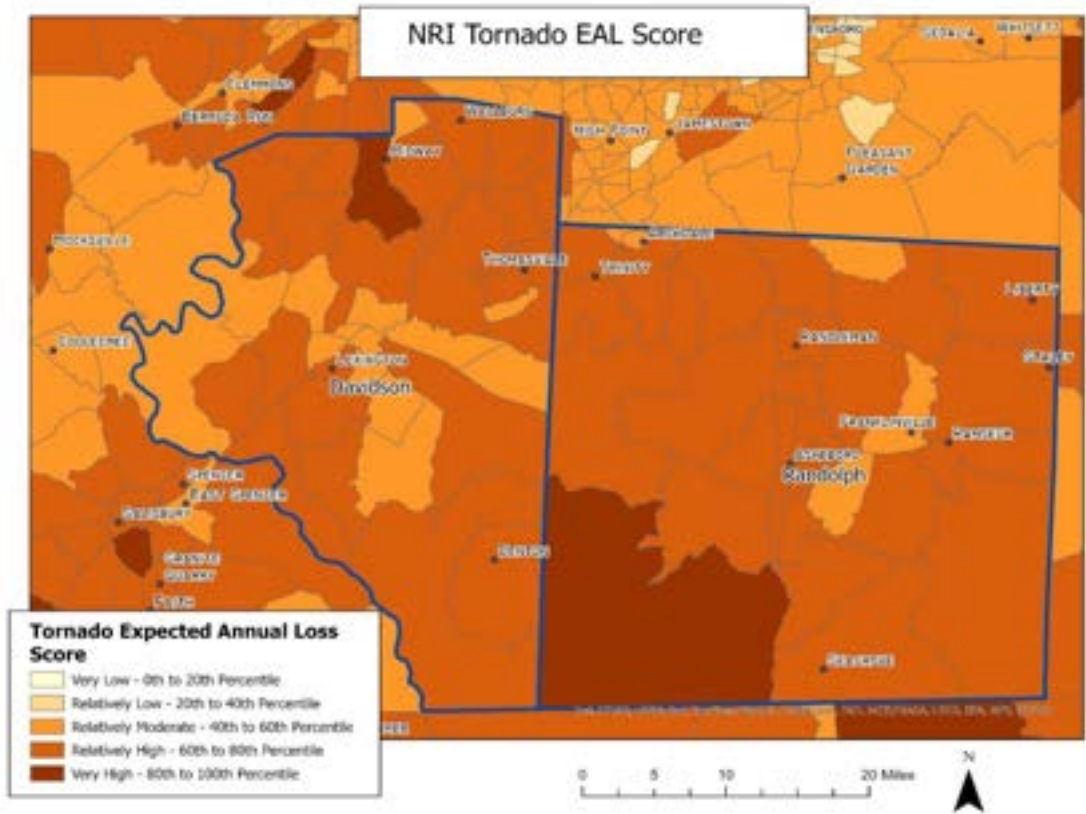


Figure 5- 35: Tornado EAL Score

5.7.6 Impact

According to historical information, tornado events are not an annual occurrence for the Region. However, given the Region's location in the southeastern United States and history of tornadoes, an occurrence is possible every few years. While the majority of the reported tornado events are small in terms of size, intensity, and duration, they do pose a significant threat should the Region experience a direct tornado strike.

People

The rate of onset of tornado events is rapid, giving those in danger minimal time to seek shelter. The current average lead time according to NOAA is 13 minutes. Injury may result from the direct impact of a tornado, or it may occur afterward when people walk among debris and enter damaged buildings. A study of injuries after a tornado in Marion, Illinois, showed that 50 percent of the tornado-related injuries were suffered during rescue attempts, cleanup, and other post-tornado activities. Common causes of injury included falling objects and heavy, rolling objects. Because tornadoes often damage power lines, gas lines, or electrical systems, there is a risk of fire, electrocution, or an explosion.

Tornado impacts may disproportionately impact vulnerable communities and socially vulnerable residents. This includes those with limited mobility to shelter during a tornado event or those with disabilities, which comprises 14.8% of residents in Davidson County and 15% in Randolph County 15.0%. This means that a significant portion of the planning area that may require extra assistance to shelter or prepare for tornado events.

To prevent injury or death after tornado events occur, communicating tornado risks, preparedness, and safety information is crucial. Although technology has become a crucial resource in the communication of extreme heat impacts, occurrences, preparedness and safety, not all residents in the area have access to the internet, a computer, or even telephone service in their housing units. Residents in the planning area without a computer (5.7% of residents in Davidson County and 4.7% of residents in Randolph County), telephone service (0.6% of residents in Davidson County and 0.8% of residents in Randolph County), or internet access (0.6% of residents in Davidson County and 0.8% of residents in Randolph County) in their households may not be able to receive important tornado preparedness information or warnings of impending tornados. The planning area should consider multiple forms of communication to distribute educational materials, including flyers, radio ads, or newspaper ads.

- ◆ In addition, 3.3% of residents in the Davidson County and 4.9% in Randolph County reported that they speak English "less than well," which means that communications only available in English would limit the ability of those residents to prepare and understand their hazard risks. It important that future mitigation actions involving public outreach and communication with residents in the planning area be available in multiple languages Due to the importance of public outreach and awareness.

Changes in Development or Housing Characteristics

In Davidson County and Randolph County there are 10,032 and 12,491 housing units that are mobile homes, respectively, which may present a significant vulnerability in the event of tornado

occurrences. Mobile homes are more likely to be damaged by tornadoes than traditional homes, so it is important that the planning area considers the potential mitigation actions to educate mobile homeowners about tornado hazard preparedness and what to do in the event of a tornado.

First Responders

Due to the rapid onset of tornado events, first responders could be critically affected by tornado events through direct impact of the tornado itself or injury received during response efforts. Response may be hindered as responders may be unable to access those that have been affected if storm conditions persist or if they are unable to safely enter affected areas. As mentioned above, a large percentage of tornado-related injuries are suffered during rescue attempts, cleanup, and other post-tornado activities due to walking among debris and entering damaged buildings.

Continuity of Operations

Continuity of operations could be impacted by a tornado. Personnel or families of personnel may be harmed which would limit their response capability. Critical facilities and resources could also be damaged or destroyed during a tornado.

Built Environment

The weakest tornadoes, EF0, can cause minor roof damage and strong tornadoes can destroy frame buildings and even badly damage steel reinforced concrete structures. Most building codes in the United States do not include provisions that provide protection against tornadic winds. Given the strength of the wind impact and construction techniques, buildings are vulnerable to direct impact, including potential destruction, from tornadoes and from wind borne debris that tornadoes turn into missiles. Mobile homes are particularly susceptible to damage and fatalities during tornadoes.

Economy

The largest impact of tornadoes is the economic damage caused by widespread destruction along their paths. More directly, there are many people killed by these storms, and to a lesser extent pets and farm animals. The major damage is the complete destruction of homes, buildings, farms, the wrecking of cars and trucks, and the loss of power distribution systems. Winds as high as 300 mph blow down walls, tear up trees, and throw debris in every direction at high speeds. Indirect losses include workers who cannot report to jobs and commercial entities that are most close to repair damages.

Natural Environment

There is no defense for plants and animals from a direct impact from a tornado. Plants and animals in the path of the tornado will receive significant damage or be killed. Strong tornadoes can shred trees and lift grass from the ground.

5.8 Winter Storm

5.8.1 Background

A winter storm can range from moderate snow over a period of a few hours to blizzard conditions with blinding wind-driven snow that lasts for several days. Events may include snow, sleet, freezing rain or a mix of these wintry forms of precipitation. Some winter storms might be large enough to affect several states, while others might affect only localized areas. Occasionally, heavy snow might also cause significant property damages, such as roof collapses on older buildings. All winter storm events have the potential to present dangerous conditions to the affected area.

Snowstorms

Larger snowfalls pose a greater risk, reducing visibility due to blowing snow and making driving conditions treacherous. A heavy snow event is defined by the National Weather Service as an accumulation of four or more inches in twelve hours or less. A blizzard is the most severe form of winter storm. It combines low temperatures, heavy snow, and winds of thirty-five miles per hour or more, which reduces visibility to a quarter mile or less for at least three hours. Winter storms are often accompanied by sleet, freezing rain, or an ice storm. Such freeze events are particularly hazardous as they create treacherous surfaces.

Ice Storms

Ice storms, which are much more common in the Region than snowstorms, are defined as storms with significant amounts of freezing rain and are a result of cold air damming (CAD). CAD is a shallow, surface-based layer of relatively cold, stably stratified air entrenched against the eastern slopes of the Appalachian Mountains. With warmer air above, falling precipitation in the form of snow melts, then becomes either super-cooled (liquid below the melting point of water) or re-freezes. In the former case, super-cooled droplets can freeze on impact (freezing rain), while in the latter case, the re-frozen water particles are ice pellets (or sleet). Sleet is defined as partially frozen raindrops or refrozen snowflakes that form into small ice pellets before reaching the ground. They typically bounce when they hit the ground and do not stick to the surface. However, it does accumulate like snow, posing similar problems and has the potential to accumulate into a layer of ice on surfaces. Freezing rain, conversely, usually sticks to the ground, creating a sheet of ice on the roadways and other surfaces.

All the winter storm elements (snow, sleet, ice, etc.) have the potential to cause significant hazards to a community. Even small accumulations can down power or communication lines and tree limbs, impact services, and create hazardous driving conditions for several days.

5.8.2 Location and Spatial Extent

The entire continental United States is susceptible to winter storm events. Some ice and winter storms may be large enough to affect several states, while others might affect limited, localized areas. The degree of exposure typically depends on the normal expected severity of local winter weather. The Region is accustomed to severe winter weather conditions and often receives winter weather during the winter months. Given the atmospheric nature of the hazard, the entire Region has uniform exposure to a winter storm.

For snow maps, the NOAA National Gridded Snowfall Analysis Database was used and covers data from 2008 to 2024. A maximum raster calculation was used to applied to snowfall layers to create one map with the maximum snowfall depth over the 2008 to 2024 period.

For winter storm and freeze maps, FEMAs NRI census tract dataset was downloaded and symbolized using Total Expected Annual Loss. The data collection is from 2005 to 2021.

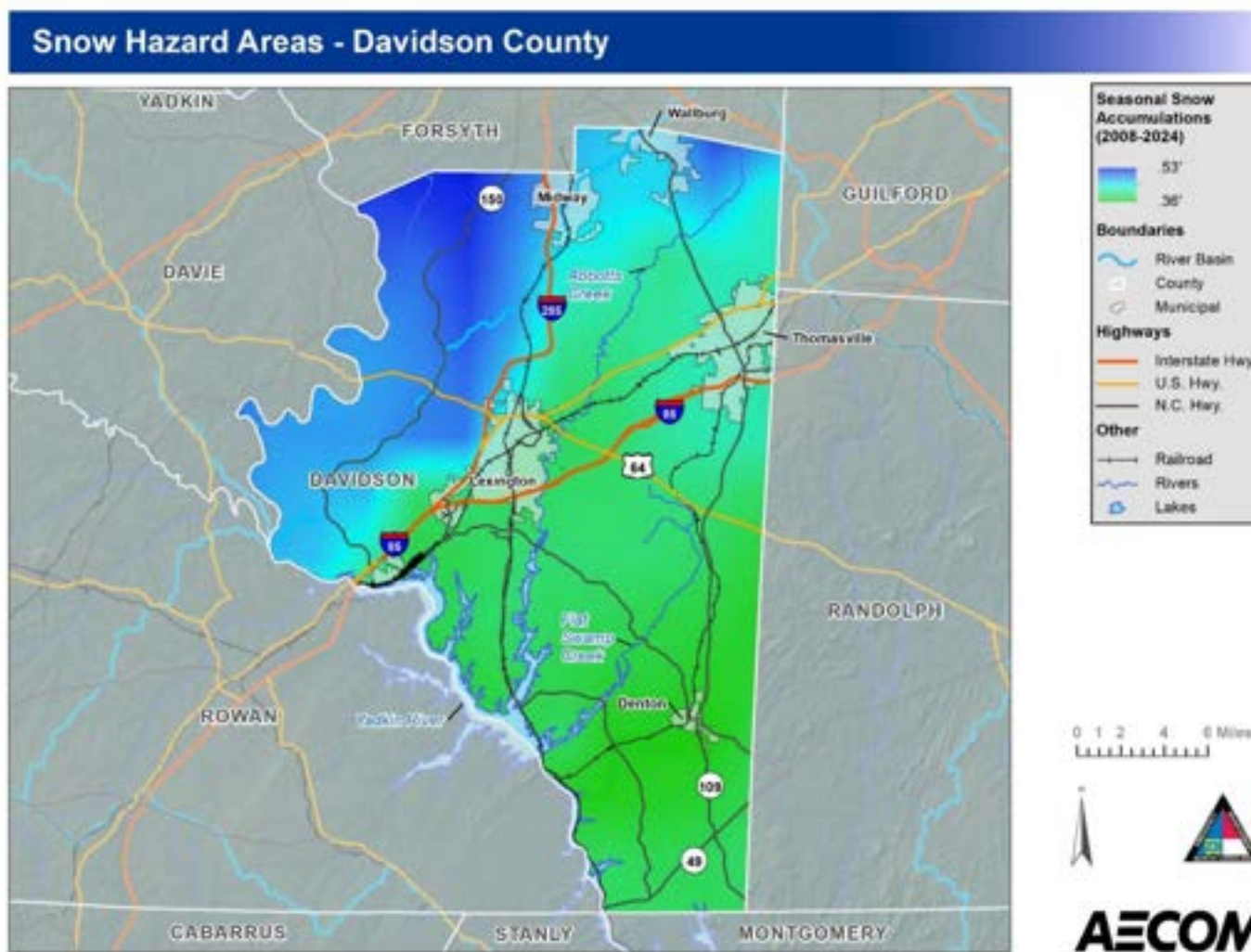


Figure 5- 37: Davidson County Snow Hazard Areas

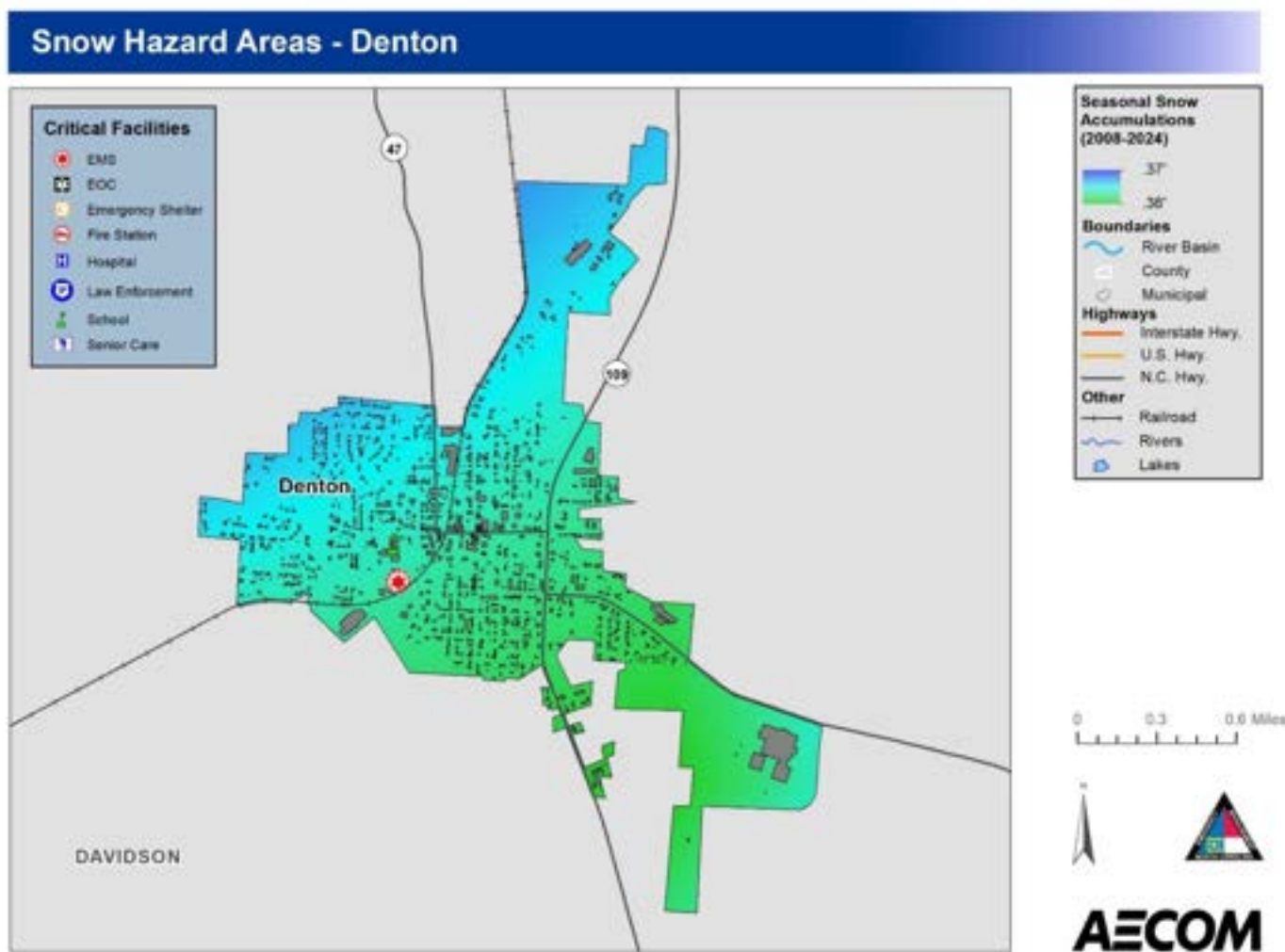


Figure 5- 38: Snow hazard areas – Denton

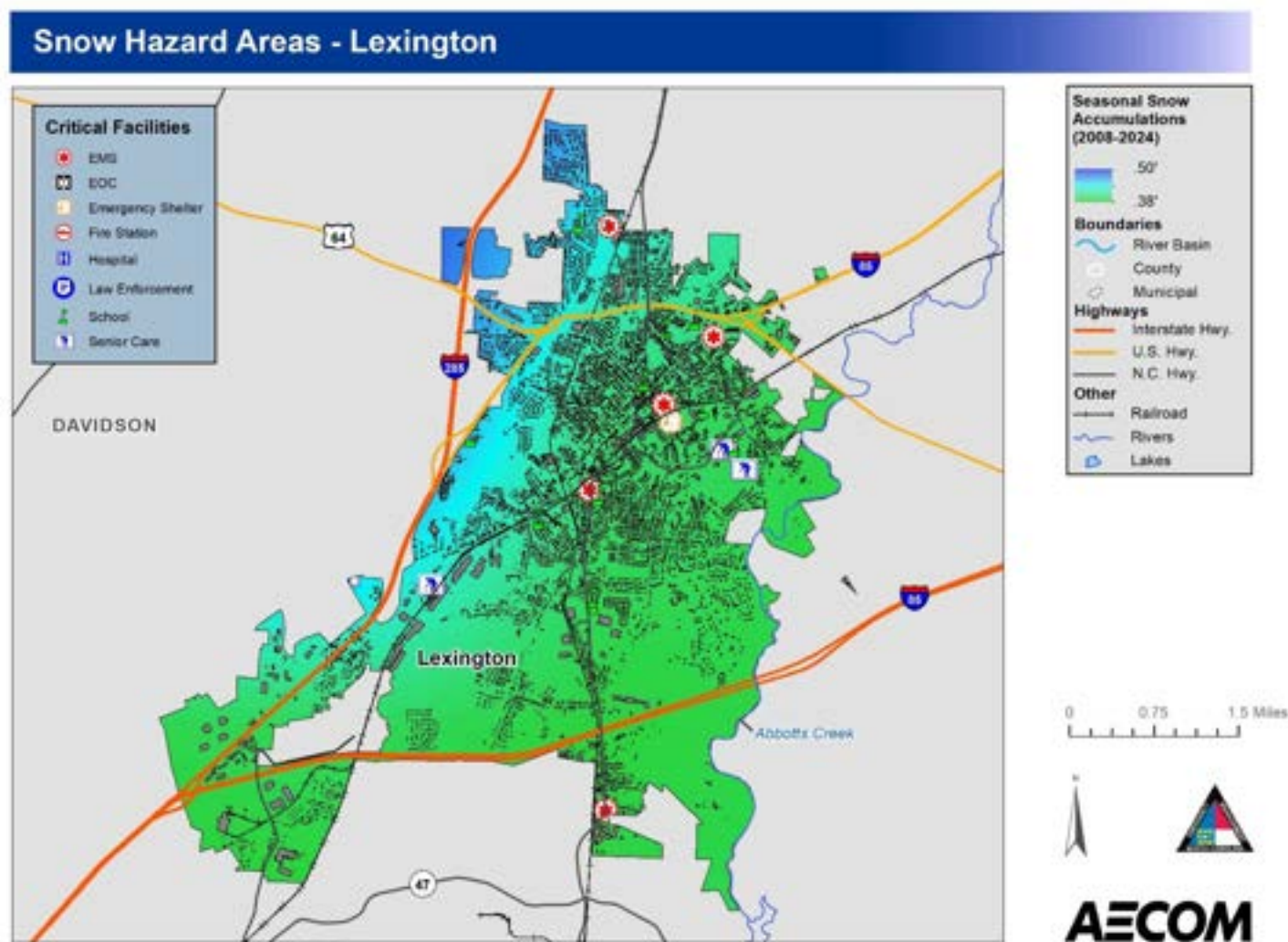


Figure 5- 39: Snow hazard areas – Lexington

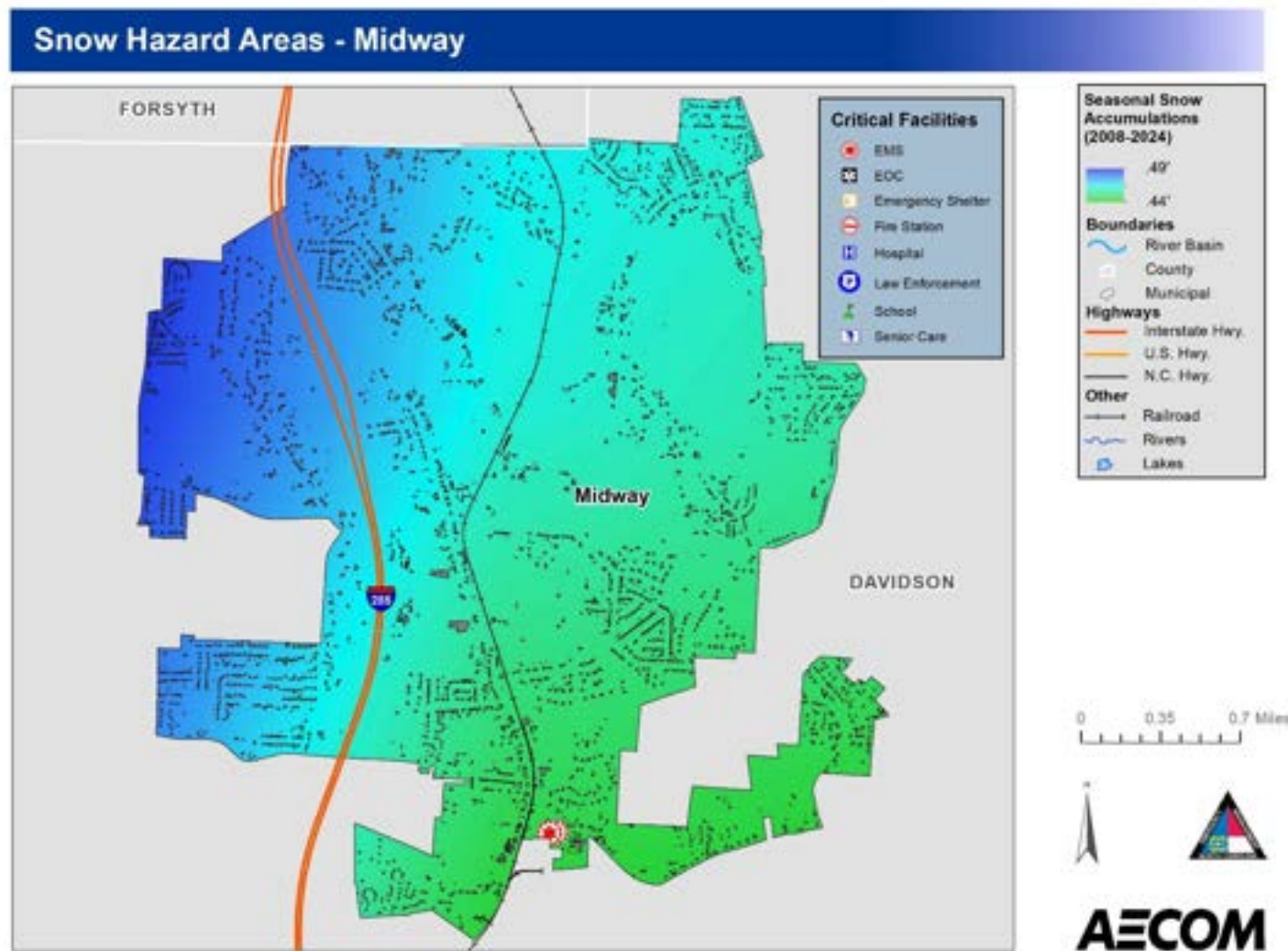


Figure 5- 40: Snow hazard areas – Midway

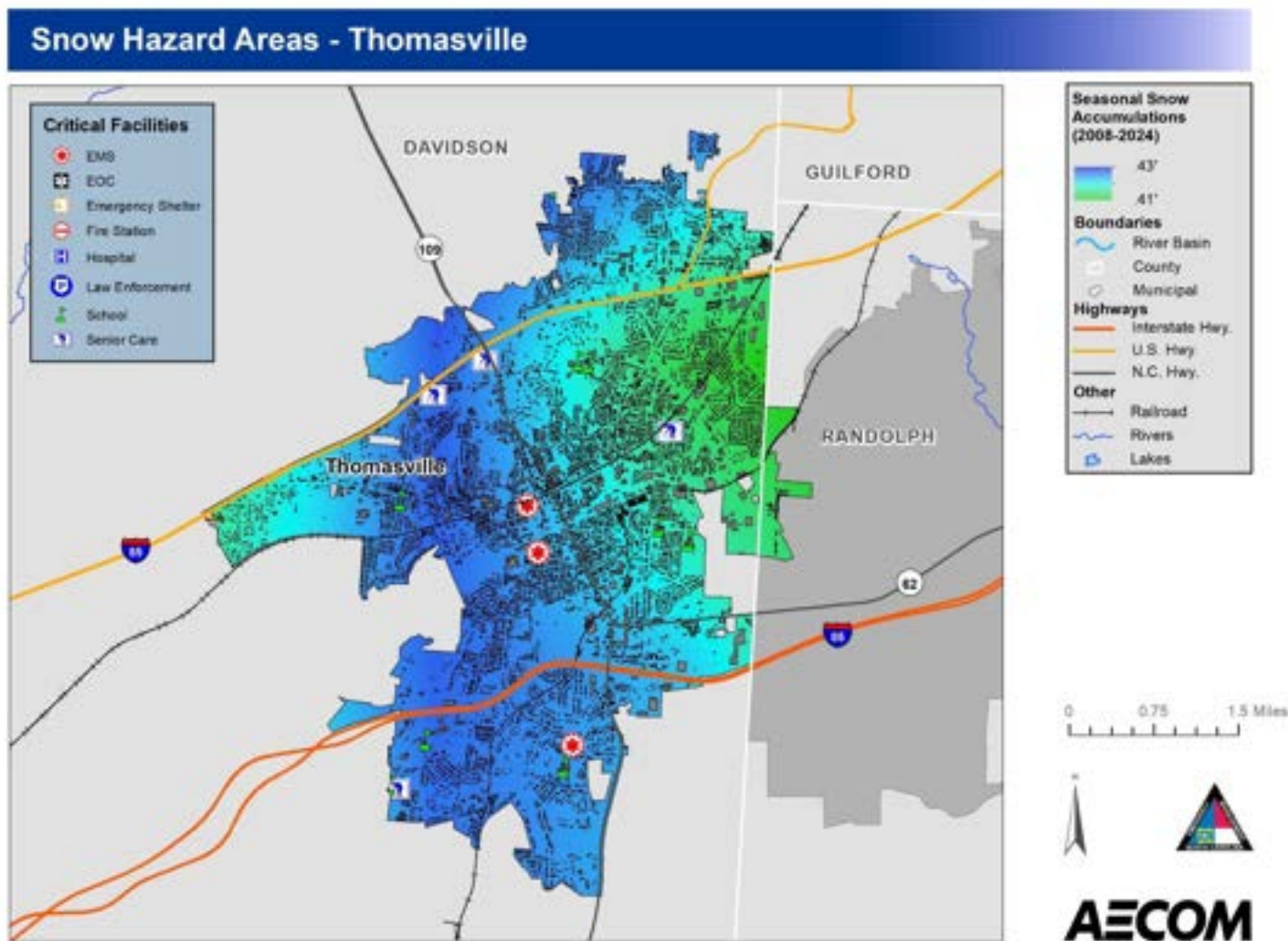


Figure 5- 41: Snow hazard areas – Thomasville

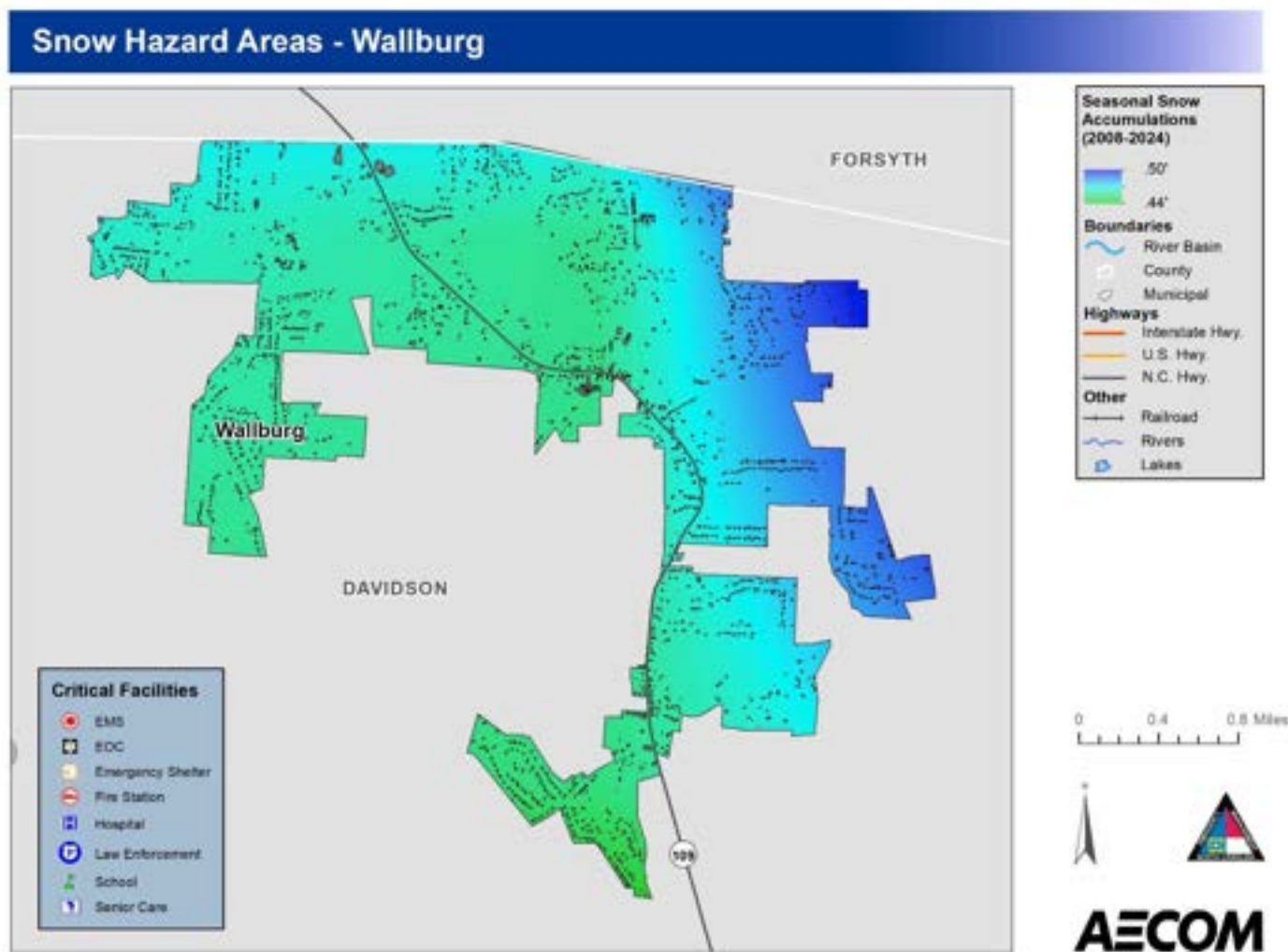


Figure 5- 42: Snow hazard areas – Wallburg

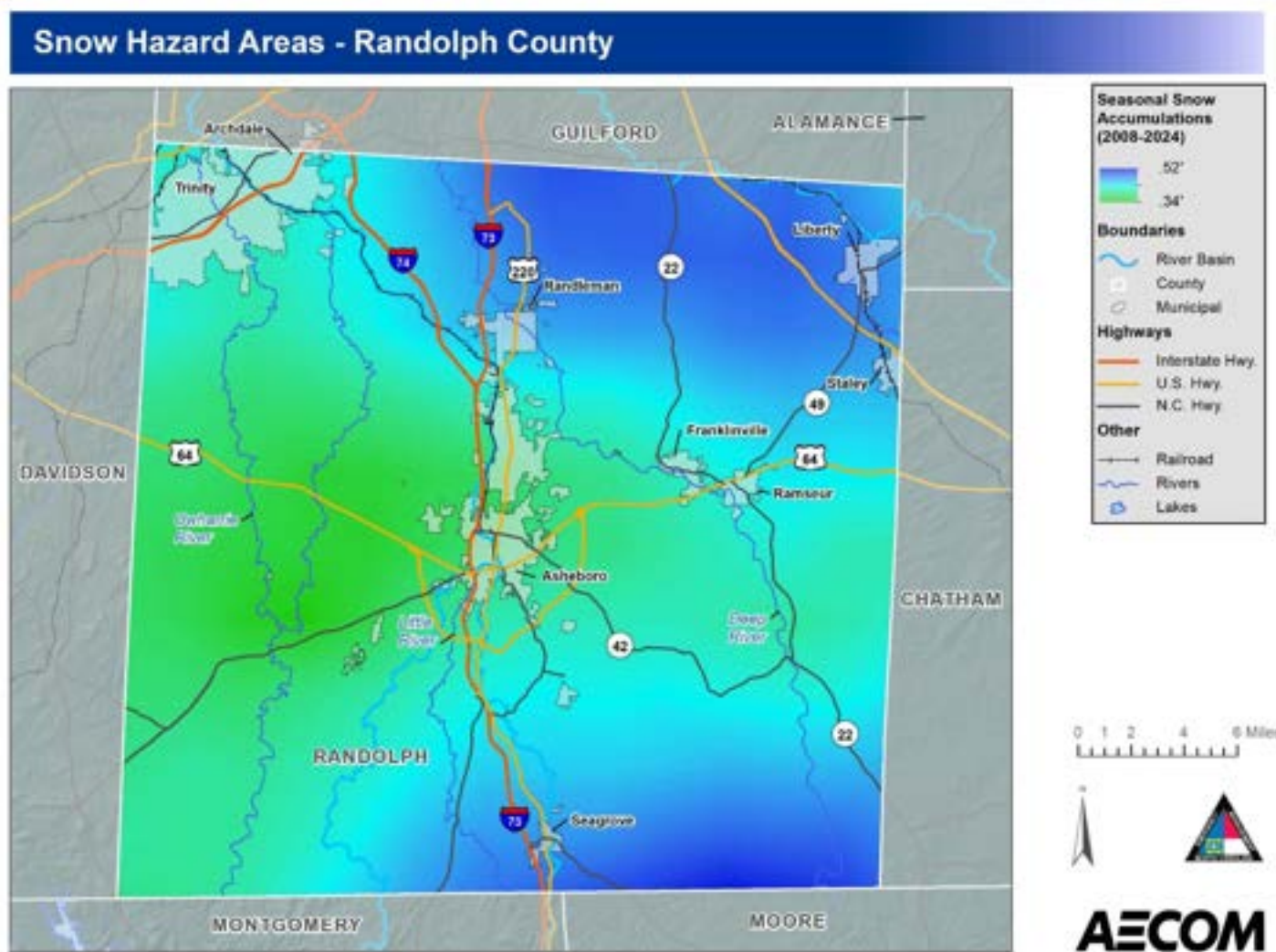


Figure 5- 43: Snow hazard areas – Randolph County

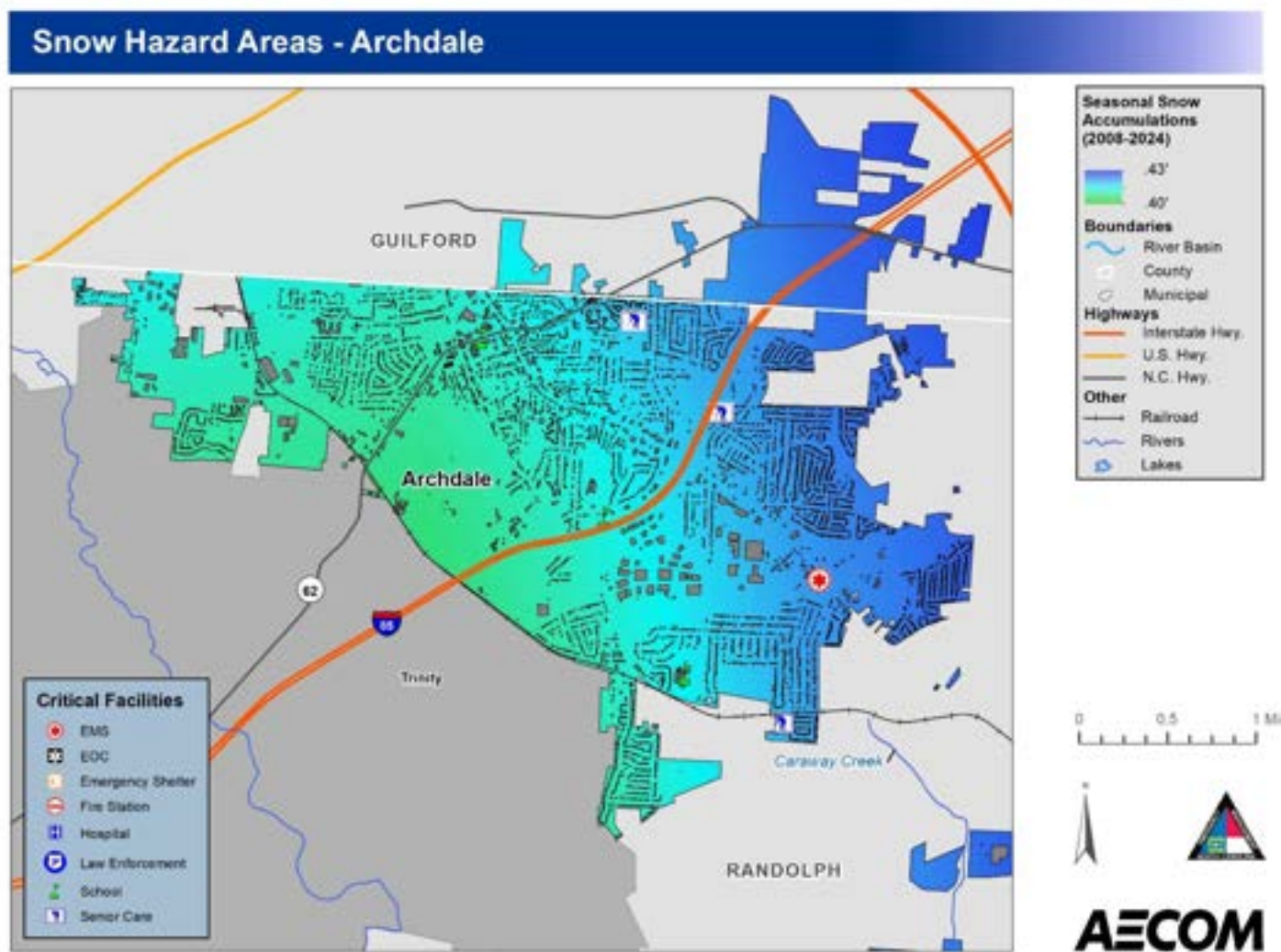


Figure 5- 44: Snow hazard areas – Archdale

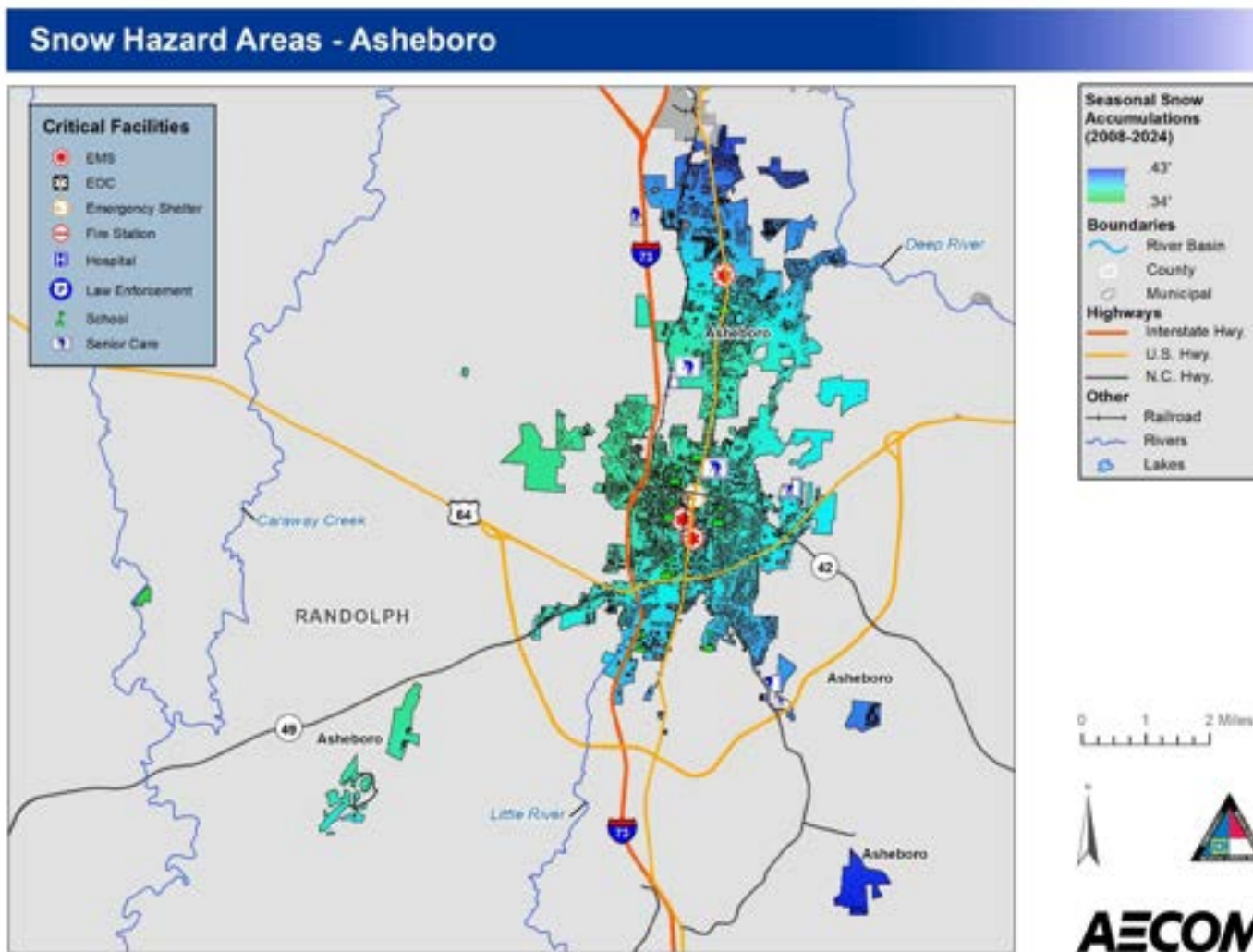


Figure 5- 45: Snow hazard areas – Asheboro

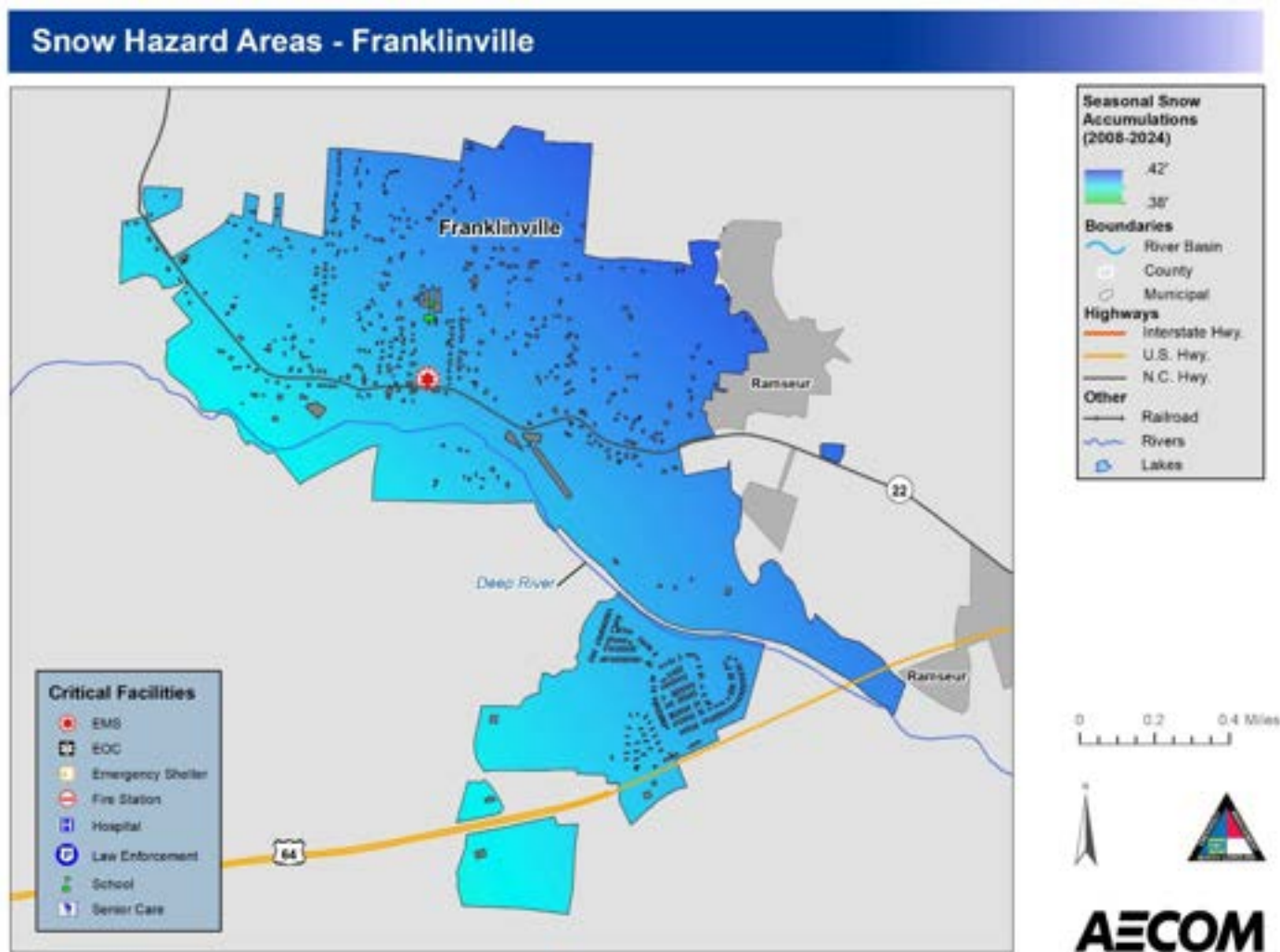


Figure 5- 46: Snow hazard areas – Franklinville

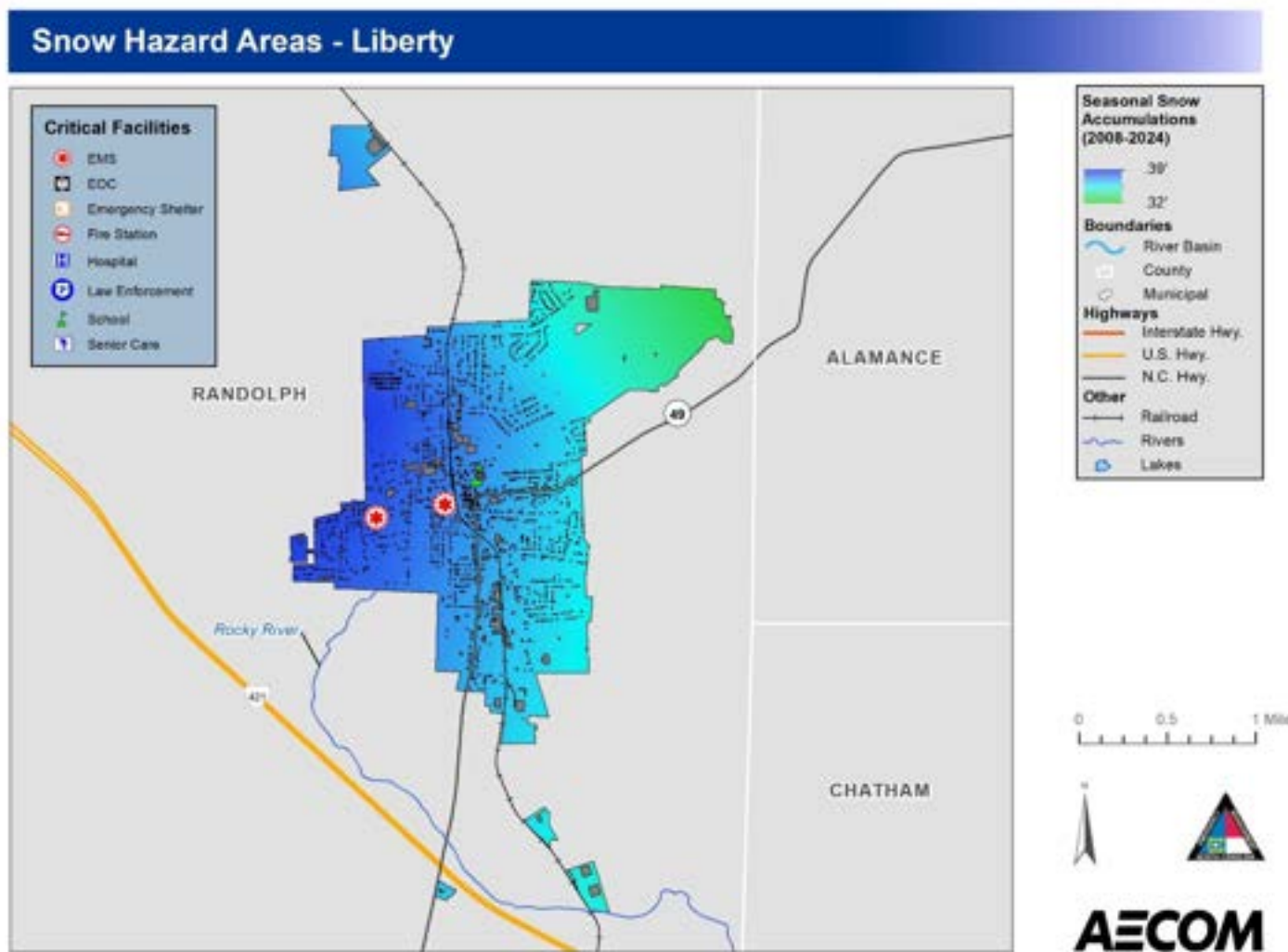


Figure 5- 47: Snow hazard areas – Liberty

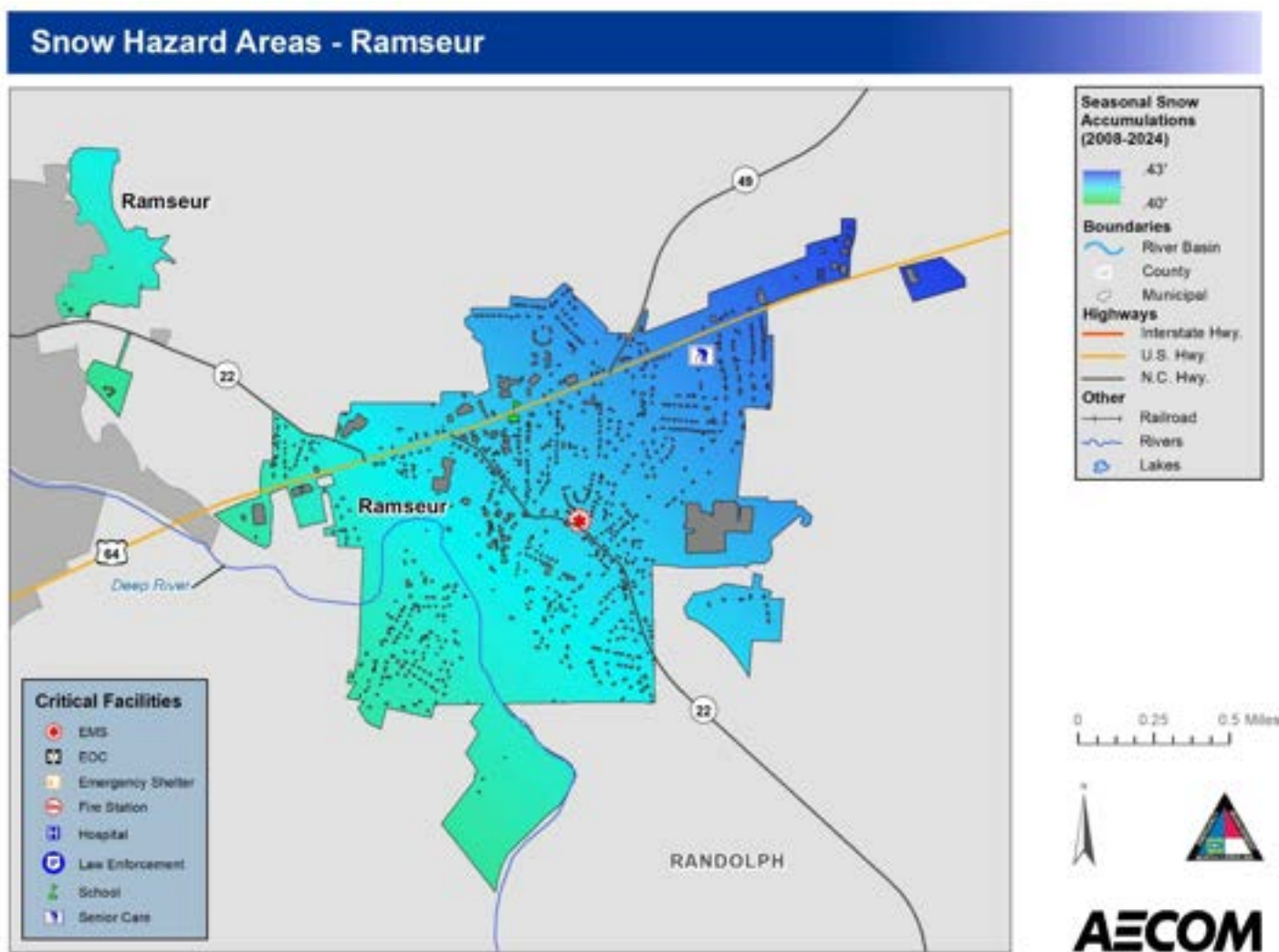


Figure 5- 48: Snow hazard areas – Ramseur

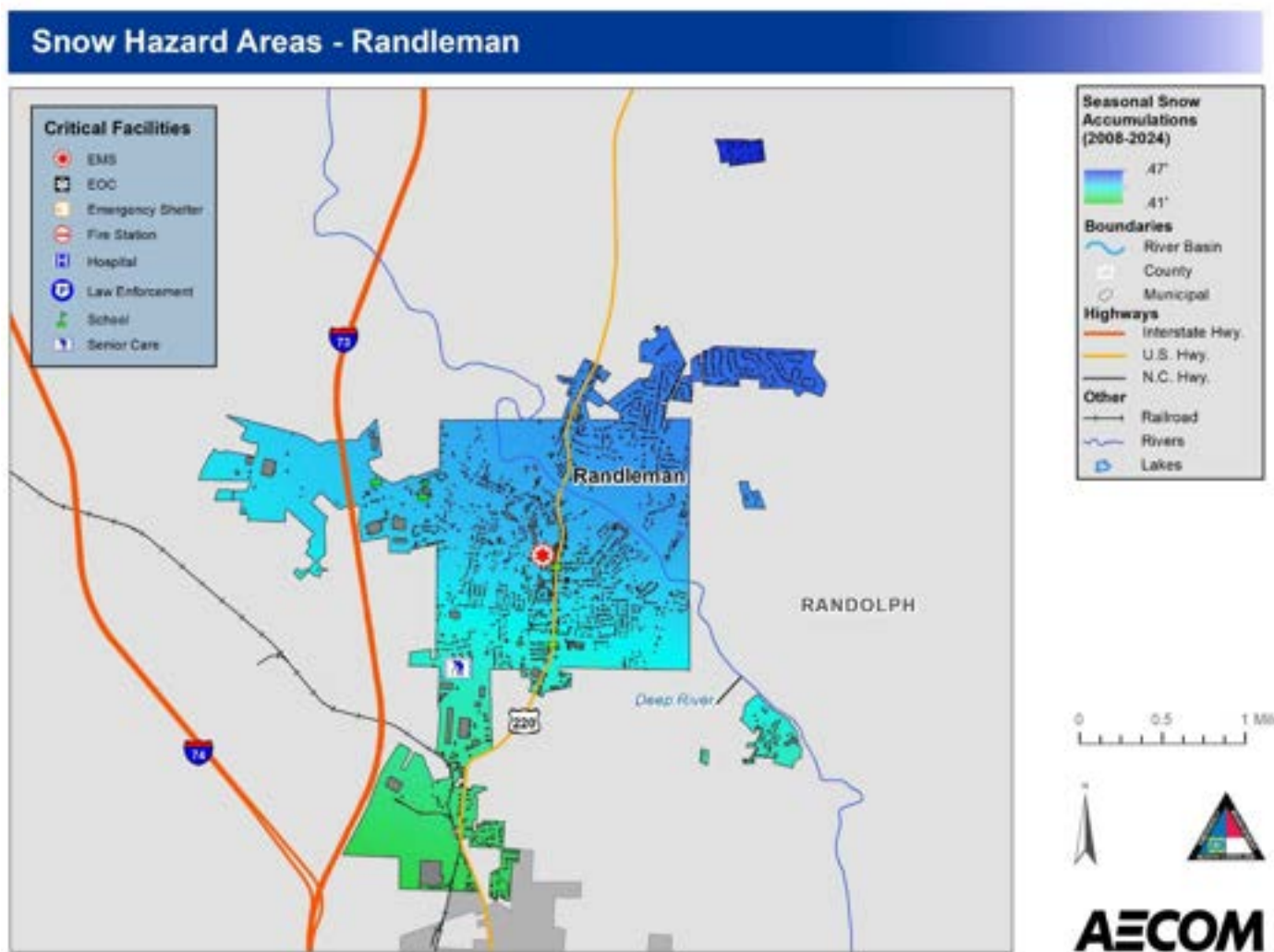


Figure 5- 49: Snow hazard areas – Randleman

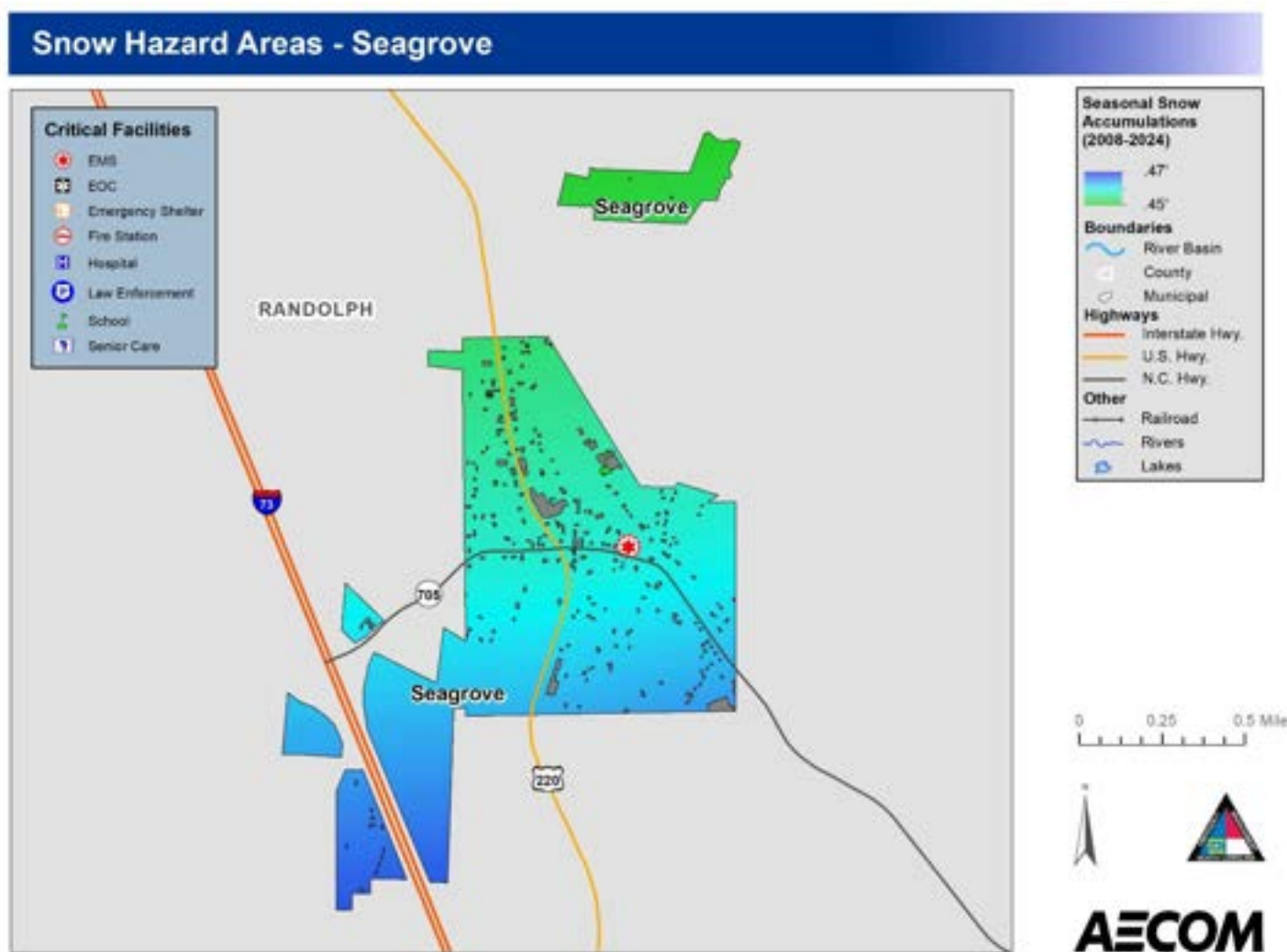


Figure 5- 50: Snow hazard areas – Seagrove

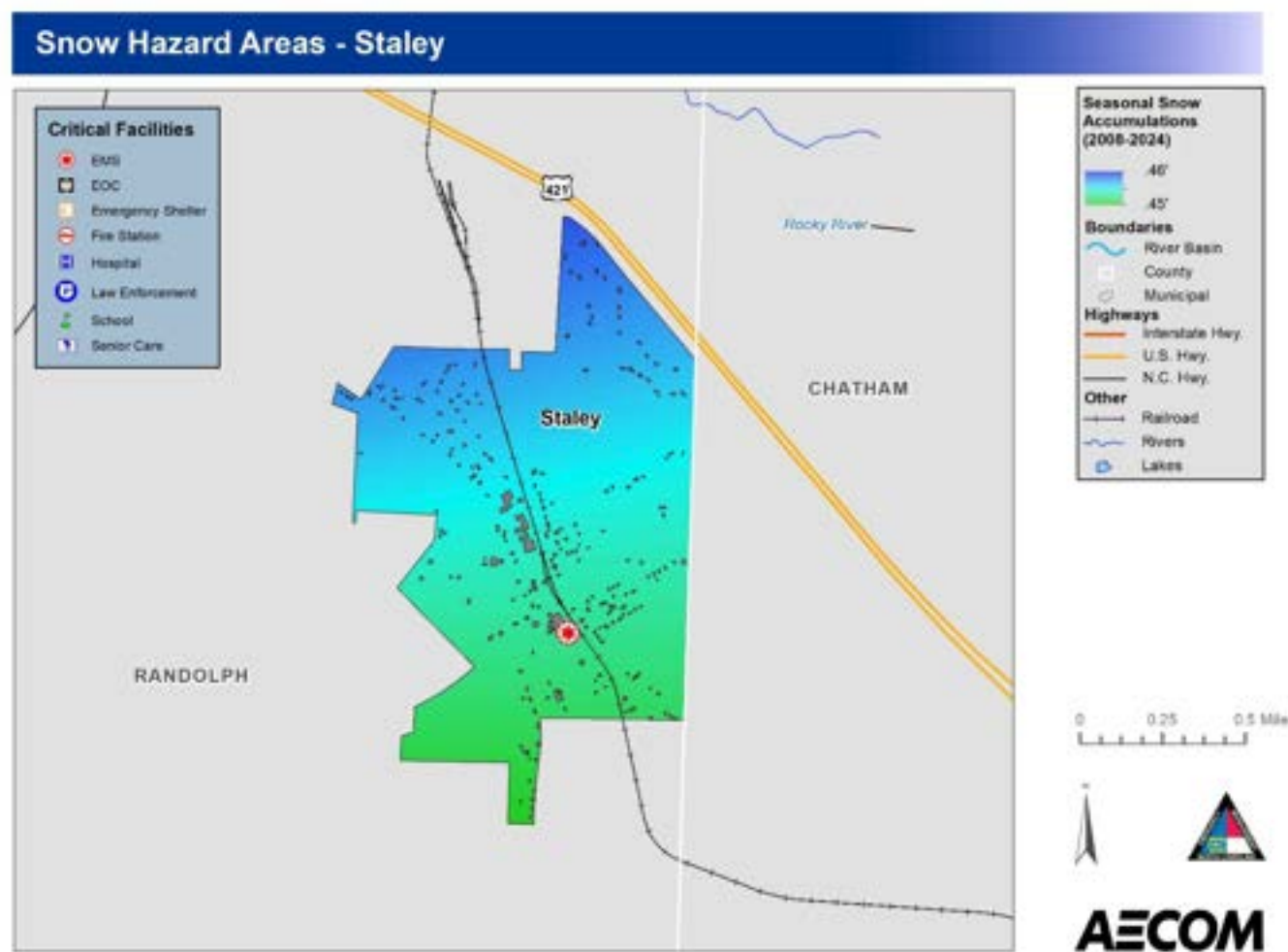


Figure 5- 51: Snow hazard areas – Staley

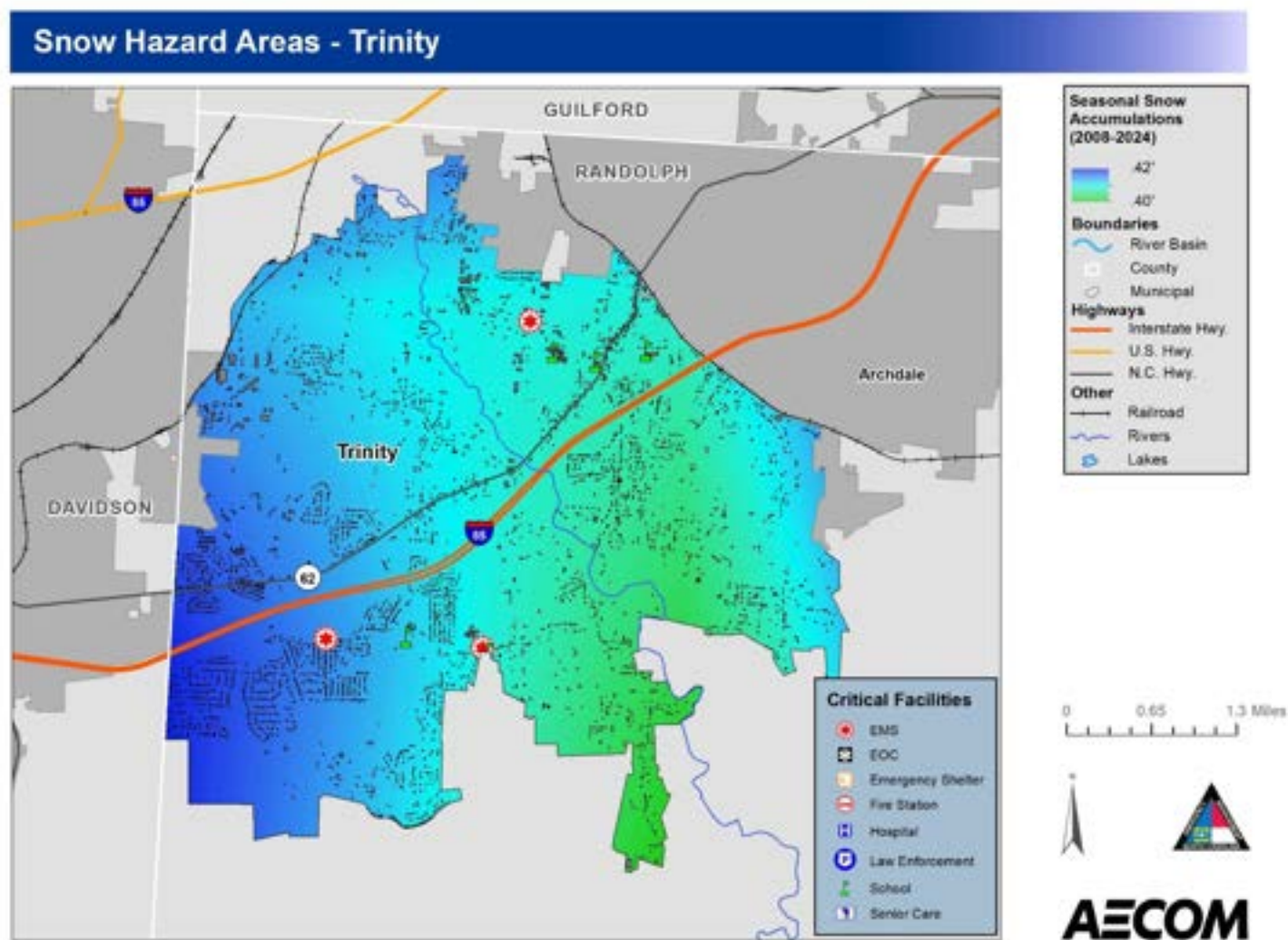


Figure 5- 52: Snow hazard areas – Trinity

5.8.3 Extent

The table below shows the total number of winter weather days and maximum snowfall for the Region from 1950 to 2019, and Table 5- 34 shows winter weather events reported from 2000 to 2024.

Table 5- 33: Total of Winter Storm Occurrences from 1950 to 2019

Community	Number of Days with Winter Weather Occurrences	Source	Maximum Snowfall Data
Davidson County	25	NCDC	15 inches
Denton	25	NCDC	4 inches
Lexington	25	NCDC	15 inches
Midway	25	NCDC	7 inches
Thomasville	25	NCDC	8.5 inches
Wallburg	25	NCDC	7 inches
Randolph County	19	NCDC	15 inches
Archdale	19	NCDC	9 inches
Asheboro	19	NCDC	6.5 inches
Franklinville	19	NCDC	7 inches
Liberty	19	NCDC	4.5 inches
Ramseur	19	NCDC	6 inches
Randleman	19	NCDC	10.5 inches
Seagrove	19	NCDC	3.5 inches
Stanley	19	NCDC	4.5 inches
Trinty	19	NCDC	9 inches

5.8.4 Historical Occurrences

Detailed information on the recorded winter storm events can be found in Table 5- 34.

Table 5- 34: Historical Winter Storm Events from 2000 to 2024 from the NCDC Storm Events Database

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
DAVIDSON (ZONE)	1/18/2000	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/20/2000	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/22/2000	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/24/2000	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/28/2000	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	11/19/2000	Heavy Snow	0	0	0	0
DAVIDSON (ZONE)	2/12/2001	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/3/2002	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/4/2002	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/23/2003	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/16/2003	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/27/2003	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/13/2003	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/26/2004	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/15/2004	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/26/2004	Winter Storm	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
DAVIDSON (ZONE)	1/30/2005	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/15/2005	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/18/2007	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/21/2007	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/1/2007	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/7/2007	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/17/2008	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/19/2008	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/13/2008	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/22/2009	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/4/2009	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	3/1/2009	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/18/2009	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/30/2009	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/29/2010	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/5/2010	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/12/2010	Winter Weather	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
DAVIDSON (ZONE)	3/2/2010	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/4/2010	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	12/16/2010	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	12/25/2010	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/10/2011	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	11/26/2013	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/21/2014	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/28/2014	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/11/2014	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/12/2014	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	3/3/2014	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	3/6/2014	Ice Storm	0	0	6,200,000	0
DAVIDSON (ZONE)	3/17/2014	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/13/2015	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/16/2015	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	2/24/2015	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/25/2015	Winter Storm	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
DAVIDSON (ZONE)	1/22/2016	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/6/2017	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	12/8/2017	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/17/2018	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	3/12/2018	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	3/24/2018	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	12/9/2018	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/12/2019	Winter Storm	0	0	0	25,000
DAVIDSON (ZONE)	2/20/2020	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/8/2021	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/31/2021	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/6/2021	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/12/2021	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/18/2021	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/3/2022	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	1/16/2022	Winter Storm	0	0	0	0
DAVIDSON (ZONE)	1/21/2022	Winter Weather	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
DAVIDSON (ZONE)	1/28/2022	Winter Weather	0	0	0	0
DAVIDSON (ZONE)	2/7/2022	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/18/2000	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/20/2000	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/22/2000	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/24/2000	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/28/2000	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	11/19/2000	Heavy Snow	0	0	0	0
RANDOLPH (ZONE)	1/3/2002	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	12/4/2002	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/16/2003	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/27/2003	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	12/13/2003	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/26/2004	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/15/2004	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/26/2004	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/30/2005	Winter Storm	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
RANDOLPH (ZONE)	12/15/2005	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/18/2007	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/21/2007	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/1/2007	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	12/7/2007	Winter Weather	0	0	15,000	0
RANDOLPH (ZONE)	1/17/2008	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/19/2008	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/20/2009	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	3/1/2009	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	12/30/2009	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/29/2010	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/12/2010	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	3/2/2010	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	12/4/2010	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	12/16/2010	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	12/18/2010	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	12/25/2010	Winter Storm	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
RANDOLPH (ZONE)	12/25/2010	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/10/2011	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/17/2013	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/21/2014	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/28/2014	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/11/2014	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/12/2014	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	3/6/2014	Ice Storm	0	0	3,100,000	0
RANDOLPH (ZONE)	3/17/2014	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/13/2015	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/16/2015	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/24/2015	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/25/2015	Winter Storm	0	0	500,000	0
RANDOLPH (ZONE)	1/22/2016	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/14/2016	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/6/2017	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/17/2018	Winter Storm	0	0	0	0

Area	Date	Event Type	Deaths	Injuries	Property Damage	Crop Damage
RANDOLPH (ZONE)	12/9/2018	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	2/20/2020	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/31/2021	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/6/2021	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/12/2021	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/18/2021	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/16/2022	Winter Storm	0	0	0	0
RANDOLPH (ZONE)	1/21/2022	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	1/28/2022	Winter Weather	0	0	0	0
RANDOLPH (ZONE)	2/7/2022	Winter Weather	0	0	0	0
Total			0	0	\$9,815,000	\$25,000

There have been several severe winter weather events in the Region. The following are summaries of the major winter weather events in the planning area from 2018 to 2024 from the NCDC Storm Events Database:

Davidson County and Randolph County - 1/17/2018

Six to eight inches of snow fell across Davidson County and Randolph County after an upper level, low pressure area crossed NC after an arctic surface cold front. An intense band of slow-moving snow moved throughout central NC and combined with low ground temperatures and high snow to liquid ratios the system resulted in significant snow accumulation across central NC.

Davidson County and Randolph County - 12/9/2018

In Davidson County snow accumulated between 5 inches and 12 inches across the county. In Randolph County snow accumulated between 3 inches to 9 inches across the county along with one tenth of an inch of ice accumulations. This resulted from strong cold air damming from the

northern Gulf of Mexico to the NC Coast, with record snowfall across central NC from 8 to 15 inches.

Davidson County 1/12/2019

One tenth to one quarter inch of ice from freezing rain accumulated in Davidson County which downed trees and caused power outages across the county. Moisture overspread from the area from the southwest as southern low-pressure system tracked from the lower Mississippi valley to the Southeast US Coast. Significant ice and freezing rain occurred across Northwest (NW) and Northern portions of NC, producing $\frac{1}{4}$ to $\frac{1}{3}$ inch of ice which toppled multiple trees and left thousands without power. \$25,000 of crop damage was reported in the county because of the winter weather.

Davidson County and Randolph County - 1/16/2022

Snow accumulated in Davidson and Randolph County between 2 to 4 inches, along with a tenth of an inch of freezing rain in Davidson and 0.15 inches of freezing rain in Randolph County. A storm system moved across the central plains to the Southeast, bringing winter weather and a mix of snow, sleet, freezing rain, and rain. Ice and snow accumulation created travel difficulties across Piedmont which caused numerous accidents across the NW Piedmont area where the heaviest snow fell.

5.8.5 Probability of Future Occurrences

The NRI reports on specific winter storm related hazards with the Ice Storm and Winter Weather risk data. Because this plan utilized occurrence data from ice storms along with winter storm events, the probability represented by the NRI will refer to these hazards as “Ice Storms” and “Winter Weather.”

Ice Storm

The NRI defines an Ice Storm as a freezing rain situation, or rain that freezes on surface contact, with significant ice accumulations which are 0.25 inches or more. The NRI utilizes the United States Army Corps of Engineers (USACE) Cold Regions Research and Engineering Laboratory (CRREL) Damaging Ice Storm GIS data²⁸, which represents freezing rainstorms between 1940 and 2014. The census tracts within the planning area have an average expected annual frequency of ice storms of 1.97, or approximately up to 2 ice storms per year, with a total EAL of \$923,745.70.

The total EAL in Davidson County is \$613,500.92, average expected annual frequency of census tracts within the county is 2.11, and the EAL and Risk score are considered to have a very high percentile. The three jurisdictions with the highest census tract level average EAL score are Denton (85.19), Midway (83.92), and Thomasville (83.32), which are all located within

²⁸ U.S. Army Corps of Engineers [USACE]. (2014). Damaging Ice Storm GIS [Dataset]. In USACE Engineer Research and Development Center Website. <https://www.erdc.usace.army.mil/Media/Fact-Sheets/Fact-Sheet-Article-View/Article/490684/damaging-ice-storm-gis/>

Davidson County. The areas with the highest total EAL at a census tract level overlapping jurisdictional boundaries are unincorporated areas (\$177,240.48), Thomasville (\$166,549.54), and Lexington (\$164,596.97).

Census tracts in Randolph County have a total EAL of \$299,982.83, average expected annual frequency of 1.79, and average EAL score and Risk Score that are a relatively high percentile. The three jurisdictions within the county that have the highest total EAL are Asheboro (\$139,699.24), Asheboro (\$68,504.69), and Trinity (\$46,415.98).

Table 5- 35: NRI Jurisdictional Ice Storm Impact Summary

Ice Storm						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	2.11	\$613,500.92	82.19	Very High	83.19	Very High
Denton	2.0911	\$17,227.50	85.19	Very High	87.40	Very High
Lexington	2.1166	\$164,596.97	80.67	Very High	82.82	Very High
Midway	2.1144	\$79,019.73	83.92	Very High	84.20	Very High
Thomasville	2.0570	\$166,549.54	83.32	Very High	85.04	Very High
Wallburg	2.1144	\$58,880.87	81.28	Very High	80.91	Very High
Unincorporated Area	2.12	\$177,240.48	81.43	Very High	81.31	Very High
Randolph County	1.7957	\$299,982.83	74.51	Relatively High	76.72	Relatively High
Archdale	1.7920	\$68,504.69	70.85	Relatively High	73.33	Relatively High
Asheboro	1.7952	\$139,699.24	75.89	Relatively High	79.21	Relatively High
Franklinville	1.7868	\$32,800.70	70.21	Relatively High	73.10	Relatively High
Liberty	1.7868	\$23,826.37	80.45	Very High	84.20	Very High
Ramseur	1.7868	\$6,908.54	70.29	Relatively High	74.63	Relatively High
Randleman	1.7868	\$43,331.14	75.27	Relatively High	77.27	Relatively High
Seagrove	1.8784	\$10,248.08	78.57	Relatively High	75.45	Relatively High
Staley	1.7868	\$10,178.62	78.46	Relatively High	80.64	Very High
Trinity	1.8747	\$46,415.98	78.77	Relatively High	80.30	Very High
Unincorporated Area	1.80	\$23,204.15	71.82	Relatively High	70.64	Relatively High
Total	1.9673	\$923,745.70	78.41	Relatively High	80.04	Very High

Winter Weather

The NRI defines winter weather events as winter storm events where the main types of precipitation are snow, sleet, or freezing rain. The NRI utilizes the Iowa State University Iowa Environmental Mesonet²⁹ for winter weather event data, and the data range included in the NRI is from November 12, 2005, to October 6, 2022.

Census tracts within the planning area have an average expected annual frequency of 1.77 winter weather events per year, total EAL value of \$551,700.56, relatively high percentile average EAL score, and a relatively high percentile average Risk Score. Davidson County has a significantly lower EAL value, average EAL score, and average Risk Score than Randolph County, which could be attributed to discrepancies in event reporting, recording, and period of record.

In Davidson County, the average expected annual frequency is 1.8 events for all census tracts, the EAL score for all census tracts is 56.86 on average, and the average Risk Score is 58.13. The three jurisdictions in Davidson County with the highest total EAL value are Thomasville (\$52,129.98), unincorporated areas (\$25,890.65), and Lexington (\$21,749). The average EAL scores for the county are all considered to be in the relatively moderate percentile except for Thomasville which has a 65.15 (relatively high percentile) average EAL score for census tracts within the jurisdiction. The average Risk Score in most jurisdictions in the county is in a relatively moderate percentile except for Denton (60.82) and Thomasville (67.65), which are considered to be at a relatively high percentile for risk of winter weather events.

In Randolph County, the average expected annual frequency of occurrence is 1.73 events, the total EAL value for census tracts is \$469,393.79, the average EAL score is 89.06 (very high percentile), and the average Risk Score is 90.68 (very high percentile). The three jurisdictions in the county with the highest total EAL value for census tracts within the jurisdictional boundaries are Asheboro (\$107,187.13), Archdale (\$211,135.83), and Randleman (\$68,149.83). All jurisdictions in Randolph County are considered to have an average EAL score and average Risk Score of greater than 80, considered to be a very high percentile, except for Franklinville which has a relatively high percentile rating for average EAL score and average Risk Score. The three highest average EAL scores in the planning area and census tracts that overlap the jurisdictional boundaries are from Staley (91.13), Liberty (91.91), and Randleman (90.44).

²⁹ Archived NWS Watch, Warnings, Advisories (By Iowa State University [ISU] & Iowa Environment Mesonet [IEM]). (n.d.). Iowa State University: Iowa Environment Mesonet. Retrieved March 5, 2025, from <https://mesonet.agron.iastate.edu/request/gis/watchwarn.phtml>

Table 5- 36: NRI Jurisdictional Winter Weather Hazard Summary

Winter Weather						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	1.80	\$82,306.77	56.86	Relatively Moderate	58.13	Relatively Moderate
Denton	1.8	\$1,951.55	57.51	Relatively Moderate	60.82	Relatively High
Lexington	1.80	\$21,749.52	53.76	Relatively Moderate	57.13	Relatively Moderate
Midway	1.80	\$9,253.41	59.65	Relatively Moderate	58.88	Relatively Moderate
Thomasville	1.78	\$52,129.98	65.15	Relatively High	67.65	Relatively High
Wallburg	1.80	\$7,674.75	56.01	Relatively Moderate	54.66	Relatively Moderate
Unincorporated Area	1.80	\$25,890.65	57.34	Relatively Moderate	56.68	Relatively Moderate
Randolph County	1.73	\$469,393.79	89.06	Very High	90.68	Very High
Archdale	1.82	\$107,187.13	88.00	Very High	89.07	Very High
Asheboro	1.73	\$211,135.83	90.32	Very High	92.01	Very High
Franklinville	1.73	\$52,712.08	87.41	Relatively High	88.93	Relatively High
Liberty	1.73	\$30,610.98	91.91	Very High	93.78	Very High
Ramseur	1.73	\$30,284.13	86.57	Very High	89.16	Very High
Randleman	1.73	\$68,149.83	90.44	Very High	91.31	Very High
Seagrove	1.73	\$12,448.77	89.93	Very High	86.88	Very High
Staley	1.73	\$13,994.53	91.13	Very High	92.05	Very High
Trinity	1.75	\$45,303.94	82.94	Very High	84.57	Very High
Unincorporated Area	1.73	\$32,958.62	88.03	Very High	86.60	Very High
Total	1.77	\$551,700.56	71.87	Relatively High	73.05	Relatively High

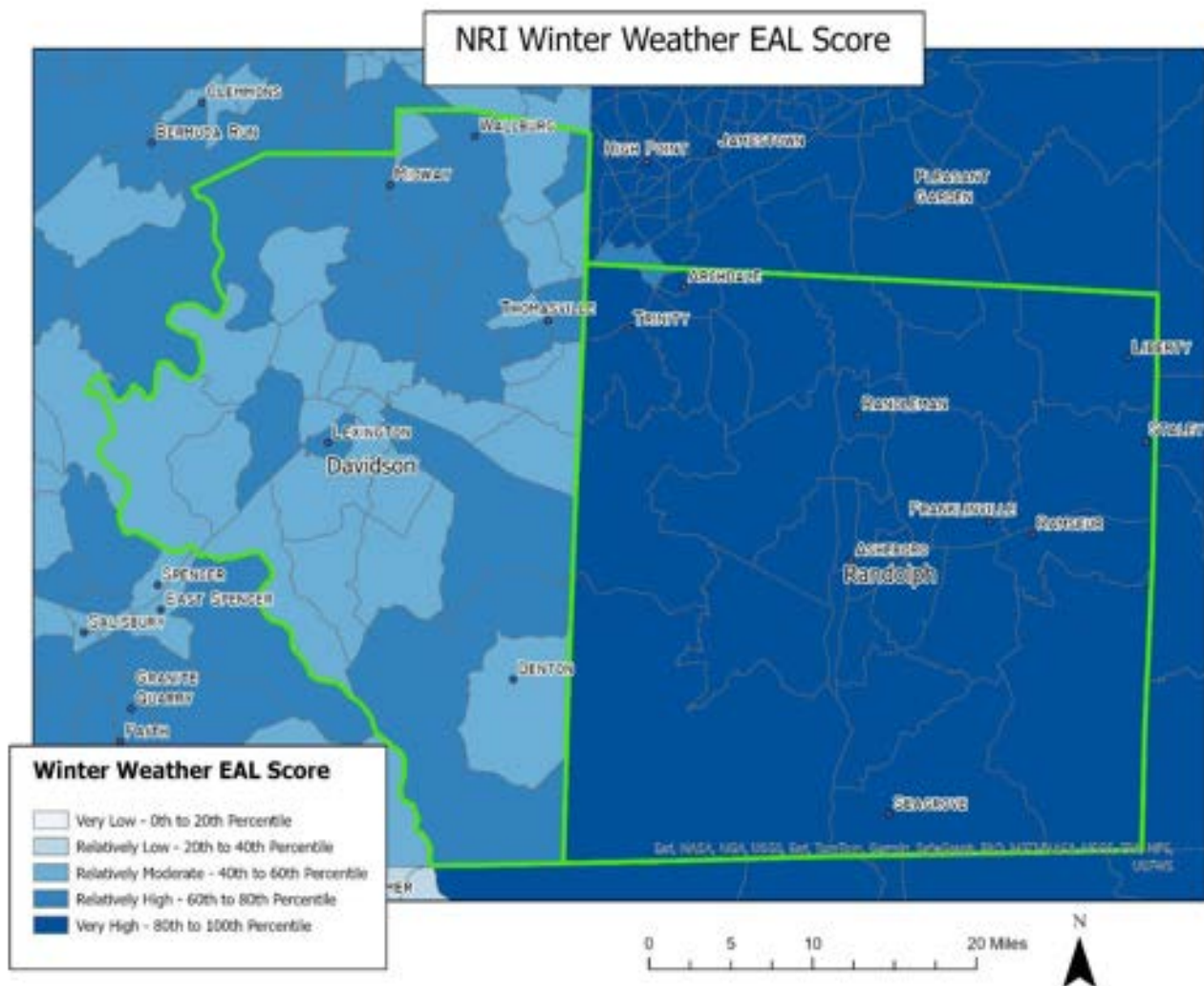


Figure 5- 53: NRI Winter Weather EAL Score

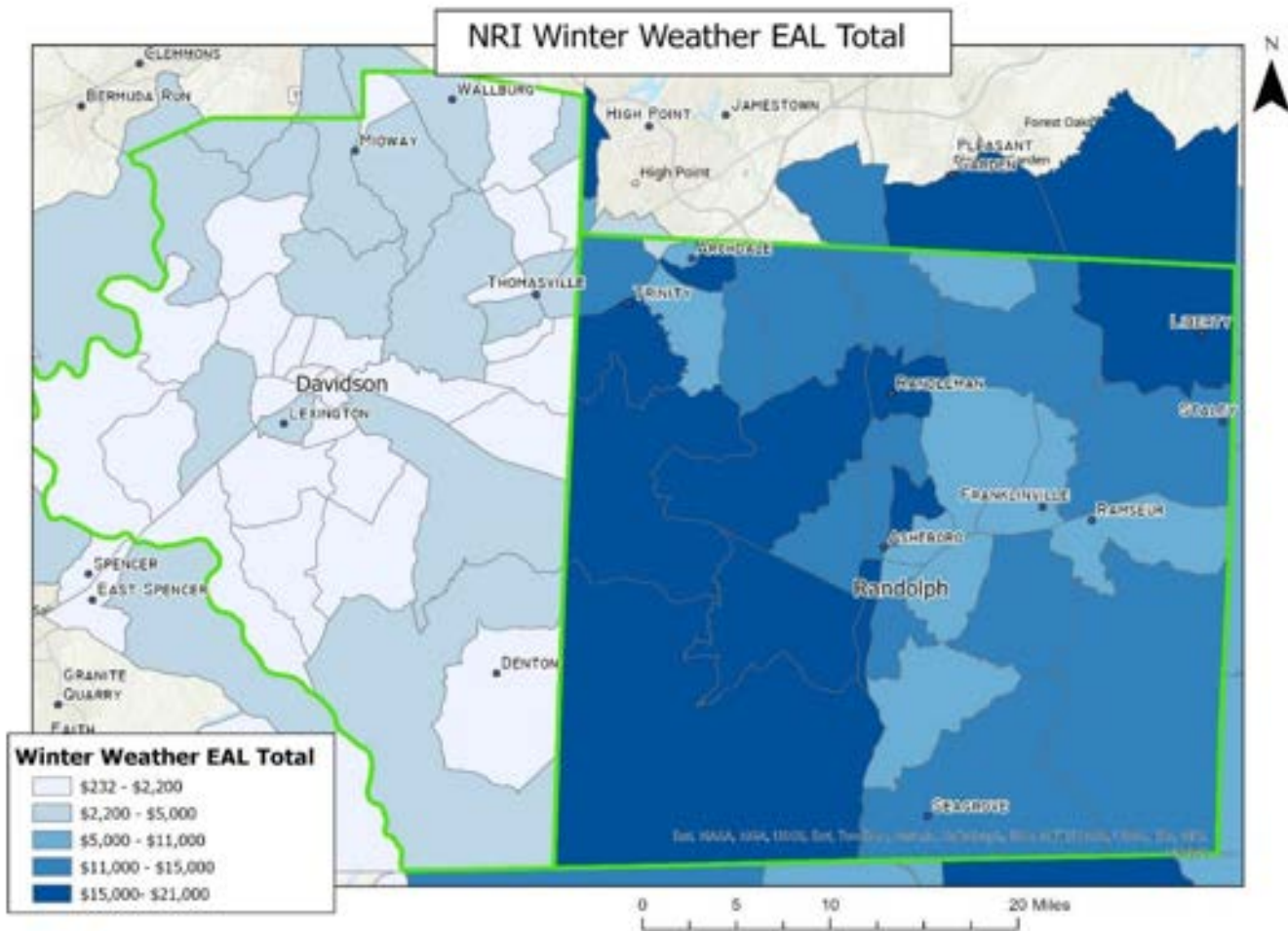


Figure 5- 54: NRI Winter Weather EAL Total

5.8.6 Impact

Winter storm events will remain a regular occurrence in the Region due to its location in the central part of the State. According to historical information, the Region experiences several winter storms events each year.

People

Winter storms are deceptive killers because most deaths are indirectly related to the storm event. The leading cause of death during winter storms is from automobile or other transportation accidents. Exhaustion and heart attacks caused by overexertion are the two most likely causes of winter storm-related deaths.

Power outages during very cold winter storm conditions can result in a potentially dangerous situation in all jurisdictions. Elderly people account for the largest percentage of hypothermia victims. In addition, if the power is out for an extended period, residents are forced to find alternative means to heat their homes. The danger arises from carbon monoxide released from improperly ventilated heating sources such as space or kerosene heaters, furnaces, and

blocked chimneys. House fires also occur more frequently in the winter due to lack of proper safety precautions when using an alternative heating source.

First Responders

Adverse impact expected to be severe for unprotected personnel and moderate to light for trained, equipped, and protected personnel. Fire suppression during winter storms may present a great danger because water supplies may freeze, and it may be difficult for firefighting equipment to get to the fire. Clearing ice- or snow-covered roads is also a problem; with limited equipment in North Carolina due to the relative infrequency of events, priority is given to main thoroughfares, and secondary roads are untouched during the initial hours after a storm has passed.

Continuity of Operations

Winter storm events can result in a loss of power which may impact operations. Downed trees, power lines and icy road conditions may prevent access to critical facilities and/or emergency equipment.

Built Environment

Localized impact to facilities and infrastructure in the areas of the incident. Power lines and roads are most adversely affected.

Economy

Local economy and finances may be adversely affected, depending on damage. Utility companies will strive to restore power as quickly as possible; however, businesses without power may be forced to close for an extended period, resulting in financial losses for the local economy.

Natural Environment

Winter storm events may include ice or snow accumulation on trees which can cause large limbs, or even whole trees, to snap and potentially fall on residential homes, cars, or power lines. This potential for winter debris creates a dangerous environment to be outside in; significant injury may occur if a large limb snaps while a local resident is out driving or walking underneath it.

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GEOLOGIC HAZARDS

5.9 Earthquake

5.9.1 Background

An earthquake is movement or trembling of the ground produced by sudden displacement of rock in the Earth's crust. Earthquakes can affect hundreds of thousands of square miles, cause damage to property measured in the tens of billions of dollars, result in loss of life and injury to hundreds of thousands of people and disrupt the social and economic functioning of the affected area.

Most property damage and earthquake-related deaths are caused by the failure and collapse of structures due to ground shaking. The level of damage depends upon the amplitude and duration of the shaking, which are directly related to the earthquake size, distance from the fault, site, and regional geology. Other damaging earthquake effects include landslides, the down-slope movement of soil and rock (mountain regions and along hillsides), and liquefaction, in which ground soil loses the ability to resist shear and flows much like quicksand. In the case of liquefaction, anything relying on the substrata for support can shift, tilt, rupture, or collapse.

Most earthquakes are caused by the release of stresses accumulated because of the rupture of rocks along opposing fault planes in the Earth's outer crust. These fault planes are typically found along the borders of the Earth's ten tectonic plates. The areas of greatest tectonic instability occur at the perimeters of the slowly moving plates, as these locations are subjected to the greatest strains from plates traveling in opposite directions and at different speeds. Deformation along plate boundaries causes strain in the rock and the consequent buildup of stored energy. When the built-up stress exceeds the rock's strength, a rupture occurs. The rock on both sides of the fracture is snapped, releasing the stored energy, and producing seismic waves, generating an earthquake.

The greatest earthquake threat in the United States is along tectonic plate boundaries and seismic fault lines located in the central and western states; however, the Eastern United State does face moderate risk to less frequent, less intense earthquake events. Figure 5- 55 shows the relative seismic risk for the United States.

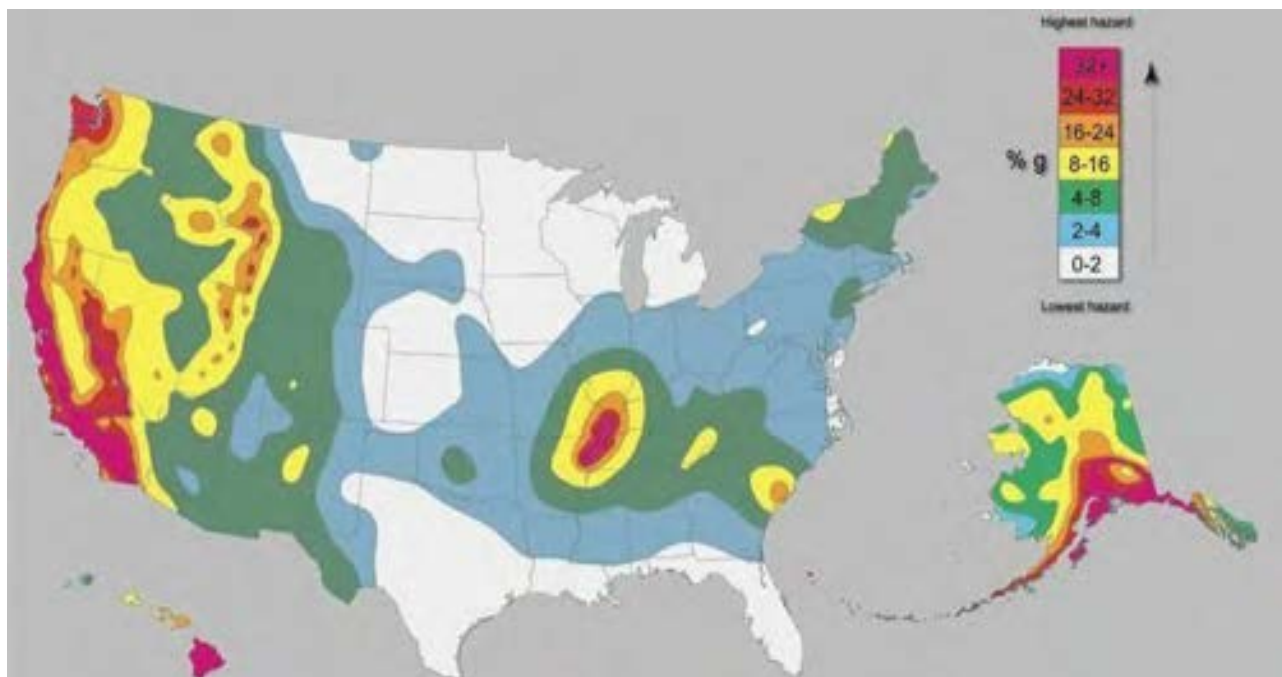


Figure 5- 55: United States Earthquake Hazard Map

Source: United States Geological Survey, <http://earthquake.usgs.gov/hazards/products/conterminous/>
 Earthquakes are measured in terms of their magnitude and intensity. Magnitude is measured using the Richter Scale, an open-ended logarithmic scale that describes the energy release of an earthquake through a measure of shock wave amplitude (Table 5- 37).

Table 5- 37: Richter Scale

RICHTER MAGNITUDES	EARTHQUAKE EFFECTS
< 3.5	Generally, not felt, but recorded.
3.5 - 5.4	Often felt but rarely causes damage.
5.4 - 6.0	At most slight damage to well-designed buildings. Can cause major damage to poorly constructed buildings over small regions.
6.1 - 6.9	Can be destructive in areas up to about 100 kilometers across where people live.
7.0 - 7.9	Major earthquake. Can cause serious damage over larger areas.
8 or >	Great earthquake. Can cause serious damage in areas several hundred kilometers across.

Source: Federal Emergency Management Agency, <http://www.fema.gov/earthquake>

Each unit increase in magnitude on the Richter Scale corresponds to a ten-fold increase in wave amplitude, or a thirty-two-fold increase in energy. Intensity is most measured using the Modified Mercalli Intensity (MMI) Scale based on direct and indirect measurements of seismic effects. The scale levels are typically described using roman numerals, ranging from “I” corresponding to imperceptible (instrumental) events to “XII” for catastrophic (destruction). A detailed description of the MMI Scale of earthquake intensity and the manner in which the earthquake is felt by people is given in Table 5- 38.

Table 5- 38: Modified Mercalli Intensity Scale for Earthquakes

SCALE	SHAKING	DESCRIPTION OF EFFECTS
I	Not felt	Not felt except by a very few under especially favorable conditions.
II	Weak	Felt only by a few persons at rest, especially on upper floors of buildings.
III	Weak	Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
IV	Light	Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
V	Moderate	Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
VI	Strong	Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.

SCALE	SHAKING	DESCRIPTION OF EFFECTS
VII	Very Strong	Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
VIII	Severe	Damage slight in specially designed structure; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, and walls. Heavy furniture overturned.
IX	Violent	Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
X	Extreme	Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.

5.9.2 Location and Spatial Extent

Approximately two-thirds of North Carolina are subject to earthquakes, with the western and southeast region most vulnerable to a very damaging earthquake. In terms of major faults, the State is primarily affected by the Charleston Fault in South Carolina and New Madrid Fault in Tennessee. Both faults have generated earthquakes measuring greater than 8 on the Richter Scale during the last 200 years. In addition, there are several smaller fault lines throughout North Carolina and neighboring states such as the Eastern Tennessee and Virginia seismic zones. These zones have produced smaller earthquakes but are more likely to have an impact on the Region.

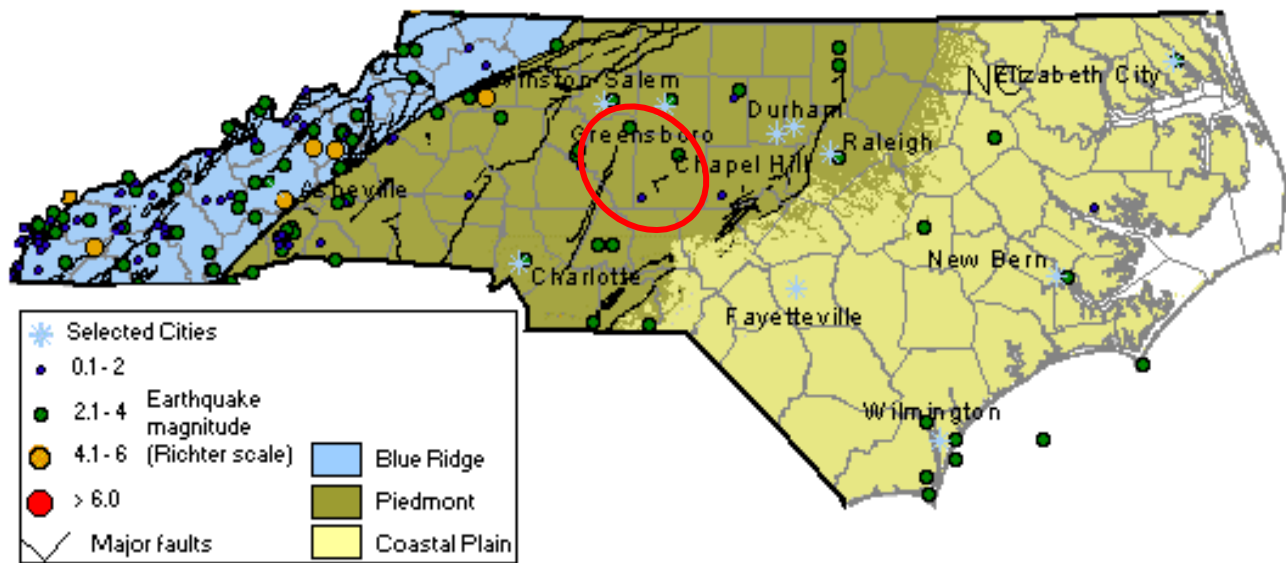
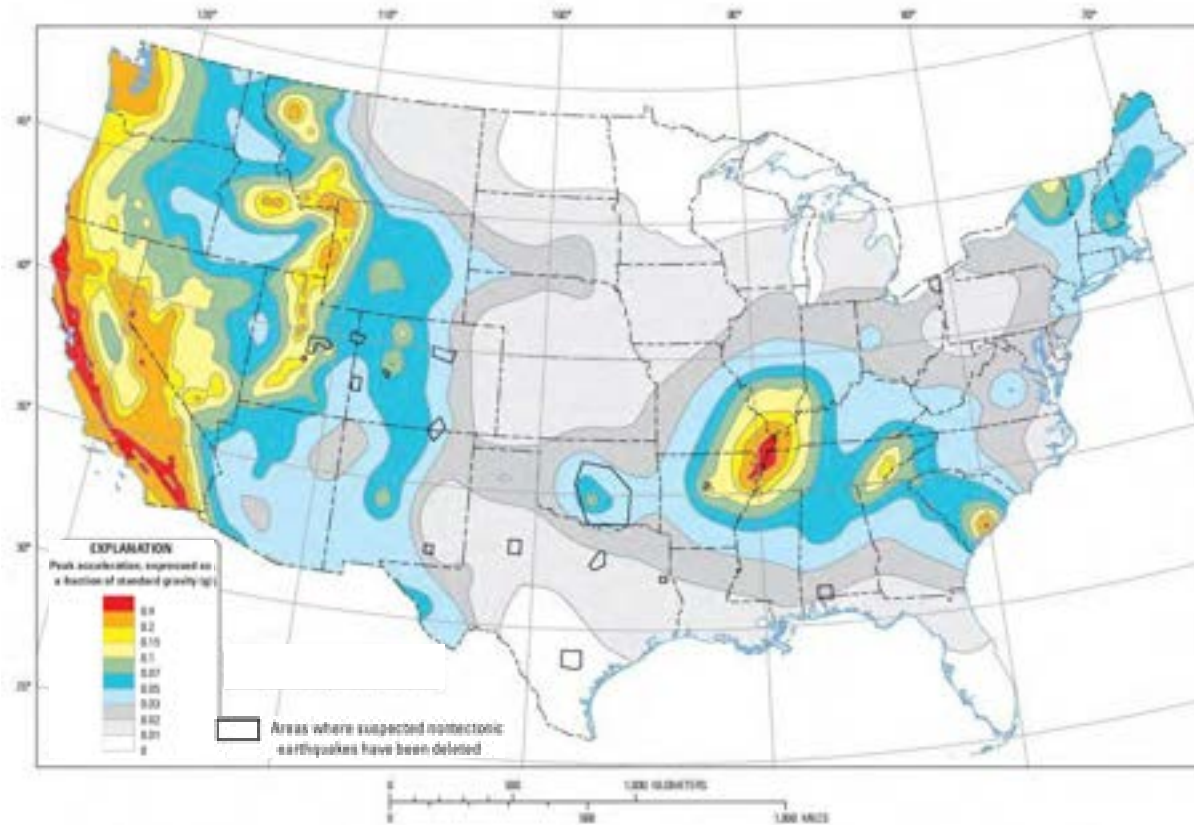


Figure 5- 56: Geological and Seismic Information for North Carolina

Source: North Carolina Geological Survey, <http://geodata.lib.ncsu.edu/fedgov/noaa/commvuln/htm/hother.htm>

Figure 5- 56 shows the intensity level associated with the Region, based on the national USGS map of peak ground acceleration with 10 percent probability of exceedance in fifty years. Peak ground acceleration is the probability that ground motion will reach a certain level during an earthquake. The data show peak horizontal ground acceleration (the fastest measured change in speed, for a particle at ground level that is moving horizontally due to an earthquake) with a 10 percent probability of exceedance in fifty years. The map was compiled by the U.S. Geological Survey (USGS) Geologic Hazards Team, which conducts global investigations of earthquake, geomagnetic, and landslide hazards. According to this map, the Region lies within an approximate zone of 0.02 to 0.05 peak acceleration. This indicates that the Region exists within an area of low to moderate seismic risk.



Ten-percent probability of exceedance in 50 years map of peak ground acceleration

Figure 5- 57: Peak Acceleration with 10 Percent Probability of Exceedance in 50 Years from the USGS

Earthquake epicenter points in Figure 5- 58, Figure 5- 59, and Figure 5- 60 were downloaded from the North Carolina Department of Environmental Quality. Below the points there is a probabilistic seismic hazard map which shows peak ground accelerations for a 2% 50-year probability. These zones are based on historic seismic activity combined with fault specific sources.

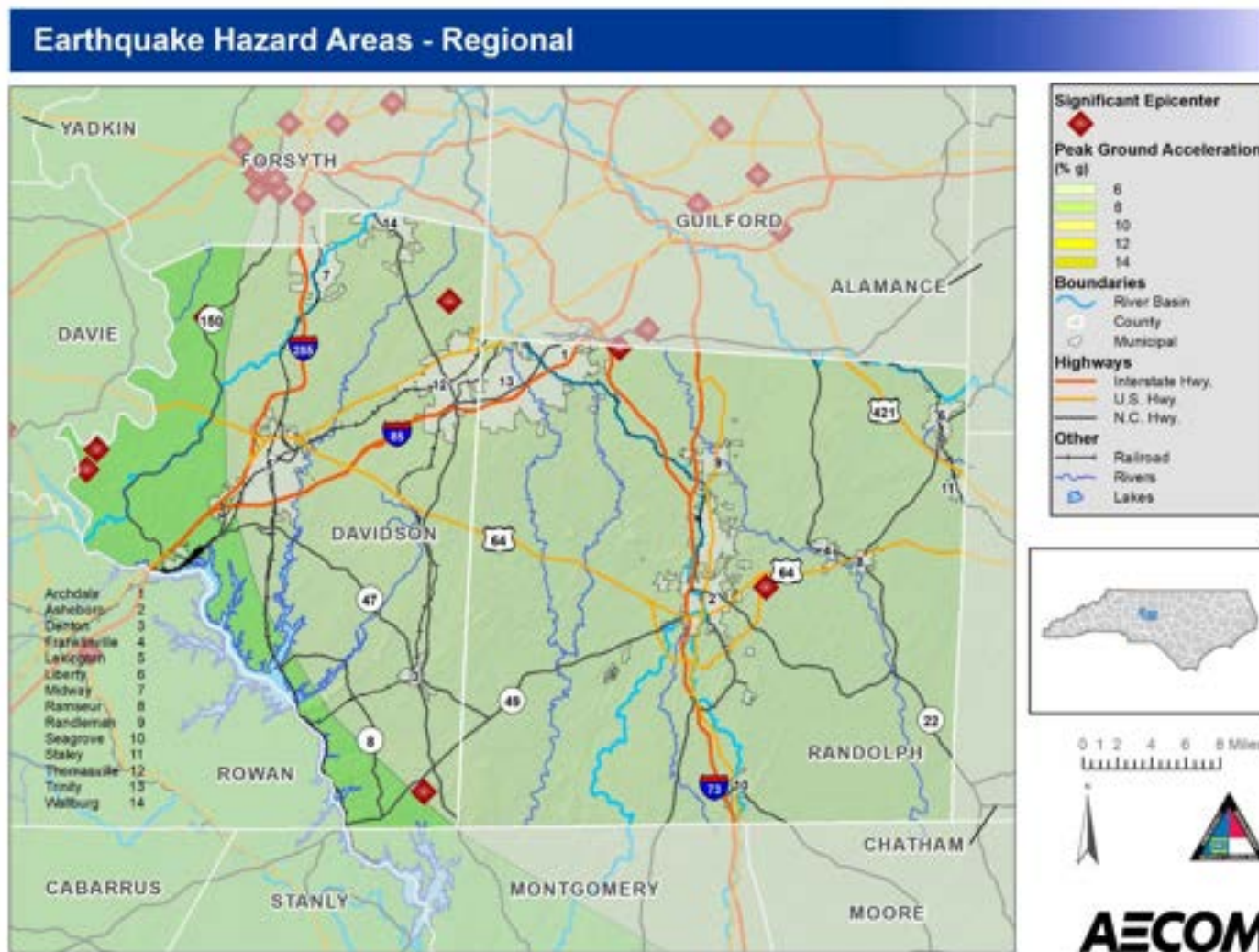


Figure 5- 58: Earthquake Hazard Areas - Regional

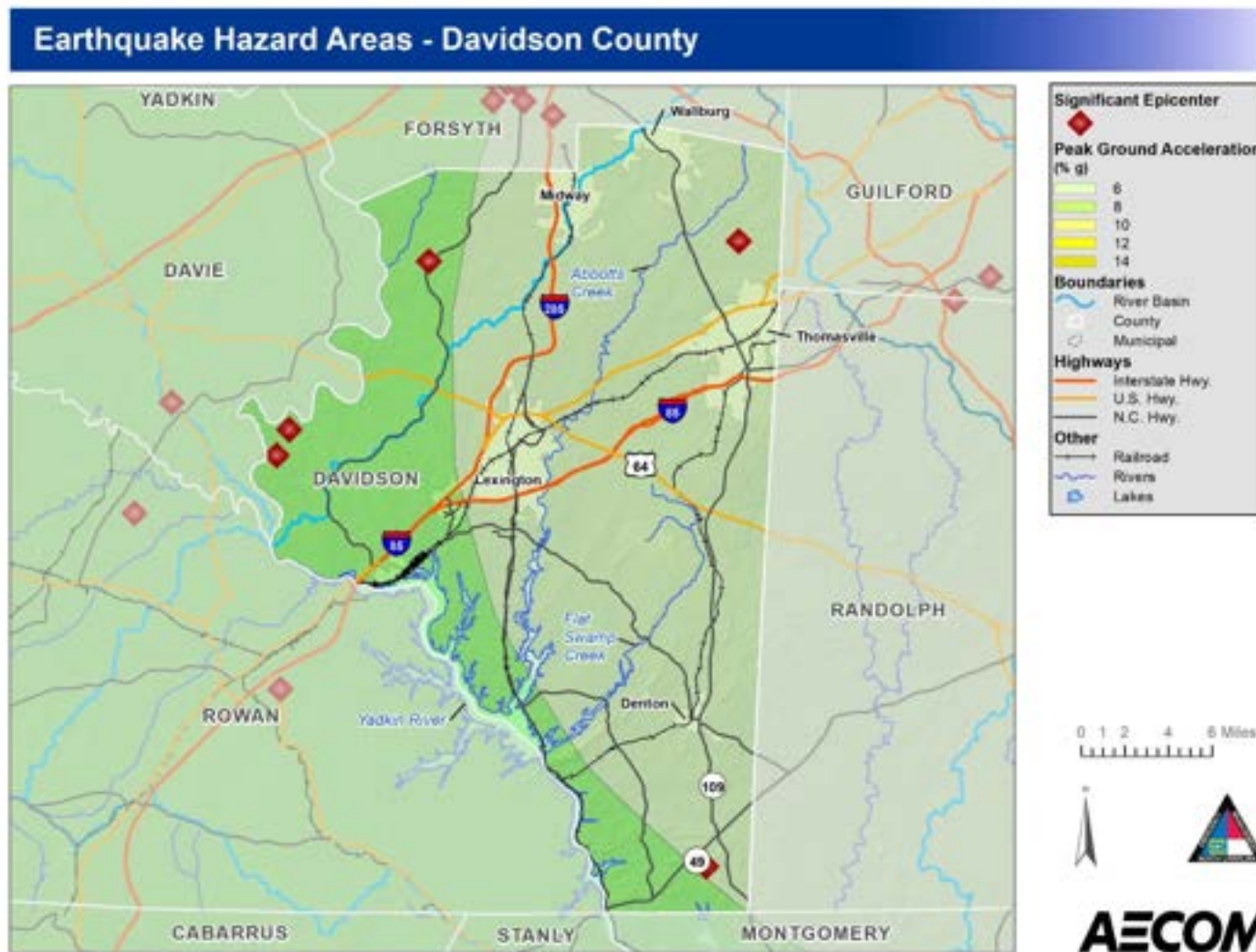


Figure 5- 59: Earthquake Hazard Areas – Davidson County

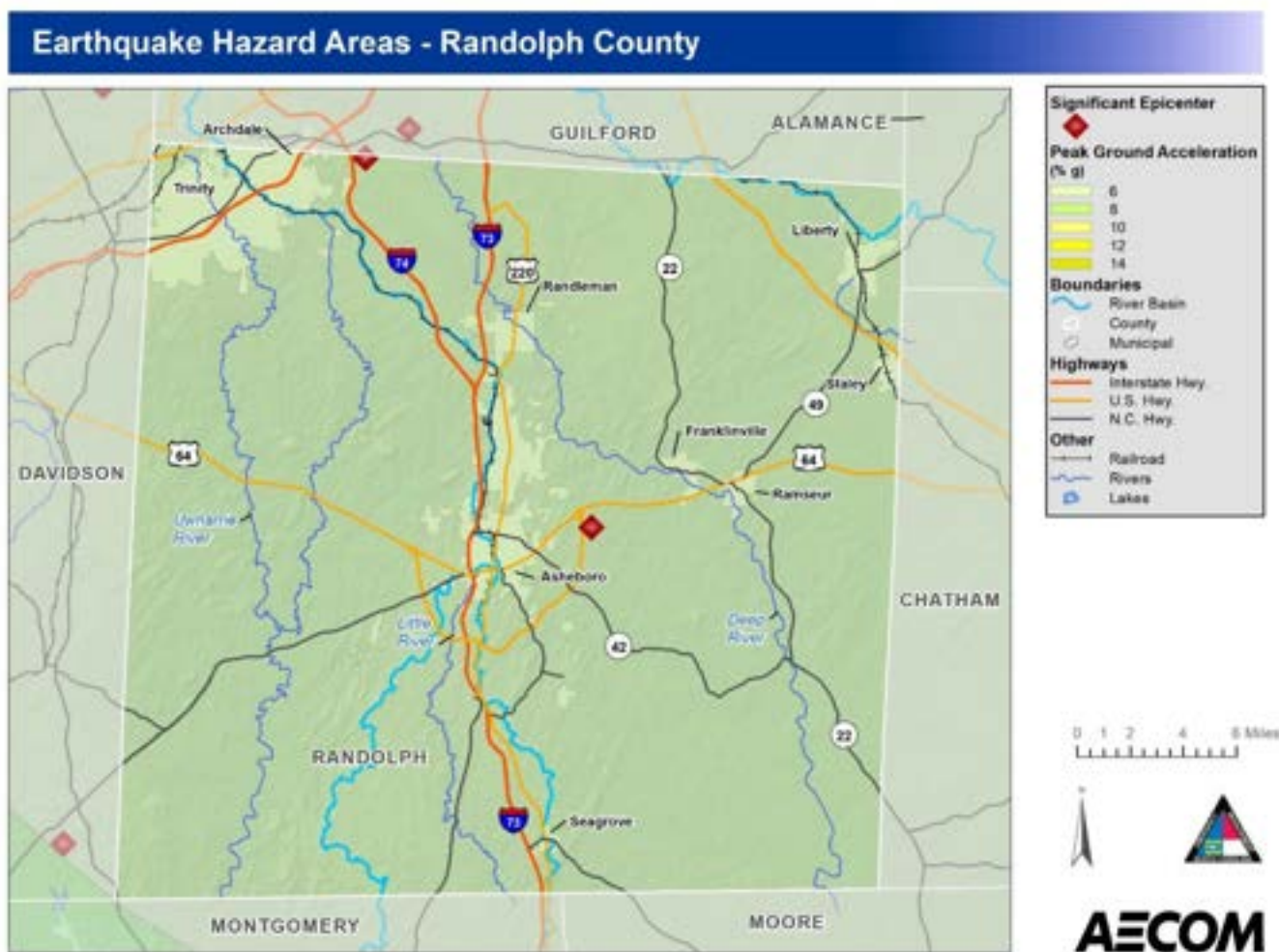


Figure 5- 60: Earthquake Hazard Areas – Randolph County

5.9.3 Extent

Earthquake extent can be measured by the Richter Scale and the Modified Mercalli Intensity (MMI) scale. The most severe earthquake felt in the Region since the mid-1800s was a six (VI) on the MMI Scale. This event occurred in 1886, and the effects of this magnitude earthquake typically include trees swaying, suspended objects swinging, and objects falling off shelves. Extent for all jurisdictions is depicted below in Table 5-32. Earthquakes of greater magnitude may be possible within the Region; however, this is known to be the greatest severity currently on record.

5.9.4 Historical Occurrences

At least eight earthquakes are known to have affected the Region since 1886. The strongest of these measured VII on the Modified Mercalli Intensity (MMI) scale and was likely an aftershock felt from the Charleston Earthquake of 1886. Table 5-39 and Table 5-40 provide a summary of earthquake events reported by the National Geophysical Data Center between 1638 to 1985.

Table 5-39: Summary of Seismic Activity in Davidson County between 1638 and 1985.

LOCATION	NUMBER OF OCCURRENCES	GREATEST MMI REPORTED	RICHTER SCALE EQUIVALENT
Town of Denton	1	III	3.3
Town of Lexington	1	--	4.7
Town of Midway	--	--	--
City of Thomasville	--	--	--
Town of Wallburg	1	III	< 4.8
Unincorporated	--	--	--
DAVIDSON COUNTY TOTAL	3	IV	< 4.8

Source: National Geophysical Data Center

Table 5-40: Summary of Seismic Activity in Randolph County between 1638 and 1985.

LOCATION	NUMBER OF OCCURRENCES	GREATEST MMI REPORTED	RICHTER SCALE EQUIVALENT
City of Archdale	0	--	--
City of Asheboro	1	VII	< 6.1
Town of Franklinville	2	IV	< 4.8
Town of Liberty	0	--	--
Town of Ramseur	0	--	--
City of Randleman	0	--	--
Town of Seagrove	0	--	--
Town of Staley	1	III	< 4.8

LOCATION	NUMBER OF OCCURRENCES	GREATEST MMI REPORTED	RICHTER SCALE EQUIVALENT
City of Trinity	0	--	--
Unincorporated Area	1	IV	< 4.8
RANDOLPH COUNTY TOTAL	5	VII	< 6.1

Source: National Geophysical Data Center

In addition to those earthquakes specifically affecting the Region, a list of earthquakes that have caused damage throughout North Carolina is presented below in Figure 5- 41.

Table 5- 41: Top 10 magnitude earthquakes in NC from 2012 to 2024³⁰

Date	Magnitude	Magnitude Type	Location
8/9/2020	5.1	mw	4 km SE of Sparta, North Carolina
6/4/2023	3.24	md	4 km NNW of West Canton, North Carolina
12/15/2014	3	md	13 km NNW of Cedar Rock, North Carolina
2/11/2014	2.9	mlg	7 km NW of Hobucken, North Carolina
8/25/2013	2.9	md	3 km NNE of Blowing Rock, North Carolina
8/11/2020	2.87	md	3 km SSE of Sparta, North Carolina
10/25/2020	2.81	md	3 km ENE of Sparta, North Carolina
5/23/2023	2.76	md	4 km N of West Canton, North Carolina
12/26/2017	2.74	md	2 km S of Lake Santeetlah, North Carolina
12/8/2022	2.69	md	0 km S of Laurel Park, North Carolina

Magnitude Types³¹

- **Mw** = Derived from centroid moment tensor inversion of the W-phase. Mw is computed for all M5.0 and higher earthquakes worldwide.
 - $Mw = 2/3 * (\log_{10}(MO) - 16.1)$ where MO is the seismic moment

³⁰ United States Geological Survey [USGS]. (n.d.). Earthquake Catalog [Dataset]. In USGS Earthquake Hazards Program. USGS Earthquake Hazards Program. <https://earthquake.usgs.gov/earthquakes/search/>

³¹ US Geological Survey [USGS]. (n.d.). Magnitude types. USGS Earthquake Hazard Program. Retrieved January 27, 2025, from <https://www.usgs.gov/programs/earthquake-hazards/magnitude-types>

Date	Magnitude	Magnitude Type	Location

- **Md** = Based on the duration of shaking measured by the time decay of amplitude of the seismogram. Sometimes used for small events but often used to compute magnitude from seismographs with clipped waveforms due to limited dynamic recording range of analog instrumentation which makes it impossible to measure the peak amplitude. Published only when no other magnitudes are available for ~4 or smaller magnitudes.
- **Mlg** = short period surface wave. Magnitude for regional earthquakes based on an amplitude of Lg surface waves. Only used for smaller events in central and eastern US, typically events less than 4.0 magnitude or when not moment magnitude is available

Table 5- 42: Earthquakes Which Have Caused Damage In North Carolina

DATE	LOCATION	RICHTER SCALE (MAGNITUDE)	MMI (INTENSITY)	MMI IN NORTH CAROLINA
12/16/1811 - 1	NE Arkansas	8.5	XI	VI
12/16/1811 - 2	NE Arkansas	8.0	X	VI
12/18/1811 - 3	NE Arkansas	8.0	X	VI
01/23/1812	New Madrid, MO	8.4	XI	VI
02/07/1812	New Madrid, MO	8.7	XII	VI
04/29/1852	Wytheville, VA	5.0	VI	VI
08/31/1861	Wilkesboro, NC	5.1	VII	VII
12/23/1875	Central Virginia	5.0	VII	VI
08/31/1886	Charleston, SC	7.3	X	VII
05/31/1897	Giles County, VA	5.8	VIII	VI
01/01/1913	Union County, SC	4.8	VII	VI
02/21/1916	Asheville, NC	5.5	VII	VII
07/08/1926	Mitchell County, NC	5.2	VII	VII
11/03/1928	Newport, TN	4.5	VI	VI
05/13/1957	McDowell County, NC	4.1	VI	VI
07/02/1957	Buncombe County, NC	3.7	VI	VI
11/24/1957	Jackson County, NC	4.0	VI	VI
10/27/1959 *	Chesterfield, SC	4.0	VI	VI
07/13/1971	Newry, SC	3.8	VI	VI
11/30/1973	Alcoa, TN	4.6	VI	VI

DATE	LOCATION	RICHTER SCALE (MAGNITUDE)	MMI (INTENSITY)	MMI IN NORTH CAROLINA
11/13/1976	Southwest Virginia	4.1	VI	VI
05/05/1981	Henderson County, NC	3.5	VI	VI
08/23/2011	Louisa County, VA	5.8	VII	V

* Conflicting reports on this event, intensity in North Carolina could have been either V or VI
Source: This information was compiled by Dr. Kenneth B. Taylor and provided by Tiawana Ramsey of NCEM.
Information was compiled from the National Earthquake Center, Earthquakes of the US by Carl von Hake (1983),
and a compilation of newspaper reports in the Eastern Tennessee Seismic Zone compiled by Arch Johnston, CERL,
Memphis State University (1983).

5.9.5 Probability of Future Occurrences

The NRI defines an earthquake as shaking of the earth's surface by energy waves emitted by slowly moving tectonic plates overcoming friction with one another underneath the earth's surface. The source of NRI earthquake data is the USGS 100-year probability of minor-damage earthquake shaking.

The average EAL score of the census tracts in the planning area is 51.04 (relatively moderate percentile) and average Risk Score is 53.36 (relatively moderate percentile). the total EAL for the planning area is \$1,091,163.29 and the average expected annual frequency of occurrence for census tracts in the planning area is 0.000356.

Davidson County has a total EAL value of \$15,477.26, an average expected annual frequency of 0.000362, a 53.73 (relatively moderate percentile) average EAL score, and a 55.19 (relatively moderate percentile) average Risk Score. The three jurisdictions with the highest total EAL are Lexington (\$220,135.34), Thomasville (\$180,801.98), and unincorporated areas (\$158,721.84). All jurisdictions have an average EAL Score considered to be in a relatively moderate percentile, and all jurisdictions in the county have average Risk Scores that are in a relatively moderate percentile, except for Denton which has a relatively high percentile risk score.

Randolph County has a total EAL of \$441,118.47, an average expected annual occurrence of 0.000350, a 47.75 (relatively moderate percentile) average EAL Score, and a 50.94 (relatively moderate percentile) average Risk Score. The three jurisdictions in the planning area with the highest EAL are Asheboro (\$175,658.64), Archdale (\$112,467.06), and Randleman (\$57,300.46). The jurisdictions in the county all have a relatively moderate percentile average EAL score except for Liberty which has a relatively high percentile (60.69) average EAL score. All jurisdictions have a relatively moderate percentile average Risk Score, except for Liberty (65.36) and Staley (62.17), which both have relatively high percentile Risk Scores.

Table 5- 43: NRI Earthquake Jurisdictional Summary

Earthquakes						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	0.000362	\$650,044.83	53.73	Relatively Moderate	55.19	Relatively Moderate
Denton	0.000423	\$18,275.01	59.25	Relatively Moderate	62.55	Relatively High
Lexington	0.000340	\$220,135.34	54.56	Relatively Moderate	57.68	Relatively Moderate
Midway	0.000373	\$71,787.90	54.53	Relatively Moderate	54.84	Relatively Moderate
Thomasville	0.000343	\$180,801.98	56.05	Relatively Moderate	58.56	Relatively Moderate
Wallburg	0.000383	\$48,842.49	49.49	Relatively Moderate	48.84	Relatively Moderate
Unincorporated Area	0.000376	\$158,721.84	50.16	Relatively Moderate	50.12	Relatively Moderate
Randolph County	0.000350	\$441,118.47	47.75	Relatively Moderate	50.94	Relatively Moderate
Archdale	0.000476	\$112,467.06	47.41	Relatively Moderate	50.33	Relatively Moderate
Asheboro	0.000316	\$175,658.64	47.41	Relatively Moderate	52.28	Relatively Moderate
Franklinville	0.000283	\$51,111.90	44.49	Relatively Moderate	48.31	Relatively Moderate
Liberty	0.031062	\$39,824.78	60.69	Relatively High	65.36	Relatively High
Ramseur	0.029895	\$33,715.78	45.25	Relatively Moderate	50.69	Relatively Moderate
Randleman	0.000259	\$57,300.46	48.40	Relatively Moderate	51.53	Relatively Moderate
Seagrove	0.039464	\$16,897.29	57.74	Relatively Moderate	53.74	Relatively Moderate
Staley	0.033278	\$18,526.16	59.51	Relatively Moderate	62.17	Relatively High
Trinity	0.000391	\$47,835.78	48.88	Relatively Moderate	51.55	Relatively Moderate
Unincorporated Area	0.000299	\$35,145.53	45.70	Relatively Moderate	44.55	Relatively Moderate
Total	0.000356	\$1,091,163.29	51.04	Relatively Moderate	53.36	Relatively Moderate

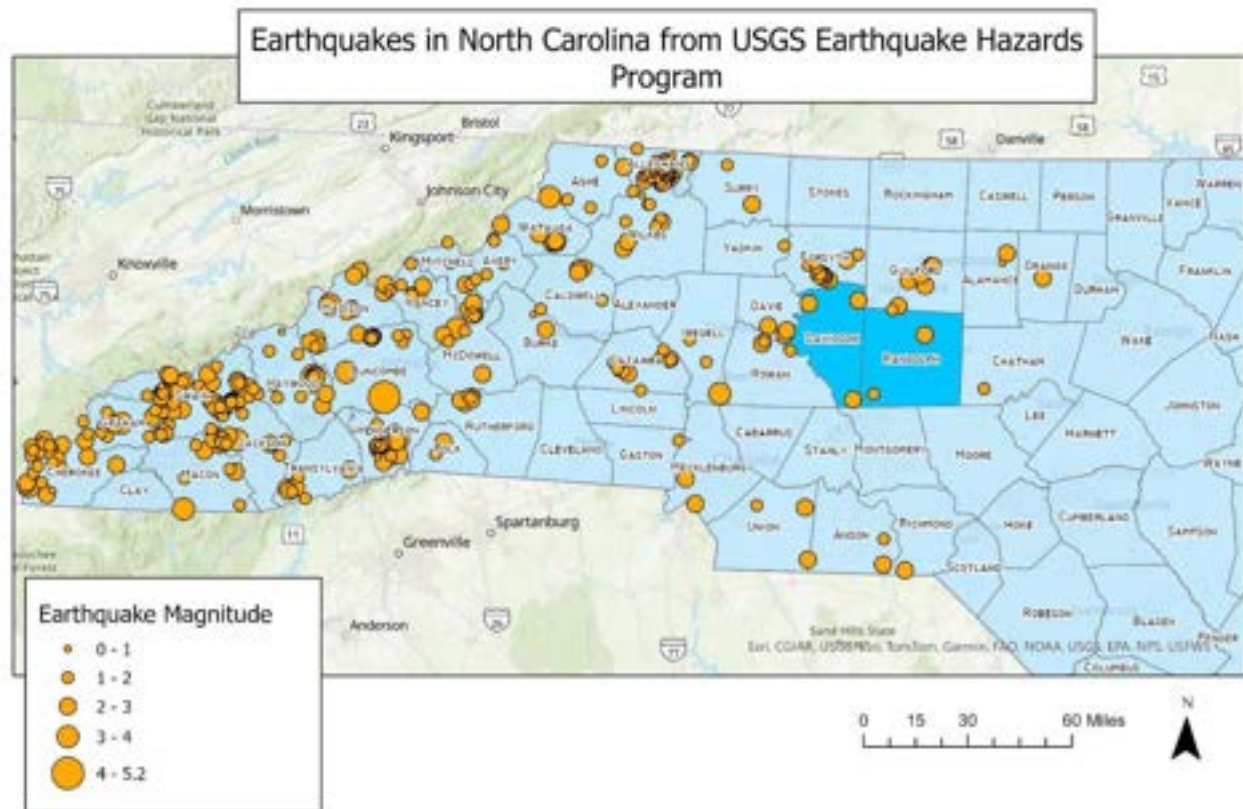


Figure 5- 61: Earthquakes in the planning area from 1916 to 2024 from the USGS Earthquakes Hazards Program

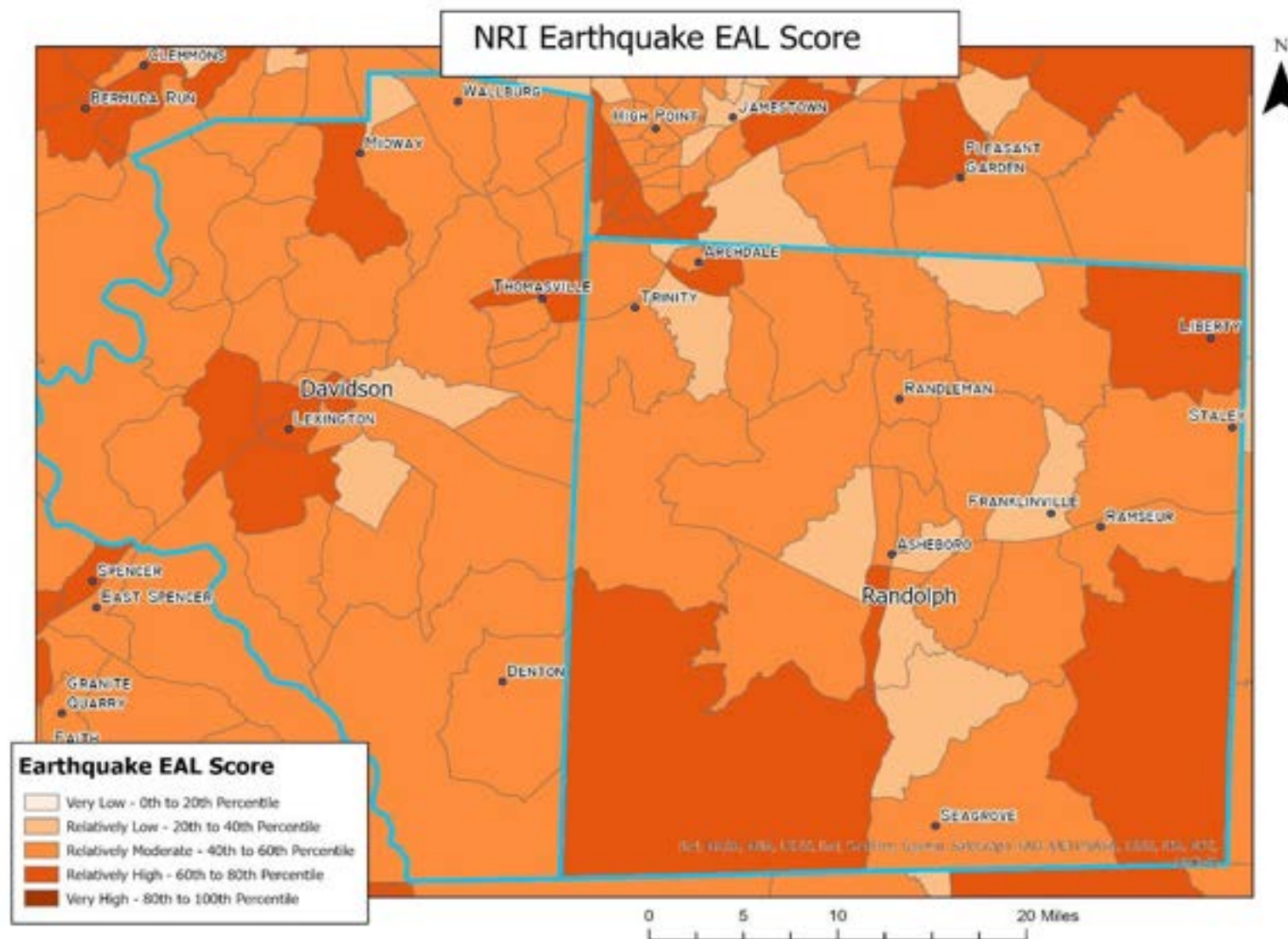


Figure 5- 62: NRI EAL Score for Earthquakes

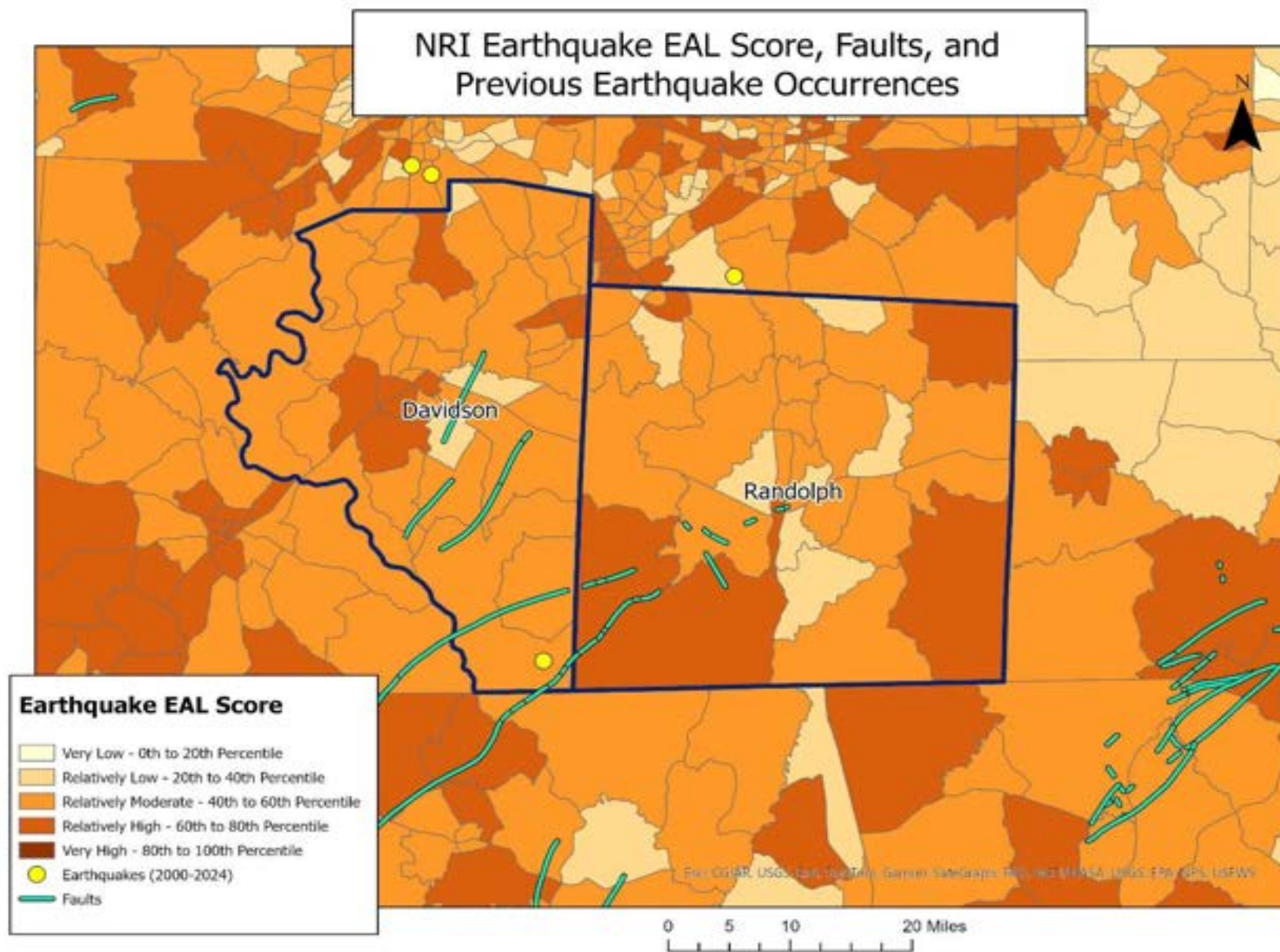


Figure 5- 63: NRI Earthquake EAL Score, Faults, and Previous Earthquakes from 2000 to 2024

5.9.6 Impact

People

Earthquakes in the Region are not high impact events that cause injury or death. The public may typically experience some shaking in these events and the greatest threat to health and well-being is often from objects falling from shelves.

Economy

Economic losses associated with an earthquake include property damage, business interruption costs, and costs to repair damaged utilities and infrastructure. Historically, there have been no economic losses associated with earthquakes in the Region.

Natural Environment

A moderate earthquake is unlikely to cause substantial impacts to the natural environment in the Region. Impacts to the built environment (e.g., ruptured gas line) could damage the surrounding environment. However, this type of damage is unlikely based on historical occurrences.

First Responders

A moderate earthquake is unlikely to damage infrastructure such as roads, bridges, or gas/power/water lines. Therefore, there would be negligible impact to first responders in the event of a moderate earthquake in the Region.

Climate Change

There are no measurable impacts of climate change on the impacts or vulnerability of earthquakes in the planning area.

5.10 Dam and Levee Failure

5.10.1 Background

Worldwide interest in dam and levee safety has risen significantly in recent years. Aging infrastructure, new hydrologic information, and population growth in floodplain areas downstream from dams and nearby levees have resulted in an increased emphasis on safety, operation, and maintenance.

There are multiple benefits to dams in that they provide water for drinking, navigation, and agricultural irrigation. Dams also provide hydroelectric power, create lakes for fishing and recreation, and save lives by preventing or reducing floods.

Though dams have benefits, they also can pose a risk to communities if not designed, operated, and maintained properly. In the event of a dam failure, the energy of the water stored behind even a small dam can cause loss of life and great property damage if development exists downstream. If a levee breaks, scores of properties may become submerged in floodwater and residents may become trapped by rapidly rising water. The failure of dams and levees has the potential to place large numbers of people and great amounts of property in harm's way.

There are approximately 92,000 dams in the United States as of 2024, according to FEMA's National Inventory of Dams, most of which are privately owned. Other owners include state and local authorities, public utilities, and federal agencies. Dams provide numerous benefits, such as storage for drinking water, safe navigation channels, and agricultural irrigation. Dams also provide hydroelectric power, create lakes for fishing and recreation, and save lives by preventing or reducing the impacts of flood hazard events.

Though dams have many benefits, they also can pose a risk to communities if not designed, operated, and maintained properly. In the event of a dam failure, the energy of the water stored behind even a small dam can cause loss of life and great property damage if development exists downstream. If a levee breaks, scores of properties may become submerged in floodwater and residents may become trapped by rapidly rising water. The failure of dams and levees has the potential to place large numbers of people and great amounts of property in harm's way. The Davidson-Randolph HMPC downloaded information from the State Dam Safety Program Office of NCDEQ website through NCDEQ, but dams that meet the following requirements are considered "exempt dams" according to the Senate Bill 107 / S.L. 2017-145 (06/29/2017) from the Dam Safety Program Office of NCDEQ regulations:

- Dams constructed by the US Army Corps of Engineers or other US Government Agency; Constructed with financial assistance from the United States Natural Resources
- Conservation Service when that agency designed or approved plans for the dam supervised its construction.
- Licensed by the Federal Energy Regulatory Commission, or for which a license application is pending with the Federal Energy Regulatory Commission; For use in connection with electric generating facilities regulated by the Nuclear Regulatory Commission.
- Under a single private ownership that provides protection only to land or other property under the same ownership and that does not pose a threat to human life or property below the dam.
- That is less than 25 feet in height or that has an impoundment capacity of less than 50 acre-feet, unless the Department determines that failure of the dam could result in loss of human life or significant damage to property below the dam.
- Constructed for and maintains the purpose of providing water for agricultural use, when a person who is licensed as a professional engineer or is employed by the Natural Resources Conservation Service, county, or local Soil and Water Conservation District, and has federal engineering job approval authority under Chapter 89C of the General Statutes designed or approved plans for the dam.

In accordance with FEMA Hazard Mitigation Planning HHPD1-a. and HHPD1-b requirements, each local government collected and shared relevant data such as dam inspection findings, according to the NC State Dam Safety Program and shared Emergency Action Plans (EAPs), inundation maps, and potential impacts on critical infrastructure with local dam owners through public meeting and draft plan reviews. The jurisdictions in the planning area are expected to continue assisting with and continue to maintain compliance with regulatory requirements in cooperation with private, utility, and local government dam owners. Maintaining compliance with regulatory requirements will reduce vulnerabilities and the planning area will continue to explore

mitigation actions that address deficiencies and reduce the long-term vulnerabilities. This includes prioritizing dams that are classified as high hazard dams to rehabilitate dams and reduce the long-term vulnerability of the planning area. Davidson and Randolph County have included mitigation actions to explore funding and dam rehabilitation projects to reduce long-term vulnerability of the planning area to dam failure or dam related hazard events, prioritized by the hazard classification in Table 5-28.

5.10.2 Location and Spatial Extent

The North Carolina Division of Energy, Mineral, and Land Resources provides information on dams, including a hazard potential classification. There are three hazard classifications—high, intermediate, and low—that correspond to qualitative descriptions and quantitative guidelines. Table 5- 44 explains these classifications.

Table 5- 44: North Carolina Dam Hazard Classifications

HAZARD CLASSIFICATION	DESCRIPTION	QUANTITATIVE GUIDELINES
Low	Interruption of road service, low volume roads	Less than 25 vehicles per day
	Economic damage	Less than \$30,000
Intermediate	Damage to highways, Interruption of service	25 to less than 250 vehicles per day
	Economic damage	\$30,000 to less than \$200,000
High	Loss of human life*	Probable loss of 1 or more human lives
	Economic damage	More than \$200,000
		250 or more vehicles per day

Table 5- 45: Summary of dam hazards and conditions in the planning area

Dam Hazard	Davidson							Randolph						Planning Area Total
	Unrated	Fair	Not Rated	Poor	Satisfactory	Unsatisfactory	Total	Unrated	Fair	Not Rated	Satisfactory	Unsatisfactory	Total	
High		12		2		2	16	3	28	1	1	1	34	50
Intermediate		2	1	1	1		5		1		1		2	7
Low	10	21	74	1	3		109	34	34	73	72		213	322
Total	10	35	75	4	4	2	130	37	63	74	74	1	249	379

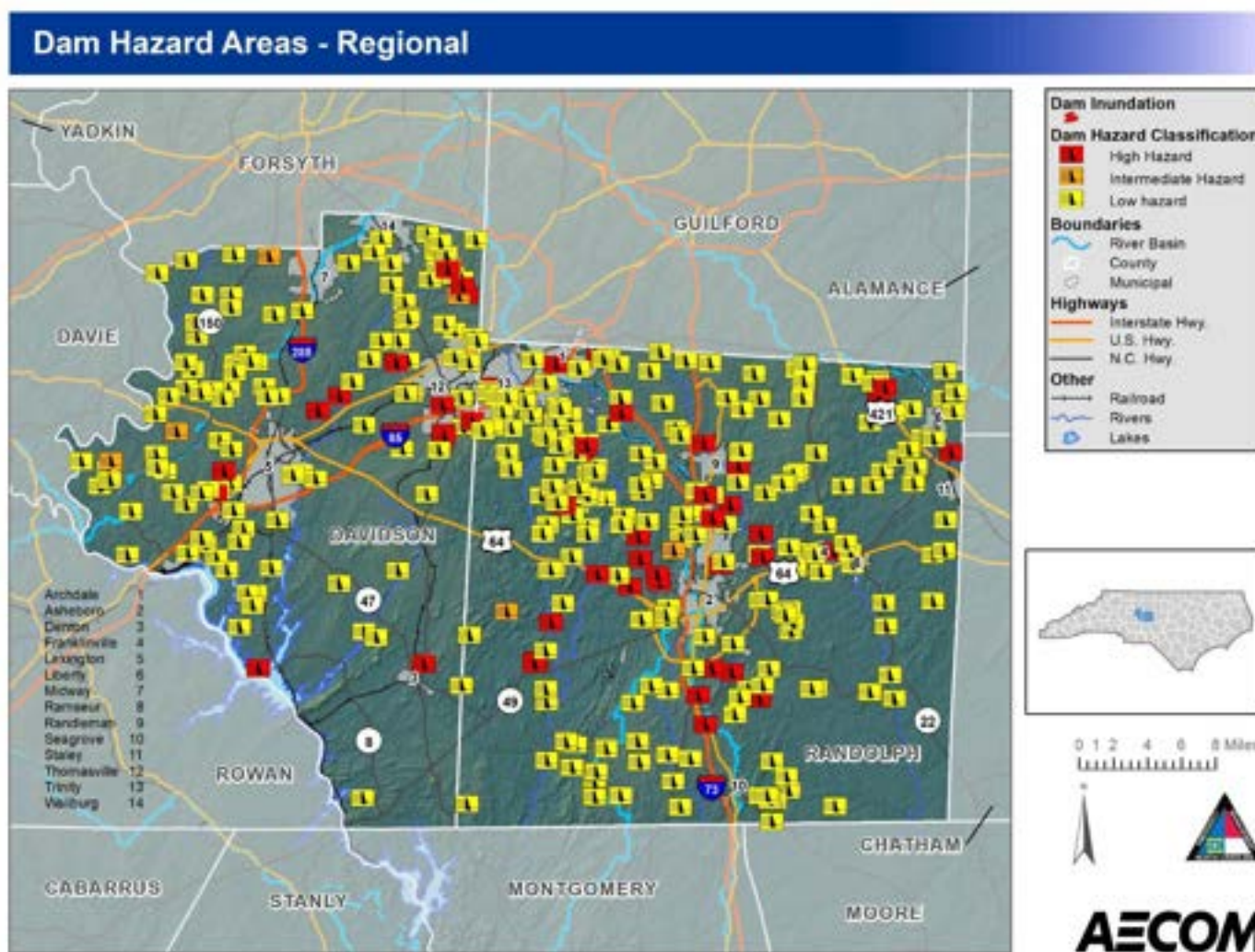


Figure 5- 64: Dam Hazard Areas - Regional

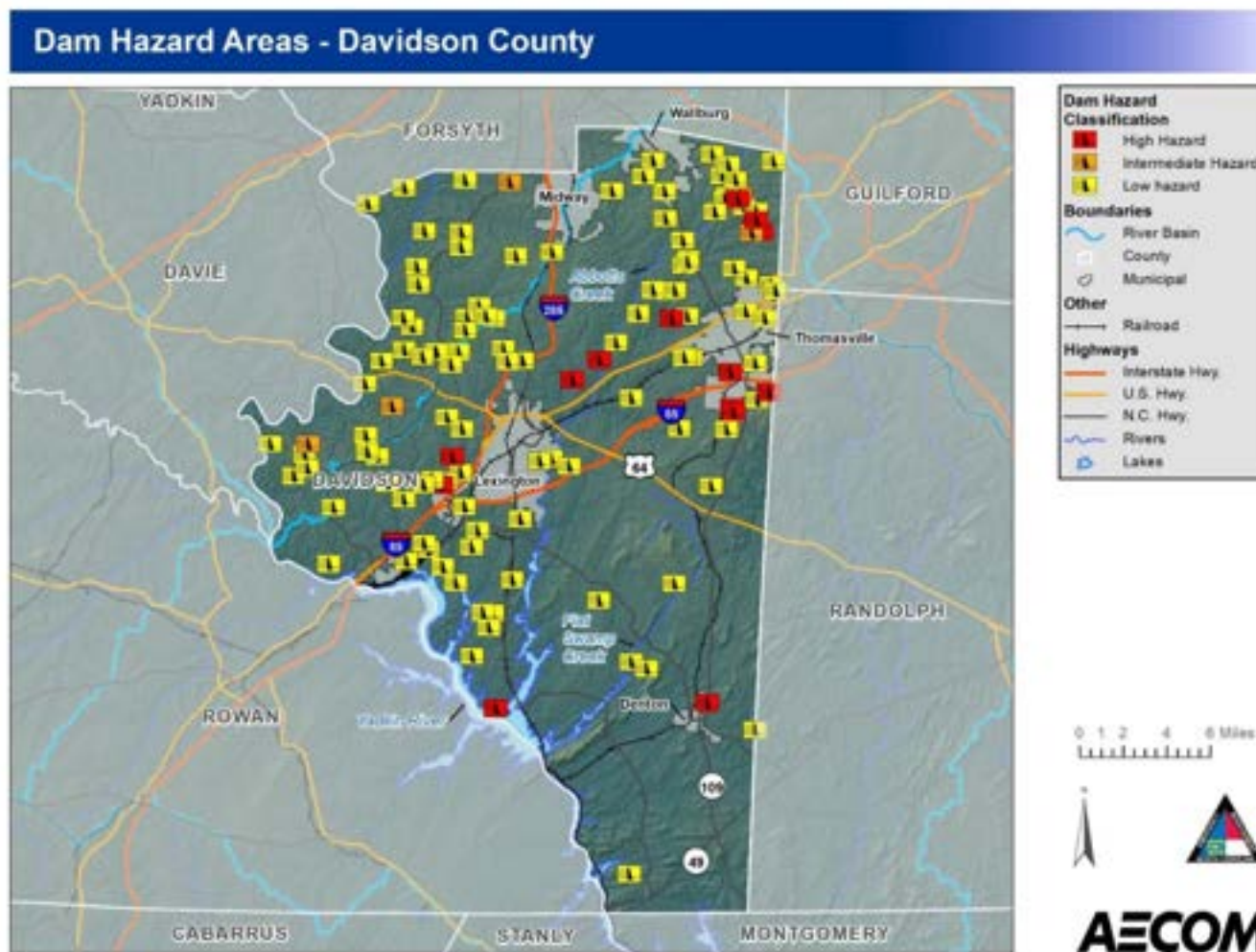


Figure 5- 65: Dam hazard areas - Davidson County

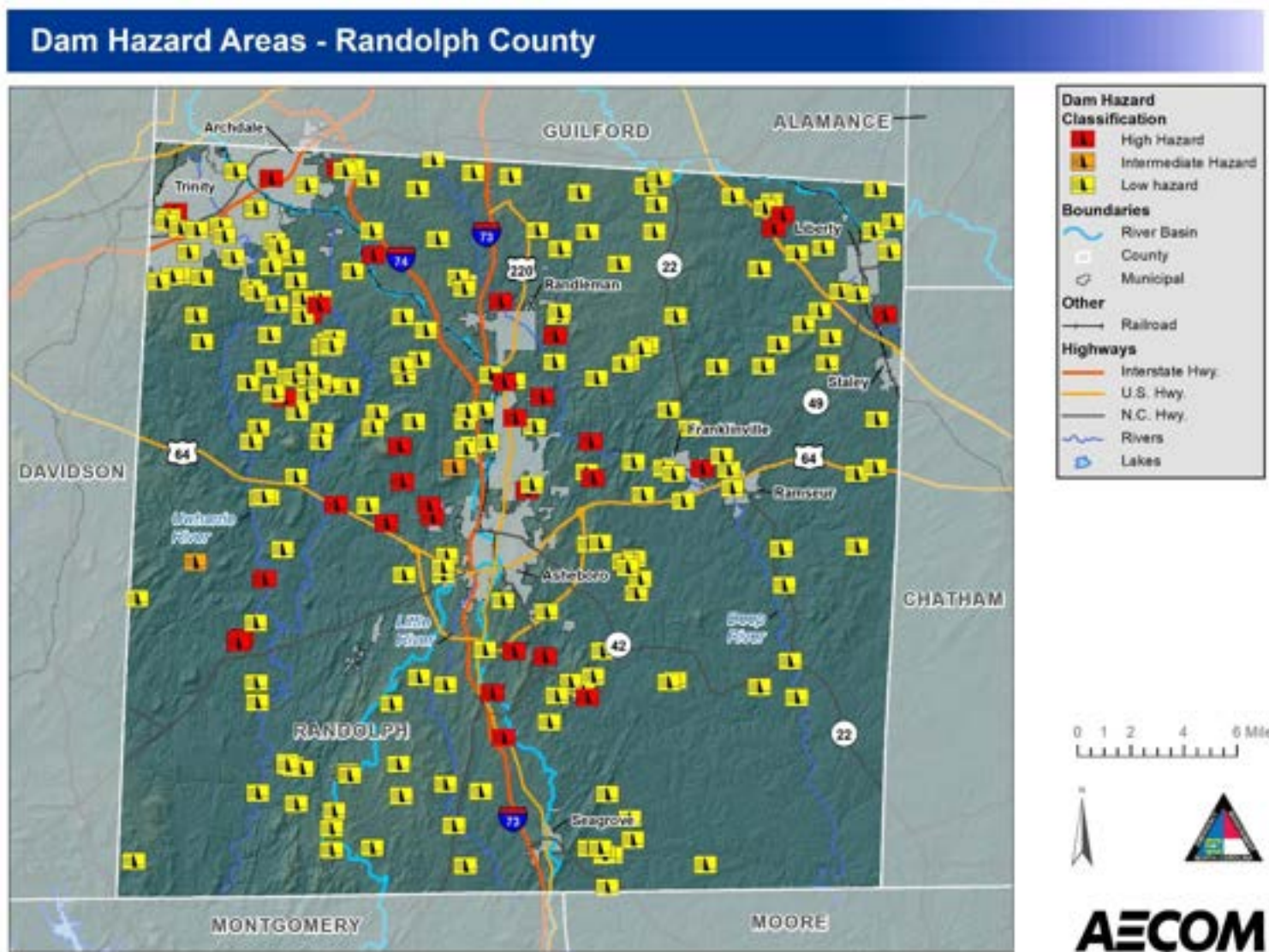


Figure 5- 66: Dam hazard areas - Davidson County

According to the NCDEQ Dam Inventory³², there are 379 dams in the planning area. shows the dam location and the corresponding hazard ranking for each. Of these dams, 50 are classified as high hazard potential. These high hazard dams are listed in Table 5- 46.

Table 5- 46: Dams in the planning area include hazard type, condition, and owner type.

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Sapona Country Club Dam	DAVID-097	Impounding	High	Davidson	Fair	2023-12-13	12/13/2025	Private	Lexington
Jerry Clinard Lake Dam	DAVID-100	Impounding	High	Davidson	Poor	2023-02-16	02/16/2025	Private	Thomasville
Yachtsmans Point Dam	DAVID-112	Impounding	High	Davidson	Fair	2023-02-14	02/14/2023	Private	Lexington
Swansgate Dam #1	DAVID-121	Impounding	High	Davidson	Poor	2023-03-03	03/03/2024	Private	High Point
Cascade Drive Dam	DAVID-122	Impounding	High	Davidson	Fair	2023-12-13	12/13/2025	Private	High Point
Merry Hills Lake Dam	DAVID-006	Impounding	High	Davidson	Fair	2023-02-07	02/07/2025	Private	High Point
Davis Lake Dam #1	DAVID-007	Impounding	High	Davidson	Fair	2023-02-07	02/07/2025	Private	High Point
Glossons Lake Dam #2	DAVID-015	Impounding	High	Davidson	Unsatisfactory	2023-02-14	02/14/2025	Private	Lexington
Lexington Storage Reservoir Dam	DAVID-021	Impounding	High	Davidson	Fair	2023-02-07	02/07/2025	Local Gov	Lexington
Lake Thom-A-Lex Dam	DAVID-022	Impounding	High	Davidson	Fair	2023-02-07	02/07/2025	Local Gov	Lexington
Garner Lake Dam	DAVID-031	Impounding	High	Davidson	Fair	2023-12-13	12/13/2024	Private	Salisbury
Johnson Dam	DAVID-042	Impounding	High	Davidson	Fair	2023-02-07	02/07/2025	Private	High Point
Freeman Lake Dam	DAVID-086	Drained	High	Davidson	Unsatisfactory	2023-02-14	02/14/2025	Private	Thomasville
Tucker Dam	DAVID-087	Impounding	High	Davidson	Fair	2023-02-14	02/14/2025	Private	Thomasville
Cedar Lodge Dam Lower	DAVID-088	Impounding	High	Davidson	Fair	2023-02-14	02/14/2025	Private	Thomasville
Cedar Lodge Dam Upper	DAVID-089	Impounding	High	Davidson	Fair	2023-02-14	02/14/2025	Private	Thomasville

³² NC Department of Environmental Quality [NCDEQ]. (2024). North Carolina Dam Inventory [Dataset]. In NCDEQ Online GIS. NCDEQ. <https://data-ncdenr.opendata.arcgis.com/datasets/ncdenr::north-carolina-dam-inventory/explore?filters=eyJJEQU1fSEFaQVJEX1BPVEVOVEIBTF9ERVNDUKlQVEkiOlsiSGlnaCJdLCJDT05ESVRJT05fQVNTRVNTTUVOVCi6WYjQb29yIiwVW5zYXRpY2ZkY3RvcnkiXX0%3D&location=36.851331%2C-83.033873%2C10.00>

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Colonial Country Club Dam Lower	RANDO-003	Impounding	High	Randolph	Fair	2023-01-26	01/26/2025	Private	Thomasville
King Dam	RANDO-010	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Private	Asheboro
Ramseur Water Supply Dam	RANDO-021	Impounding	High	Randolph	Fair	2023-12-13	12/13/2025	Local Gov	Ramseur
Shaw-Hudson Lake Dam	RANDO-022	Impounding	High	Randolph	Fair	2023-02-28	02/28/2025	Private	Asheboro
Farlow Lake Dam	RANDO-023	Impounding	High	Randolph	Fair	2023-08-24	08/24/2025	Private	Asheboro
Mccrary Lake Dam	RANDO-024	Impounding	High	Randolph	Fair	2023-02-23	02/23/2025	Local Gov	Asheboro
John Bunch Lake Dam	RANDO-025	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Local Gov	Asheboro
Lucas Lake Dam	RANDO-027	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Utility	Asheboro
Asheboro Country Club Lake Dam	RANDO-029	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Private	Asheboro
Beard Lake Dam	RANDO-037	Impounding	High	Randolph	Fair	2023-02-08	02/08/2025	Private	Sophia
		Exempt-Federal Energy Regulatory Commission							
Cox Lake Dam	RANDO-038	(FERC)	High	Randolph	Satisfactory	2011-02-10	09/09/1999	Private	Ramseur
Richardson Lake Dam	RANDO-040	Impounding	High	Randolph	Unsatisfactory	2024-01-03	01/03/2026	Private	Greensboro
Randleman City Lake Dam	RANDO-042	Impounding	High	Randolph	Fair	2023-02-28	02/28/2025	Local Gov	Randleman
Overman Lake Dam	RANDO-052	Impounding	High	Randolph	Fair	2023-12-13	12/13/2025	Private	Liberty
Bouldin Dam	RANDO-053	Impounding	High	Randolph	Fair	2023-01-26	01/26/2025	Private	Archdale
King Lake Dam	RANDO-054	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Private	Archdale
Dodson Lake Dam	RANDO-056	Impounding	High	Randolph	Fair	2022-03-22	03/22/2024	Private	Raleigh
Ingold Dam	RANDO-060	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Private	Sophia
Woodman Dam	RANDO-061	Impounding	High	Randolph	Fair	2023-08-24	08/24/2025	Private	Thomasville
Upper Toms Creek Nursery Dam	RANDO-110	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Private	Denton

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Middle Toms Creek Nursery Dam	RANDO-111	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Private	Denton
Lower Toms Creek Nursery Dam	RANDO-112	Impounding	High	Randolph	Fair	2023-02-02	02/02/2025	Private	Denton
Pinewood Country Club Dam	RANDO-118	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Private	Asheboro
Fox Dam	RANDO-125	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Private	Asheboro
Robert L. Reece Lake Dam	RANDO-185	Impounding	High	Randolph	Fair	2024-01-03	01/03/2026	Local Gov	Asheboro
Holly Ridge Golf Links Dam No. 1	RANDO-190	Impounding	High	Randolph	Fair	2023-02-08	02/08/2025	Private	Sophia
Lower Zoo Dam	RANDO-193	Impounding	High	Randolph	Fair	2023-02-23	02/23/2025	State	Asheboro
Bullins Lake Dam	RANDO-198	Impounding	High	Randolph	Fair	2023-02-23	02/23/2025	Private	Randleman
Randleman Dam	RANDO-200	Impounding	High	Randolph	Fair	2023-01-26	01/26/2025	Private	Randleman
Kyle Siler Dam	RANDO-208	Impounding	High	Randolph	Not Rated	2022-02-23	02/23/2027	Private	Trinity
East Pond Dam	RANDO-210	Impounding	High	Randolph	-	-	-	Private	Plano
Bruce Hughes Dam	RANDO-222	Impounding	High	Randolph	Fair	2023-02-08	02/08/2028	Private	Sophia
Henley Lake Dam	RANDO-238	Impounding	High	Randolph	-	-	-	Private	Randleman
South Main Street Dam	RANDO-246	Impounding	High	Randolph	-	-	-	Private	Asheboro
Miller Creek Dam	DAVID-116	Exempt	Intermediate	Davidson	Not Rated	2021-02-10	02/10/2026	Private	Winston-Salem
Davis Lake Dam #2	DAVID-008	Exempt	Intermediate	Davidson	Satisfactory	2020-12-08	12/08/2023	Private	High Point
Lingle Lake Dam	DAVID-019	Impounding	Intermediate	Davidson	Fair	2023-02-07	02/07/2026	Private	Lexington
Willow Creek Dam #2	DAVID-057	Impounding	Intermediate	Davidson	Fair	2022-01-11	01/11/2025	Private	High Point
Lazy G Ranch Dam #2	DAVID-080	Impounding	Intermediate	Davidson	Poor	2023-02-07	02/07/2026	Private	Roswell
Schoonbeck Lake Dam	RANDO-002	Impounding	Intermediate	Randolph	Fair	2023-02-23	02/23/2026	Private	Boynton Beach
Northmont Estates Dam	RANDO-199	Impounding	Intermediate	Randolph	Satisfactory	2022-01-12	01/12/2025	Private	Asheboro
Stokes Lake Dam	DAVID-098	Exempt	Low	Davidson	Not Rated	2015-01-06	01/06/2020	Private	Winston-Salem
Mickey Lake Dam	DAVID-099	Exempt	Low	Davidson	Not Rated	2014-12-04	12/04/2019	Private	Winston-Salem

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Scotten Lake Dam	DAVID-101	Exempt	Low	Davidson	Not Rated	2015-01-07	01/07/2020	Private	Thomasville
Overby Lake Dam	DAVID-102	Exempt	Low	Davidson	Not Rated	2015-01-07	01/07/2020	Private	Winston-Salem
Johnston Lake Dam	DAVID-103	Exempt	Low	Davidson	Not Rated	2015-01-07	01/07/2020	Private	Winston-Salem
Hanes Lake Dam	DAVID-104	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Clemmons
Craver Lake Dam	DAVID-105	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Clemmons
Log House Road Lake Dam	DAVID-106	Reclaimed	Low	Davidson	Not Rated	2019-12-05	12/05/2999		
Koontz Lake Dam	DAVID-107	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Lexington
Walser's Carp Lake Dam	DAVID-108	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Lexington
Martin Lake Dam	DAVID-109	Breached	Low	Davidson	Poor	2023-02-07	02/07/2025		
Hidden Springs Drive Dam	DAVID-110	Exempt	Low	Davidson	Not Rated	2015-01-13	01/13/2020	Private	Lexington
Hartley Farm Dam	DAVID-111	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Welcome
I-85 Industrial Park Storm Water Management (SWM) Pond Dam	DAVID-113	Impounding	Low	Davidson	Not Rated	2021-02-10	02/10/2026	Local Gov	Lexington
Egger Wood SWM Pond Dam	DAVID-114	Exempt	Low	Davidson	Not Rated	2021-02-10	02/10/2026	Private	Linwood
Cain Farm Pond Dam	DAVID-115	Exempt	Low	Davidson	Not Rated	2021-02-10	02/10/2026	Private	Thomasville
Hedrick Dam	DAVID-117	Breached	Low	Davidson	Not Rated	2021-02-10	02/10/2026		
Old Greensboro Road Dam	DAVID-118	Exempt	Low	Davidson	Fair	2024-01-04	01/04/2029	Private	High Point
South Road Holdings Dam	DAVID-119	Impounding	Low	Davidson	-	-	-	Private	High Point
Beallgray Farm Pond Dam	DAVID-120	Impounding	Low	Davidson	-	-	-	Private	Linwood
Salem Glen Pond Dam	DAVID-123	Impounding	Low	Davidson	-	-	-	Private	Clemmons
Heath Pond Dam	DAVID-124	Impounding	Low	Davidson	-	-	-	Private	Lexington

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Jane Kearns Dam	DAVID-125	Impounding	Low	Davidson	-	-	-	Private	Southmont
Bodenheimer Pond Dam	DAVID-126	Impounding	Low	Davidson	-	-	-	Private	Thomasville
Kirsch Pond Dam #1	DAVID-127	Impounding	Low	Davidson	-	-	-	Private	Thomasville
Kirsch Pond Dam #2	DAVID-128	Impounding	Low	Davidson	-	-	-	Private	Thomasville
Hedgecock Lake #3 Dam	DAVID-129	Impounding	Low	Davidson	-	-	-	Private	Kernersville
Phillip Eggers Dam	DAVID-130	Impounding	Low	Davidson	-	-	-	Private	Lexington
Davidson Water Inc Dam	DAVID-001	Exempt	Low	Davidson	Not Rated	2020-11-03	11/03/2025	Utility	Welcome
Thompson Lake Dam	DAVID-002	Exempt	Low	Davidson	Not Rated	2014-09-30	09/30/2019	Private	Lexington
Staley Lake Dam	DAVID-003	Exempt	Low	Davidson	Fair	2014-02-25	02/25/2019	Private	Linwood
Salvation Army Pond Dam	DAVID-004	Exempt	Low	Davidson	Fair	2014-08-26	08/26/2019	Private	Denton
Reed Dam	DAVID-005	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Raleigh
Thomasville P O Club Dam	DAVID-009	Exempt	Low	Davidson	Not Rated	2020-11-03	11/03/2025	Private	Thomasville
Liberty Drive Lake Dam	DAVID-010	Breached	Low	Davidson	Fair	2020-11-18	12/18/2024		
Link-Taylor Corporation Dam	DAVID-011	Exempt	Low	Davidson	Not Rated	2014-09-10	09/10/2019	Private	Asheboro
Smith Lake Dam	DAVID-012	Exempt	Low	Davidson	Not Rated	2019-11-19	11/19/2024	Private	Lexington
Hargrave Pond Dam	DAVID-013	Exempt	Low	Davidson	Fair	2014-02-04	02/04/2019	Private	Lexington
Glosson Lake Dam #1	DAVID-014	Exempt	Low	Davidson	Not Rated	2019-11-13	11/13/2024	Private	Winston-Salem
Glossen Lake Dam #3	DAVID-016	Exempt	Low	Davidson	Not Rated	2019-11-13	11/13/2024	Private	Winston-Salem
Little Dam	DAVID-017	Exempt	Low	Davidson	Fair	2014-02-04	02/04/2019	Private	Linwood
Carter Pond Dam	DAVID-018	Exempt	Low	Davidson	Fair	2014-02-04	02/04/2019	Private	Lexington
Finch Park Lake Dam	DAVID-020	Exempt	Low	Davidson	Fair	2014-02-25	02/25/2019	State	Lexington
Metcalf Dam	DAVID-023	Exempt	Low	Davidson	Not Rated	2024-01-04	01/04/2029	Private	Winston-Salem
Snyder Lake Dam	DAVID-024	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Winston-Salem

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Grimes Lake Dam	DAVID-025	Exempt	Low	Davidson	Fair	2023-12-13	12/13/2028	Private	Lexington
Clodfelter Lake Dam	DAVID-026	Exempt	Low	Davidson	Not Rated	2019-11-13	11/13/2024	Private	Lexington
Cobles Reservoir Dam	DAVID-027	Impounding	Low	Davidson	Not Rated	2019-11-13	11/13/2024	Private	St. Louis
Yokely Lake Dam	DAVID-028	Exempt	Low	Davidson	Not Rated	2021-12-16	12/16/2026	Private	Greensboro
Hilton Lake Dam	DAVID-029	Exempt	Low	Davidson	Not Rated	2015-01-07	01/07/2020	Private	Thomasville
Willmore Lake Dam	DAVID-030	Exempt	Low	Davidson	Fair	2014-08-26	08/26/2019	Private	Lexington
Perryman Dam	DAVID-032	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Lexington
Bates Dam	DAVID-033	Exempt	Low	Davidson	Not Rated	2021-12-09	12/09/2026	Private	Lexington
Hege Dam	DAVID-034	Exempt	Low	Davidson	Not Rated	2021-12-01	12/01/2026	Private	High Point
Fishel-Hege Dam	DAVID-035	Exempt	Low	Davidson	Not Rated	2021-12-09	12/09/2026	Private	Lexington
Jones Dam	DAVID-036	Exempt	Low	Davidson	Not Rated	2020-11-03	11/03/2025	Local Gov	Lexington
Lopp Lake Dam	DAVID-037	Exempt	Low	Davidson	Not Rated	2015-01-27	01/27/2020	Private	Lewisville
Nolan Smith Dam	DAVID-038	Exempt	Low	Davidson	Not Rated	2020-11-24	11/24/2025	Private	Lexington
Brinkley Dam	DAVID-039	Breached	Low	Davidson	Fair	2014-09-03	09/03/2019		
Essick Dam	DAVID-040	Exempt	Low	Davidson	Fair	2023-12-13	12/13/2028	Private	Kernersville
Berrier Lake Dam	DAVID-041	Exempt	Low	Davidson	Not Rated	2015-01-06	01/06/2020	Private	Lexington
Bingham Dam	DAVID-043	Exempt	Low	Davidson	Not Rated	2020-11-10	11/10/2025	Private	Denton
David Berrier Dam	DAVID-044	Exempt	Low	Davidson	Not Rated	2020-11-04	11/04/2025	Private	Lexington
Ed Hinkle Dam	DAVID-045	Exempt	Low	Davidson	Not Rated	2020-11-10	11/10/2025	Private	Lexington
Dennis Shoaf Dam	DAVID-046	Exempt	Low	Davidson	Satisfactory	2014-03-12	03/12/2019	Private	Lexington
Byerly Sink Pond Dam	DAVID-047	Exempt	Low	Davidson	Satisfactory	2014-03-12	03/12/2019	Private	Clemmons
Helmstetler Dam	DAVID-048	Exempt	Low	Davidson	Fair	2023-12-13	12/13/2028	Private	Lexington
Randall Hill Dam	DAVID-049	Exempt	Low	Davidson	Not Rated	2020-11-04	11/04/2025	Private	Lexington
Robert Walser Dam	DAVID-050	Exempt	Low	Davidson	Fair	2014-09-03	09/03/2019	Private	Lexington
Steve Myers Pond Dam	DAVID-051	Impounding	Low	Davidson	Fair	2022-01-25	01/25/2027	Private	Lexington
Thomasville Quarry Dam	DAVID-052	Exempt	Low	Davidson	Not Rated	2015-02-25	02/25/2020	Private	Raleigh
Robert Shoaf Lake Dam	DAVID-053	Exempt	Low	Davidson	Not Rated	2014-12-04	12/05/2019	Private	Lexington
Hedgecock Lake #1 Dam	DAVID-054	Exempt	Low	Davidson	Not Rated	2024-01-03	01/03/2029	Private	High Point
R.L. Davis Lake Dam	DAVID-055	Exempt	Low	Davidson	Not Rated	2020-11-04	11/04/2025	Private	Greensboro
Willow Creek Dam #1	DAVID-056	Exempt	Low	Davidson	Not Rated	2021-12-16	12/16/2026	Private	Charlotte

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Emerywood Dam #1	DAVID-058	Exempt	Low	Davidson	Fair	2014-02-18	02/18/2019	Private	High Point
Emerywood Dam #2	DAVID-059	Exempt	Low	Davidson	Fair	2014-02-18	02/18/2019	Private	High Point
Bodenheimer Lake Dam	DAVID-060	Exempt	Low	Davidson	Not Rated	2021-11-30	11/30/2026	Private	High Point
Hedgecock Lake Dam #2	DAVID-061	Exempt	Low	Davidson	Fair	2014-02-25	02/25/2019	Private	High Point
Lower Coggins Lake Dam	DAVID-062	Breached	Low	Davidson	Satisfactory	2020-12-02	12/02/2021		
Bowers Lake Dam	DAVID-063	Exempt	Low	Davidson	Fair	2014-02-18	02/18/2019	Private	Thomasville
Perry Walters Dam	DAVID-064	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Lexington
Gary Craven Lake Dam	DAVID-065	Exempt	Low	Davidson	Not Rated	2015-01-07	01/07/2020	Private	Thomasville
Hubert Hedgecock Lake Dam	DAVID-066	Exempt	Low	Davidson	Fair	2014-02-18	02/18/2019	Private	High Point
Clinton Ray Wood Dam	DAVID-067	Exempt	Low	Davidson	Not Rated	2020-11-04	11/04/2025	Private	Lexington
Joe Bales Dam	DAVID-068	Reclaimed	Low	Davidson	Not Rated	2023-02-07	02/07/2030		
Johnny Beck Dam	DAVID-069	Exempt	Low	Davidson	Not Rated	2024-01-04	01/04/2029	Private	Lexington
George Smith Waste Storage Pond Dam	DAVID-070	Exempt	Low	Davidson	Not Rated	2014-09-10	09/10/2019	Private	Lexington
Van Parker Dam	DAVID-071	Exempt	Low	Davidson	Not Rated	2024-01-04	01/04/2029	Private	Winston-Salem
Perry Walters Lake Dam #2	DAVID-072	Exempt	Low	Davidson	Not Rated	2014-12-09	12/09/2019	Private	Lexington
Steve Jones Dam	DAVID-073	Exempt	Low	Davidson	Not Rated	2024-01-04	01/04/2029	Private	Thomasville
Van Parker Dam #2	DAVID-074	Exempt	Low	Davidson	Fair	2014-02-18	02/18/2019	Private	Burlington
Bill Millis Dam	DAVID-075	Exempt	Low	Davidson	Not Rated	2020-11-05	11/05/2025	Private	High Point
Gilmer Phillips Dam	DAVID-076	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Lexington
Gentry Dam	DAVID-077	Exempt	Low	Davidson	Not Rated	2021-11-30	11/30/2026	Private	Thomasville
Williams Lake Dam	DAVID-078	Exempt	Low	Davidson	Not Rated	2024-01-05	01/05/2029	Private	Thomasville
Lazy G Ranch Dam #1	DAVID-079	Exempt	Low	Davidson	Not Rated	2023-12-13	12/13/2028	Private	Lexington
Charles Lanier Dam	DAVID-081	Exempt	Low	Davidson	Not Rated	2015-01-06	01/06/2020	Private	Lexington
Price Dam	DAVID-082	Exempt	Low	Davidson	Not Rated	2015-01-06	01/06/2020	Private	Lexington
Beyeler Lake Dam	DAVID-083	Exempt	Low	Davidson	Not Rated	2015-01-27	01/27/2020	Private	Denton
Jaycees Lake Dam	DAVID-084	Exempt	Low	Davidson	Not Rated	2014-12-18	12/18/2019	Private	Thomasville

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Lawing Drive Lake Dam	DAVID-085	Exempt	Low	Davidson	Not Rated	2014-12-18	12/18/2019	Private	Thomasville
Richey Lake Dam	DAVID-090	Exempt	Low	Davidson	Not Rated	2015-01-06	01/06/2020	Private	Winston-Salem
Badgett Lake Dam	DAVID-091	Exempt	Low	Davidson	Not Rated	2015-02-12	02/12/2020	Private	Linwood
Rothrock Lake Dam	DAVID-092	Exempt	Low	Davidson	Not Rated	2014-12-18	12/18/2019	Private	Thomasville
Alexander Lake Dam	DAVID-093	Exempt	Low	Davidson	Not Rated	2014-12-18	12/18/2019	Private	Greensboro
Riverview Pond Dam	DAVID-094	Exempt	Low	Davidson	Not Rated	2015-01-13	01/13/2020	Private	Lexington
Coltrane Lake Dam	DAVID-095	Exempt	Low	Davidson	Not Rated	2015-01-13	01/13/2020	Private	Lexington
Leonard Lake Dam	DAVID-096	Exempt	Low	Davidson	Not Rated	2015-01-13	01/13/2020	Private	Lexington
Hedrick Lake Dam	RANDO-001	Exempt	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Lexington
Colonial Country Club Dam Middle	RANDO-004	Impounding	Low	Randolph	Fair	2023-01-26	01/26/2025	Private	Thomasville
Colonial Country Club Dam Upper	RANDO-005	Impounding	Low	Randolph	Satisfactory	2018-11-27	11/27/2023	Private	Thomasville
Thomas Lake Dam	RANDO-006	Impounding	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Cary
Wheatmore Farm Lake Dam	RANDO-007	Exempt	Low	Randolph	Fair	2023-01-26	01/26/2028	Private	Thomasville
Bob Cat Acres Lake Dam	RANDO-008	Breached	Low	Randolph	Not Rated	2021-02-03	02/03/2022		
Spring Lake Dam	RANDO-009	Exempt	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Asheboro
Hurley Lake Dam	RANDO-011	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Greensboro
Auman Lake Dam	RANDO-012	Impounding	Low	Randolph	Not Rated	2020-04-08	04/08/2025	Private	Asheboro
Black Lake Dam	RANDO-013	Exempt	Low	Randolph	Satisfactory	2014-10-29	10/29/2024	Private	Burlington
Slack Lake Dam	RANDO-014	Exempt	Low	Randolph	Satisfactory	2016-03-03	03/03/2021	Private	Asheboro
Wimbish Lake Dam	RANDO-015	Exempt	Low	Randolph	Satisfactory	2014-10-29	10/29/2019	Private	Charlotte
Lambert Mill Lake Dam	RANDO-016	Exempt	Low	Randolph	Not Rated	2020-11-10	11/10/2025	Private	Roanoke
Goss Lake Dam	RANDO-017	Exempt	Low	Randolph	Not Rated	2021-11-23	11/23/2026	Private	Seagrove
Carter Lake Dam	RANDO-018	Exempt	Low	Randolph	Not Rated	2020-11-17	11/17/2025	Private	Asheboro
Randolph Mill Lake Dam	RANDO-019	Exempt	Low	Randolph	Not Rated	2022-01-06	01/06/2027	Private	Asheboro
Ramseur Lake Dam	RANDO-020	Exempt	Low	Randolph	Not Rated	2021-11-23	11/23/2026	Private	Durham
Cedarwood Lake Dam	RANDO-026	Exempt	Low	Randolph	Fair	2015-11-03	11/03/2020	Private	Asheboro
Lake Wood Dam	RANDO-028	Impounding	Low	Randolph	Fair	2023-02-16	02/16/2028	Private	Asheboro

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Wood Lake Dam Lower	RANDO-030	Exempt	Low	Randolph	Not Rated	2022-01-05	01/05/2027	Private	Asheboro
Wood Lake Dam Middle	RANDO-031	Exempt	Low	Randolph	Not Rated	2022-01-05	01/05/2027	Private	Asheboro
Kivett Lake Dam	RANDO-032	Impounding	Low	Randolph	Fair	2023-03-15	03/15/2028	Private	Sophia
White Lake Dam	RANDO-033	Impounding	Low	Randolph	Fair	2023-02-23	02/23/2028	Private	Asheboro
Thompson-Arthur Lake Dam	RANDO-034	Impounding	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Sophia
Wesleyan Youth Camp Lake Dam	RANDO-035	Exempt	Low	Randolph	Satisfactory	2014-11-19	11/19/2019	Private	Sophia
Camp Keyauwee Lake Dam	RANDO-036	Exempt	Low	Randolph	Not Rated	2022-01-05	01/05/2027	Private	Colfax
Hamlett Lake Dam	RANDO-039	Impounding	Low	Randolph	Fair	2023-02-16	02/16/2028	Private	Asheboro
Worthville Lake Dam	RANDO-041	Exempt	Low	Randolph	Not Rated	2021-12-02	12/02/2026	Private	Asheboro
Camp Nawaka Dam #2	RANDO-043	Exempt	Low	Randolph	Satisfactory	2014-02-06	02/06/2024	Private	Randleman
Camp Nawaka Dam #1	RANDO-044	Exempt	Low	Randolph	Satisfactory	2014-02-06	02/06/2024	Private	Randleman
Davis Lake Dam	RANDO-045	Impounding	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Randleman
Lineberry Lake Dam	RANDO-046	Exempt	Low	Randolph	Not Rated	2023-12-13	12/13/2028	Private	Franklinville
Walker Shoe Company Lake Dam	RANDO-047	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Asheboro
Peavine Lake Dam	RANDO-048	Exempt	Low	Randolph	Satisfactory	2014-10-21	10/21/2019	Private	Siler City
Kennedy Lake Dam	RANDO-049	Impounding	Low	Randolph	Fair	2023-02-23	02/23/2028	Private	Liberty
Patterson Lake Dam	RANDO-050	Impounding	Low	Randolph	Fair	2023-02-21	02/21/2028	Private	Staley
Sizemore Lake Dam	RANDO-051	Exempt	Low	Randolph	Satisfactory	2014-10-23	10/23/2019	Private	Greensboro
Hedgecock Lake Dam	RANDO-055	Breached	Low	Randolph	Satisfactory	2014-11-06	11/06/2019	-	-
Jones Dam	RANDO-057	Exempt	Low	Randolph	Not Rated	2023-12-13	12/13/2028	Private	Climax
Edmonds Dam	RANDO-058	Exempt	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Randleman
Hylton Lake Dam	RANDO-059	Exempt	Low	Randolph	Satisfactory	2014-11-18	11/18/2019	Private	Randleman
East Hamlett Lake Dam	RANDO-062	Drained	Low	Randolph	Not Rated	2019-11-21	11/21/2024	Private	Randleman
West Buttke Lagoon Dam	RANDO-063	Exempt	Low	Randolph	Not Rated	2021-12-15	12/15/2026	Private	Randleman
East Buttke Lake Dam	RANDO-064	Impounding	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Randleman
Underwood Dam	RANDO-065	Exempt	Low	Randolph	Satisfactory	2014-12-30	12/30/2019	Private	Trinity
Lamb Dam	RANDO-066	Exempt	Low	Randolph	Satisfactory	2015-11-03	11/03/2020	Private	Asheboro

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Frye Dam	RANDO-067	Exempt	Low	Randolph	Satisfactory	2014-11-18	11/18/2019	Private	Asheboro
Yates Dam	RANDO-068	Exempt	Low	Randolph	Satisfactory	2014-11-12	11/12/2019	Private	Sophia
Butler Dam	RANDO-069	Exempt	Low	Randolph	Satisfactory	2014-11-19	11/19/2019	Private	Sophia
Harris Dam	RANDO-070	Exempt	Low	Randolph	Satisfactory	2014-11-19	11/19/2019	Private	Trinity
Schmitt Dam	RANDO-071	Exempt	Low	Randolph	Satisfactory	2014-11-13	11/13/2019	Private	Farmington
Caraway Lake Dam #1	RANDO-072	Exempt	Low	Randolph	Satisfactory	2014-02-04	02/04/2019	Private	Asheboro
Caraway Lake Dam #2	RANDO-073	Impounding	Low	Randolph	Fair	2023-02-23	02/23/2028	Private	Asheboro
Hillsville Dam	RANDO-074	Breached	Low	Randolph	Satisfactory	2014-11-19	11/18/9999	-	-
Williams Dam	RANDO-075	Exempt	Low	Randolph	Satisfactory	2014-11-12	11/12/2019	Private	Trinity
Oakwinds Lake Dam	RANDO-076	Exempt	Low	Randolph	Satisfactory	2014-11-12	11/12/2019	Private	Sophia
Goodyear Dam	RANDO-077	Exempt	Low	Randolph	Satisfactory	2014-11-13	11/13/2019	Private	Asheboro
Smith Lagoon Dam	RANDO-078	Exempt	Low	Randolph	Satisfactory	2014-10-23	10/23/2019	Private	Liberty
Deaton Dam	RANDO-079	Exempt	Low	Randolph	Satisfactory	2016-02-23	02/23/2021	Private	Trinity
Fletcher Dam	RANDO-080	Exempt	Low	Randolph	Satisfactory	2016-02-23	02/23/2021	Private	Trinity
Green Gate Lake Dam	RANDO-081	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Trinity
Leath Dam #2	RANDO-082	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	High Point
Bouldin Dam	RANDO-083	Exempt	Low	Randolph	Satisfactory	2016-02-23	02/23/2021	Private	High Point
Floyd Dam	RANDO-084	Exempt	Low	Randolph	Not Rated	2020-11-12	11/23/2016	Private	Trinity
James Lambeth Dam	RANDO-085	Exempt	Low	Randolph	Satisfactory	2016-02-23	02/23/2021	Private	Trinity
Double T Lake Dam	RANDO-086	Exempt	Low	Randolph	Satisfactory	2016-02-23	02/23/2021	Private	Trinity
Lewis Dam #1	RANDO-087	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Archdale
Lewis Dam #2	RANDO-088	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Colfax
Hidden Acres Dam	RANDO-089	Exempt	Low	Randolph	Satisfactory	2015-12-10	12/10/2020	Private	Asheboro
Jackson Dam	RANDO-090	Exempt	Low	Randolph	Satisfactory	2016-02-11	02/11/2021	Private	Trinity
Snider Estate Dam	RANDO-091	Exempt	Low	Randolph	Satisfactory	2015-12-10	12/10/2020	Private	High Point
Mountain View Farms Dam	RANDO-092	Exempt	Low	Randolph	Satisfactory	2014-01-30	01/30/2019	Private	Archdale
Alman Dam	RANDO-093	Exempt	Low	Randolph	Satisfactory	2015-12-15	12/15/2020	Private	Jamestown
Hutchens Dam	RANDO-094	Breached	Low	Randolph	Satisfactory	2014-12-22	12/22/2090	-	-
Lake Silver Dam	RANDO-095	Impounding	Low	Randolph	Fair	2024-01-03	01/03/2029	Private	Trinity
Evergreen Acres Dam	RANDO-096	Exempt	Low	Randolph	Satisfactory	2015-11-19	11/19/2020	Private	Trinity
Collett Dam	RANDO-097	Exempt	Low	Randolph	Satisfactory	2014-11-06	11/06/2019	Private	Addison

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Darr Dam	RANDO-098	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Trinity
Alfred Darr Dam	RANDO-099	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Trinity
Burge Dam	RANDO-100	Breached	Low	Randolph	Satisfactory	2014-11-06	11/06/9999	-	-
Mary King Dam	RANDO-101	Exempt	Low	Randolph	Satisfactory	2014-11-06	11/06/2019	Private	Archdale
Kinley Dam	RANDO-102	Exempt	Low	Randolph	Satisfactory	2015-11-19	11/19/2020	Private	Archdale
Joe Lambeth Dam	RANDO-103	Breached	Low	Randolph	Fair	2021-02-03	02/03/2022	-	-
Bean Dam	RANDO-104	Exempt	Low	Randolph	Satisfactory	2015-11-12	11/12/2020	Private	Archdale
Teal Dam	RANDO-105	Exempt	Low	Randolph	Satisfactory	2015-11-12	11/12/2020	Private	Asheboro
Newton Dam	RANDO-106	Exempt	Low	Randolph	Satisfactory	2014-01-30	01/30/2019	Private	Trinity
Oxford Dam	RANDO-107	Exempt	Low	Randolph	Satisfactory	2016-02-11	02/11/2021	Private	Asheboro
Armstrong Dam	RANDO-108	Exempt	Low	Randolph	Satisfactory	2016-02-11	02/11/2021	Private	Denton
Burroughs Dam	RANDO-109	Exempt	Low	Randolph	Not Rated	2020-11-10	11/10/2025	Private	High Point
Loflin Dam	RANDO-113	Exempt	Low	Randolph	Satisfactory	2014-12-15	12/15/2019	Private	Asheboro
Parker Dam	RANDO-114	Exempt	Low	Randolph	Satisfactory	2016-02-03	02/03/2021	Private	Asheboro
Lake Forest Dam	RANDO-115	Impounding	Low	Randolph	Not Rated	2023-02-23	02/23/2028	Private	Asheboro
Callicutt Dam	RANDO-116	Exempt	Low	Randolph	Not Rated	2020-11-10	11/10/2025	Private	Asheboro
Hammond Dam	RANDO-117	Impounding	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Asheboro
Trogdon Dam	RANDO-119	Exempt	Low	Randolph	Satisfactory	2015-11-12	11/12/2020	Private	Hollywood
Garner Dam	RANDO-120	Exempt	Low	Randolph	Satisfactory	2016-03-03	03/03/2021	Private	Asheboro
Grant Dam	RANDO-121	Impounding	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Asheboro
Thornburg Dam #1	RANDO-122	Impounding	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	High Point
Thornburg Dam #2	RANDO-123	Exempt	Low	Randolph	Satisfactory	2016-02-03	02/03/2021	Private	High Point
Walker Dam	RANDO-124	Exempt	Low	Randolph	Satisfactory	2015-12-10	12/10/2020	Private	Trinity
Shamrock Farm Dam	RANDO-126	Exempt	Low	Randolph	Not Rated	2020-11-12	01/12/2017	Private	Sophia
Hammond Dam	RANDO-127	Exempt	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Soldotna
Mitchell Dam	RANDO-128	Exempt	Low	Randolph	Satisfactory	2016-02-11	02/11/2021	Private	Denton
Culler Dam	RANDO-129	Impounding	Low	Randolph	Fair	2023-01-26	01/26/2028	Private	High Point
Neely Dam	RANDO-130	Exempt	Low	Randolph	Satisfactory	2015-12-15	12/15/2020	Private	Asheboro
Burkhead Dam	RANDO-131	Exempt	Low	Randolph	Satisfactory	2014-12-22	12/22/2019	Private	Asheboro
Scott Dam	RANDO-132	Impounding	Low	Randolph	Fair	2023-02-28	02/28/2028	Private	Asheboro
Craven Dam	RANDO-133	Exempt	Low	Randolph	Satisfactory	2014-11-24	11/24/2019	Private	Asheboro
Luck Dam	RANDO-134	Exempt	Low	Randolph	Not Rated	2020-11-05	11/05/2025	Private	Statesville

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Harvell Dam	RANDO-135	Exempt	Low	Randolph	Not Rated	2020-11-05	11/05/2025	Private	Cedar Falls
Randolph Mill Earth Dam	RANDO-136	Exempt	Low	Randolph	Not Rated	2023-12-13	12/13/2028	Private	Asheboro
Hare Dam	RANDO-137	Exempt	Low	Randolph	Not Rated	2020-11-05	11/05/2025	Private	Asheboro
Hughes Dam	RANDO-138	Reclaimed	Low	Randolph	Not Rated	2019-11-21	11/21/2999	-	-
Graham Dam	RANDO-139	Exempt	Low	Randolph	Not Rated	2022-01-06	01/06/2027	Private	Huntersville
Powell Dam	RANDO-140	Exempt	Low	Randolph	Not Rated	2020-11-17	11/17/2025	Private	Asheboro
Brown Dam	RANDO-141	Exempt	Low	Randolph	Satisfactory	2014-12-22	12/22/2019	Private	Asheboro
Draugh Dam	RANDO-142	Exempt	Low	Randolph	Satisfactory	2015-12-08	12/08/2020	Private	Asheboro
Dawson Dam	RANDO-143	Exempt	Low	Randolph	Fair	2015-11-12	11/12/2020	Private	Asheboro
Bowman Dam	RANDO-144	Exempt	Low	Randolph	Satisfactory	2018-11-29	11/29/2023	Private	Climax
Hancock Dam	RANDO-145	Impounding	Low	Randolph	Fair	2023-12-13	12/13/2028	Private	Franklinville
Hall Dam	RANDO-146	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Franklinville
Pugh Dam	RANDO-147	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	High Point
Hollady Dam	RANDO-148	Exempt	Low	Randolph	Not Rated	2020-11-05	11/05/2025	Private	Ramseur
Liles Dam	RANDO-149	Exempt	Low	Randolph	Not Rated	2020-11-17	11/17/2025	Private	Ramseur
Allen Dam	RANDO-150	Exempt	Low	Randolph	Not Rated	2020-11-17	11/17/2025	Private	Staley
Earwood Dam	RANDO-151	Exempt	Low	Randolph	Not Rated	2021-12-15	12/15/2026	Private	Asheboro
Amick Dam	RANDO-152	Exempt	Low	Randolph	Not Rated	2020-12-01	12/01/2025	Private	Bath
Lawrence Dam	RANDO-153	Exempt	Low	Randolph	Not Rated	2020-11-10	11/10/2025	Private	Seagrove
Garner Dam	RANDO-154	Exempt	Low	Randolph	Not Rated	2020-11-10	11/10/2025	Private	Seagrove
Buttke Lagoon Dam	RANDO-155	Exempt	Low	Randolph	Not Rated	2019-12-03	12/03/2024	Private	Randleman
Chandler Dam	RANDO-156	Exempt	Low	Randolph	Satisfactory	2014-11-24	11/24/2019	Private	Southern Pines
Whitley Dam	RANDO-157	Exempt	Low	Randolph	Not Rated	2020-11-17	11/17/2025	Private	Asheboro
King Dam	RANDO-158	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Seagrove
Chapman Dam	RANDO-159	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Shelby
Nixon Dam	RANDO-160	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Franklinville
Coward Dam	RANDO-161	Exempt	Low	Randolph	Not Rated	2021-11-19	11/19/2026	Private	Liberty
Gilmore Dam	RANDO-162	Impounding	Low	Randolph	Fair	2023-02-21	02/21/2028	Private	Staley
Petty Dam	RANDO-163	Exempt	Low	Randolph	Not Rated	2020-11-18	11/18/2025	Private	Randleman
Griffin Dam	RANDO-164	Exempt	Low	Randolph	Not Rated	2022-01-05	01/05/2027	Private	Asheboro

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Upper Three Lakes Estate Dam	RANDO-165	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Plano
Lower Three Lakes Estate Dam	RANDO-166	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Plano
Langley Dam	RANDO-167	Exempt	Low	Randolph	Satisfactory	2014-10-23	10/23/2019	Private	Staley
H Richardson Dam	RANDO-168	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Randleman
Hockett Dam	RANDO-169	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Randleman
A Johnson Dam	RANDO-170	Exempt	Low	Randolph	Not Rated	2020-11-18	11/18/2025	Private	Greensboro
E Richardson Dam	RANDO-171	Exempt	Low	Randolph	Not Rated	2020-11-18	11/18/2025	Private	Climax
Ferree Dam	RANDO-172	Exempt	Low	Randolph	Not Rated	2020-11-18	11/18/2025	Private	Climax
Upper Ferree Dam	RANDO-173	Impounding	Low	Randolph	Fair	2023-02-21	02/21/2028	Private	Climax
Lower Ferree Dam	RANDO-174	Exempt	Low	Randolph	Not Rated	2021-11-19	11/19/2026	Private	Climax
Daniels Dam	RANDO-175	Exempt	Low	Randolph	Not Rated	2020-12-01	12/01/2025	Private	Chocowinity
Hicks Dam	RANDO-176	Exempt	Low	Randolph	Not Rated	2020-12-01	12/01/2025	Private	Staley
Brower Dam	RANDO-177	Exempt	Low	Randolph	Not Rated	2020-12-01	12/01/2025	Private	Staley
Euliss Dam	RANDO-178	Exempt	Low	Randolph	Satisfactory	2017-01-05	11/08/9999	Private	Liberty
Dashwood Dam	RANDO-179	Exempt	Low	Randolph	Not Rated	2020-11-18	11/18/2025	Private	Randleman
Rogers Dam	RANDO-180	Exempt	Low	Randolph	Not Rated	2020-11-19	11/19/2025	Private	Greensboro
Johnson Estate Dam	RANDO-181	Exempt	Low	Randolph	Not Rated	2021-11-19	11/19/2026	Private	Liberty
Rush Dam	RANDO-182	Breached	Low	Randolph	Satisfactory	2015-12-08	12/08/2020	-	-
Middle Zoo Dam	RANDO-183	Exempt	Low	Randolph	Not Rated	2020-03-17	03/17/2025	State	Asheboro
Spencer Dam	RANDO-184	Reclaimed	Low	Randolph	Satisfactory	2013-01-09	01/09/9999	-	-
Olyn Wright Dam	RANDO-186	Exempt	Low	Randolph	Not Rated	2023-12-20	12/20/2028	Private	Asheboro
Liberty Wastewater Dam	RANDO-187	Exempt	Low	Randolph	Satisfactory	2014-10-23	10/23/2019	Utility	Liberty
Wood Lake Dam Upper	RANDO-188	Exempt	Low	Randolph	Not Rated	2022-01-05	01/05/2027	Private	Asheboro
Timken Retention Dam	RANDO-189	Exempt	Low	Randolph	Satisfactory	2014-01-21	01/21/2019	Private	North Canton
Upper Zoo Dam	RANDO-191	Impounding	Low	Randolph	Fair	2020-03-17	03/17/2025	State	Asheboro
Upper Applefield Farms Lagoon Dam	RANDO-192	Exempt	Low	Randolph	Satisfactory	2014-10-21	10/21/2019	Private	Browns Summit
African Plains Dam	RANDO-194	Exempt	Low	Randolph	Satisfactory	2014-10-21	10/21/2019	State	Asheboro
Cox Lagoon Dam	RANDO-195	Exempt	Low	Randolph	Not Rated	2022-01-06	01/06/2027	Private	Ramseur
Bryant Dam	RANDO-196	Exempt	Low	Randolph	Satisfactory	2015-11-19	11/19/2020	Private	Thomasville

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Apple Farm Dam	RANDO-197	Exempt	Low	Randolph	Satisfactory	2015-11-19	11/19/2020	Private	Trinity
Victory Junction Camp Dam	RANDO-201	Impounding	Low	Randolph	Fair	2023-02-23	02/23/2028	Private	Randleman
Staley Mill Pond Dam	RANDO-202	Exempt	Low	Randolph	Satisfactory	2013-12-18	12/18/2018	Private	Liberty
Beeson Farm Dam	RANDO-203	Exempt	Low	Randolph	Satisfactory	2015-11-03	11/03/2020	Private	Climax
Doyle Dam	RANDO-204	Exempt	Low	Randolph	Satisfactory	2014-12-30	12/30/2019	Private	Trinity
Purgatory Farm Pond Dam	RANDO-205	Exempt	Low	Randolph	Not Rated	2021-01-07	01/07/2026	Private	Franklinville
Jason Creek Dam	RANDO-206	Exempt	Low	Randolph	Not Rated	2021-01-07	01/07/2026	Private	Ramseur
Koopman Waste Pond Dam No. 4	RANDO-207	Exempt	Low	Randolph	Not Rated	2021-01-07	01/07/2026	Private	Statesville
West Pond Dam	RANDO-209	Exempt	Low	Randolph	-	-	-	Private	Plano
Fork Creek Road Dam	RANDO-211	Impounding	Low	Randolph	-	-	-	Private	Seagrove
Uwharrie Farms Dam	RANDO-212	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Black Mountain Pond Dam	RANDO-213	Impounding	Low	Randolph	-	-	-	Private	High Point
Black Mountain Pond Dam #2	RANDO-214	Impounding	Low	Randolph	-	-	-	Private	High Point
Black Mountain Pond Dam #3	RANDO-215	Impounding	Low	Randolph	-	-	-	Private	High Point
Black Mountain Pond Dam #4	RANDO-216	Impounding	Low	Randolph	-	-	-	Private	High Point
Lassiter Mill Dam	RANDO-217	Reclaimed	Low	Randolph	-	-	-		
Kidds Mill Dam	RANDO-218	Impounding	Low	Randolph	-	-	-	Private	Franklinville
Millers Mill Dam	RANDO-219	Impounding	Low	Randolph	-	-	-	Private	Trinity
Leath Pond Dam	RANDO-220	Impounding	Low	Randolph	-	-	-	Private	High Point
Dillon Dam	RANDO-221	Impounding	Low	Randolph	Fair	2023-02-08	02/08/2028	Private	Sophia
Uwharrie Trace Dam	RANDO-223	Impounding	Low	Randolph	Fair	2023-02-02	02/02/2025	Private	Trinity
Carman Dam	RANDO-224	Impounding	Low	Randolph	Fair	2023-02-02	02/02/2025	Private	Trinity
Shoe Pond Dam	RANDO-225	Impounding	Low	Randolph	-	-	-	Private	Sophia
Dehart Dam	RANDO-226	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Baxter Dam	RANDO-227	Impounding	Low	Randolph	-	-	-	Private	Asheboro

Dam Name	State ID	Dam status	Dam Hazard	County	Condition	Date of Last Inspection	Next Inspection Date	Owner Type	City
Allred Pond Dam	RANDO-228	Impounding	Low	Randolph	-	-	-	Private	Franklinville
Callicutt Pond Dam	RANDO-229	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Loflin Pond Dam	RANDO-230	Impounding	Low	Randolph	-	-	-	Private	Seagrove
Cagle Pond Dam	RANDO-231	Impounding	Low	Randolph	-	-	-	Private	Roanoke
Gerald Cagle Pond Dam	RANDO-232	Impounding	Low	Randolph	-	-	-	Private	Seagrove
Carter Lake Dam #2	RANDO-233	Impounding	Low	Randolph	-	-	-	Private	Cedar Falls
Carter Lake Dam #3	RANDO-234	Impounding	Low	Randolph	-	-	-	Private	Cedar Falls
Smith-Trogdon Dam #1	RANDO-235	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Smith-Trogdon Dam #2	RANDO-236	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Brenda Smith Lake Dam	RANDO-237	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Kaufman Pond Dam	RANDO-239	Impounding	Low	Randolph	-	-	-	Private	Ramseur
Ward Pond Dam	RANDO-240	Impounding	Low	Randolph	-	-	-	Private	Randleman
Caughron Pond Dam	RANDO-241	Impounding	Low	Randolph	-	-	-	Private	Sophia
Poe Pond Dam	RANDO-242	Impounding	Low	Randolph	-	-	-	Private	Sophia
Rice Pond Dam	RANDO-243	Impounding	Low	Randolph	-	-	-	Private	Sophia
McQuaigue Pond Dam	RANDO-244	Impounding	Low	Randolph	-	-	-	Private	Trinity
Williamson Pond Dam	RANDO-245	Impounding	Low	Randolph	-	-	-	Private	Trinity
Wrape Dam	RANDO-247	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Harper Pond #1 Dam	RANDO-248	Impounding	Low	Randolph	-	-	-	Private	Asheboro
Harper Pond #2 Dam	RANDO-249	Impounding	Low	Randolph	-	-	-	Private	Asheboro

It should be noted that dam regulations for classifying dams were changed. As a result, more dams are classified as high hazard.

5.10.3 Extent

Despite the considerable number of dams classified as high hazard, there have been no dam breaches reported by State of North Carolina Hazard Mitigation Plan, but 12 dams have been reported as “breached” throughout the planning area by the NC Office of Dam Safety (See Table 5- 47).Precaution should still be taken to monitor high hazard dams to avoid failure or mis-operation that could potentially result in the loss of human life.

5.10.4 Historical Occurrences

According to the NC Office of Dam Safety, there are 379 dams in the planning area, 12 of which have been breached, 2 which have been drained, 5 which have been reclaimed, and 233 that are exempt (Table 5- 47). No information regarding damage arising from these breaches was readily available for inclusion in this plan update.

Table 5- 47: Dams in the planning area and their status according to the NC Office of Dam Safety³³

Dam Status	Davidson	Randolph	Total
Breached	5	7	12
Drained	1	1	2
Exempt	91	142	233
Impounding	31	96	127
Reclaimed	2	3	5
Grand Total	130	249	379

5.10.5 Probability of Future Occurrences

There is a fundamental limitation in the data available for dam/levee failure hazard events regarding the planning area’s vulnerability assessment. Excellent data is available for GIS analysis, including point locations and mapped inundation areas. However, this robust data is primarily available for the dams owned by Duke Energy Corporation. These large facilities would undoubtedly profoundly impact on the planning area should a failure occur; however, such failures are extremely unlikely, and the HMPC feels strongly that these are not the structures that concern the Davidson-Randolph Region. The dam structures that are of concern are smaller, privately owned, and unregulated dams for which no GIS data or inventories are

³³ N.C. Department of Environmental Quality [NCDEQ]. (n.d.-a). Dam safety Program Overview. Retrieved January 30, 2025, from <https://www.deq.nc.gov/about/divisions/energy-mineral-and-land-resources/dam-safety-program-overview#Tab-DamInventoryDataSheet-13109>

currently available. These facilities could cause the most damage and disruption should a more common failure occur.

Given the importance of smaller, privately owned, and/or unregulated dams and their gap in available data for the Davidson Randolph Region, even though data is available, it would be misleading and unproductive for mitigation planning. It has also been determined that any rudimentary calculations based on the point locations for the dams mapped by NCDEQ would also be potentially misleading if any buffer or proximity analysis were performed to estimate surrounding impacts should a failure occur. Given these caveats, subsequent sections speak to the potential significant impacts of a dam failure event.

Therefore, any mitigation actions developed for this hazard should address data limitations, education and awareness programs, and/or any jurisdiction-specific concerns that may be addressable through an appropriate mitigation project.

5.10.6 Impact

Given the current dam inventory and historical data, a dam breach is unlikely (less than 1 percent annual probability) in the future. However, as has been demonstrated in the past, regular monitoring is necessary to prevent these events.

People

A person's immediate vulnerability to a dam failure is directly associated with the person's distance downstream of the dam as well as proximity to the stream carrying the floodwater from the failure. For dams that have an Emergency Action Plan (EAP), the vulnerability of loss of life for people in their homes or on their property may be mitigated by following the EAP evacuation procedures; however, the displaced persons may still incur sheltering costs. For people located on the river (e.g., for recreation) the vulnerability of loss of life is significant. The dams in the Region do not provide drinking water supply. As a result, the Region is not at risk of major public health threats posed by the disruption of drinking water supply from dam failure.

. As access to internet become more common, it is likely that resources to prepare for hazards such as dam failure will begin to be located primarily through the internet. In Randolph County, 4.7% of residents do not have a computer and 17.7% of the residents do not have a broadband internet connection. In Davidson County, 5.7% of residents are estimated to not have a computer and 9.7% of the planning area are estimated to not have a broadband internet subscription. A large portion of the overall planning area lacks internet access, which makes it important to consider public awareness and preparedness initiatives that are communicated with multiple different media types, such as radio ads, newspaper ads, flyers, and commercials.

The prevention of future dam and levee failure impacts is reliant on the ability for dam failure emergencies to be communicated with residents in the planning area in a timely manner to reduce potential loss of life related to dam failure. Communication of emergency alerts through telephone messages and reverse 911 systems have become a crucial tool to alert residents of imminent hazardous conditions, which can also include periodic educational messages on how to prepare and how to respond in the event of an emergency. In addition to the substantial portion of residents who do not have access to a computer or to the internet in their housing unit, it is estimated that 0.6% of Davidson County and 0.8% of Randolph County residents do

not have telephone access in their housing unit as of 2023. To limit future hazard impacts, the planning area should evaluate which areas are most at risk of dam failure and develop a plan to ensure that all residents in hazard areas are able to receive emergency alerts in a timely manner.

Changes in Development and Housing Characteristics

There are no changes in development that impact the planning area's future risk of dam failure events. But, if future developments occur in areas where dams are a high, intermediate, or low hazard classification, there is risk of catastrophic damage to properties, infrastructure, and critical facilities. If development increases in areas of high hazard classification, there is risk of disproportionate exposure to potential dam failure hazards for those located in those areas.

Economy

Economic impact from small dams is small and impact is often limited to dam owner and the cost of first responder activities. Large failures can disrupt the economy through displacement of workers, damage to commercial employment centers or destruction of infrastructure that impacts commercial activities or access to other economic drivers.

Natural Environment

Aquatic species within the lake will either be displaced or destroyed. The velocity of the flood wave will likely destroy riparian and instream vegetation and destroy wetland function. The flood wave will likely cause erosion within and adjacent to the stream. Deposition of eroded deposits may choke instream habitat or disrupt riparian areas. Sediments within the lake bottom and any low oxygen water from within the lake will be dispersed, potentially causing fish kills or releasing heavy metals found in the lake sediment layers.

Dam failure causes increased soil erosion, rapid sedimentation which clogs the waterways, decreases water quality by carrying pollutants downstream and contributing to contamination of rivers and lakes, and can destroy ecosystems downstream by destroying habitats for wildlife and plants.

First Responders

For dams that fail slowly, first responders will be impacted similarly to other events that have advance warning. For dams that fail without warning, the impact is rapid and severe, requiring rapid response to the impacts. Although the response is restricted to the stream below the dam, the location of impact moves rapidly downstream requiring multiple response locations.

Climate Change

Changes to the climate are expected to lead to more frequent severe storm events, which will likely increase the future risk of dam overtopping, damage, or failures during periods of excessive precipitation.

5.11 Flood

5.11.1 Background

Flooding is the most frequent and costly natural hazard in the United States and is a hazard that has caused more than 10,000 deaths since 1900. Nearly 90 percent of presidential disaster declarations result from natural events where flooding was a major component.

Floods result from excessive precipitation and can be classified under two categories: general floods (precipitation over a given river basin for a long period of time along with storm-induced wave action) and flash floods (the product of heavy localized precipitation in a short time period over a given location). The severity of a flooding event is typically determined by a combination of several major factors, including stream and river basin topography and physiography, precipitation and weather patterns, recent soil moisture conditions, and the degree of vegetative clearing and impervious surface.

General floods are usually long-term events that may last for several days. The primary types of general flooding include riverine, coastal, and urban flooding. Riverine flooding is a function of excessive precipitation levels and water runoff volumes within the watershed of a stream or river. Coastal flooding is typically a result of storm surge, wind-driven waves, and heavy rainfall produced by hurricanes, tropical storms, and other large coastal storms. Urban flooding occurs where manmade development has obstructed the natural flow of water and decreased the ability of natural groundcover to absorb and retain surface water runoff.

Most flash flooding is caused by slow-moving thunderstorms in a local area or by heavy rains associated with hurricanes and tropical storms. However, flash flooding events may also occur from a dam or levee failure within minutes or hours of heavy amounts of rainfall or from a sudden release of water held by a retention basin or other stormwater control facility. Although flash flooding occurs most often along mountain streams, it is also common in urbanized areas where much of the ground is covered by impervious surfaces.

The periodic flooding of lands adjacent to rivers, streams, and shorelines (land known as a floodplain) is a natural and inevitable occurrence that can be expected to take place based upon established recurrence intervals. The recurrence interval of a flood is defined as the average time interval, in years, expected between a flood event of a particular magnitude and an equal or larger flood. Flood magnitude increases with increasing recurrence intervals.

Floodplains are designated by the frequency of the flood that is large enough to cover them. For example, the 10-year floodplain will be covered by the 10-year flood and the 100-year floodplain by the 100-year flood. Flood frequencies, such as the 100-year flood, are determined by plotting a graph of the size of all known floods for an area and determining how often floods of a particular size occur. Another way of expressing the flood frequency is the chance of occurrence each year, which is the percentage of the probability of flooding each year. For example, the 100-year flood has a 1 percent chance of occurring in any given year and the 500-year flood has a 0.2 percent chance of occurring in any given year. FEMA and the State of North Carolina Division of Emergency Management have begun recommending the use of the latter term.

5.11.2 Location and Spatial Extent

There are areas in the Region that are susceptible to flood events. Special flood hazard areas in the Region were mapped using Geographic Information System (GIS) and FEMA Digital Flood Insurance Rate Maps (DFIRM).³⁴ This includes Zone AE (1-percent annual chance floodplain with elevation) and Zone X500 (0.2-percent annual chance floodplain).

There are areas in Davidson County that are susceptible to flood events. Special flood hazard areas in Davidson County were mapped using Geographic Information System (GIS) and FEMA Digital Flood Insurance Rate Maps (DFIRM). This includes Zone AE (1-percent annual chance floodplain with elevation) and Zone X500 (0.2-percent annual chance floodplain).

According to GIS analysis, of the 552.7 square miles of land that make up Davidson County, there are 48.1 square miles of land in zone AE (1- percent annual chance floodplain/100-year floodplain) and 1.3 square miles of land in zone X500 (0.2- percent annual chance floodplain/500-year floodplain). According to GIS analysis, of the 790.0 square miles that make up Randolph County, there are 34.67 square miles of land in Zone AE (1-percent annual chance floodplain/100-year floodplain) and 0.84 square miles of land in Zone X500 (0.2-percent annual chance floodplain/500-year floodplain). The jurisdictional totals are presented below in Table 5-48.

Table 5- 48: Summary of Floodplain Areas

LOCATION	100-YEAR or 1% Annual Chance AREA (SQUARE MILES)	500-YEAR or 0.2% Annual Chance AREA (SQUARE MILES)
Denton	0.0	0.0
Lexington	2.8	0.2
Midway	0.2	0.0
Thomasville	0.9	0.1
Wallburg	0.3	0.0
Unincorporated Area	43.9	1.0
RANDOLPH COUNTY TOTAL	48.1	1.3
City of Archdale	0.63	0.10
City of Asheboro	2.40	0.12
Town of Franklinville	0.59	0.02
Town of Liberty	0.44	0.00
Town of Ramseur	1.26	0.03
City of Randleman	0.71	0.00

LOCATION	100-YEAR or 1% Annual Chance AREA (SQUARE MILES)	500-YEAR or 0.2% Annual Chance AREA (SQUARE MILES)
Town of Seagrove	0.02	0.00
Town of Staley	0.00	0.00
City of Trinity	0.65	0.09
Unincorporated Area	27.97	0.48
RANDOLPH COUNTY TOTAL	34.67	0.84

Source: Federal Emergency Management Agency/North Carolina Flood Mapping Program

It is important to note that while FEMA digital flood data is recognized as the best available data for planning purposes, it does not always reflect the most accurate and up-to-date flood risk. Flooding and flood-related losses often do occur outside of delineated special flood hazard areas. Flood boundaries in the following maps were downloaded from the FEMA Mapping Service Center. The boundaries are from the latest effective studies that were conducted in 2009.

For more information about the facilities, historic properties, and critical facilities and their flood risk, please see Appendix G.

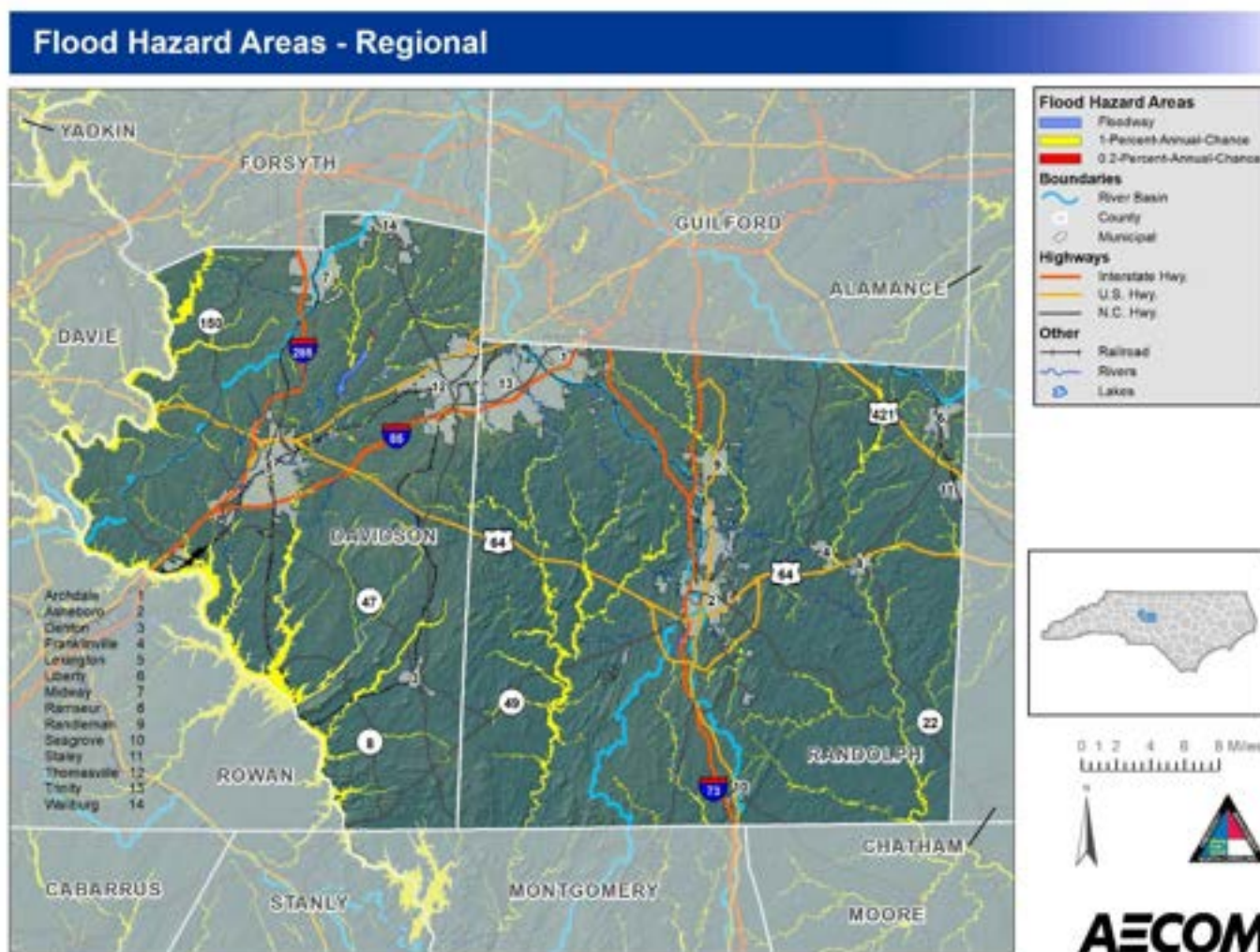


Figure 5- 67: Flood Hazard Areas - Regional

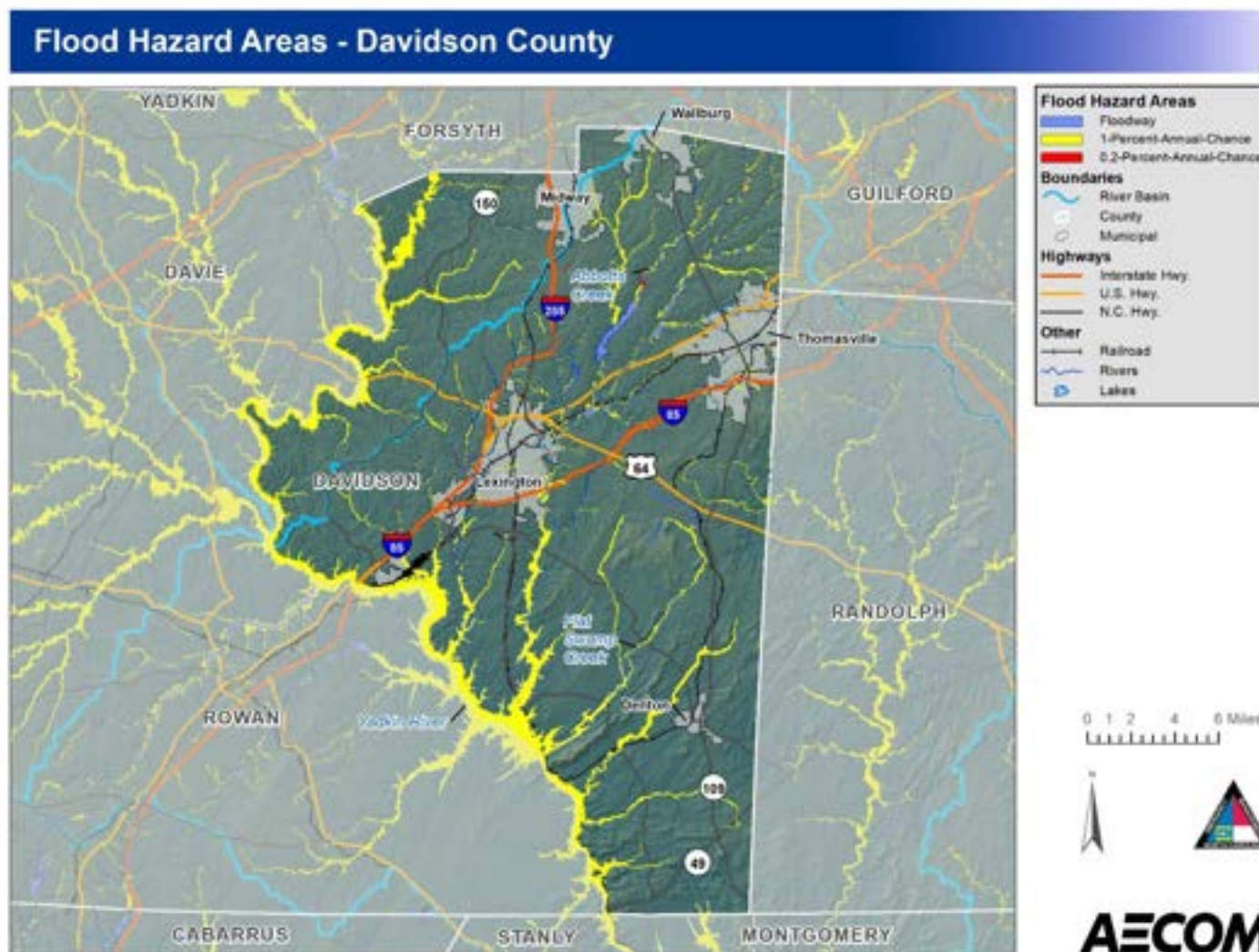


Figure 5- 68: Flood Hazard Areas – Davidson County

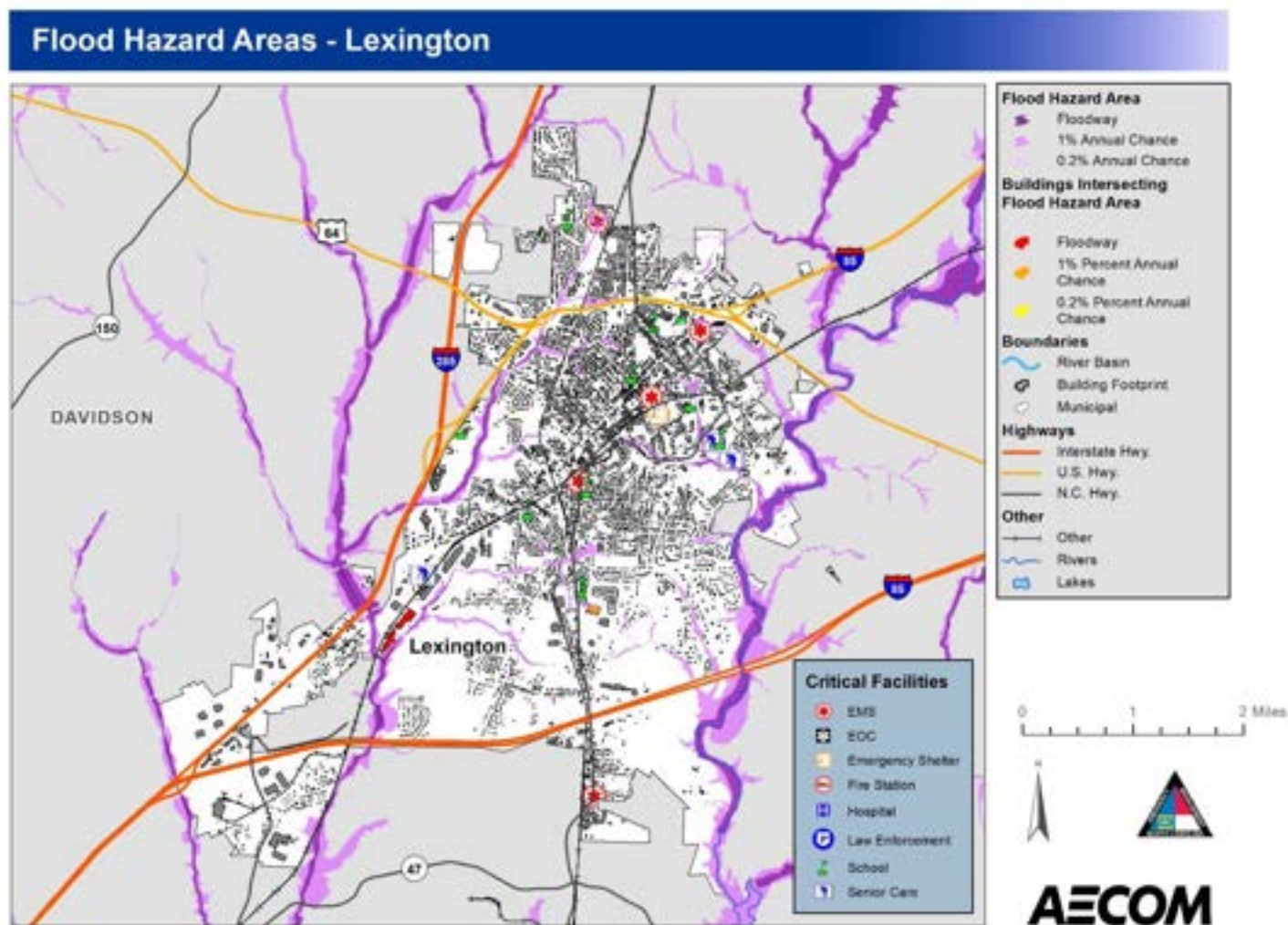


Figure 5- 69: Flood Hazard Areas - Lexington

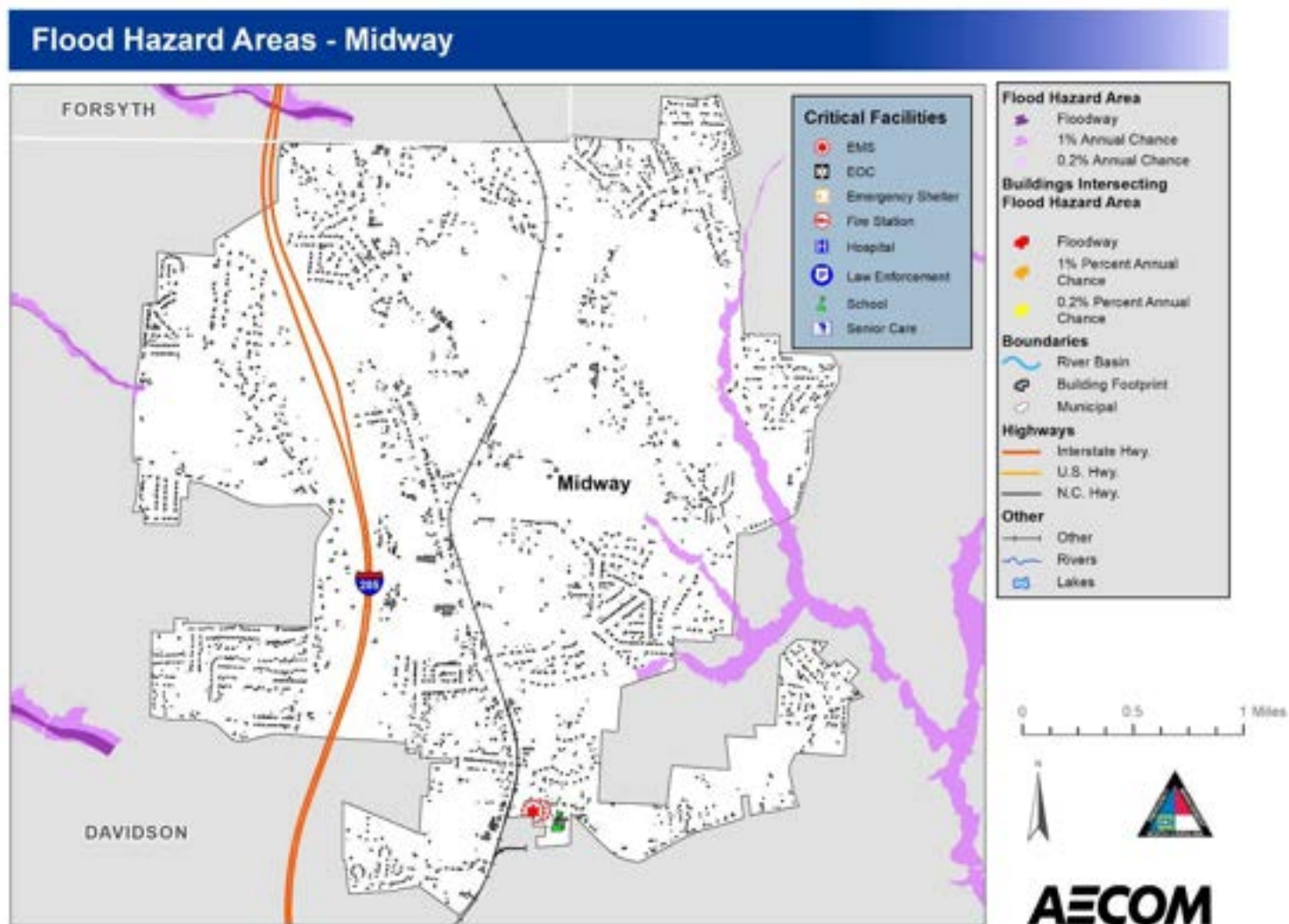


Figure 5- 70: Flood Hazard Areas - Midway

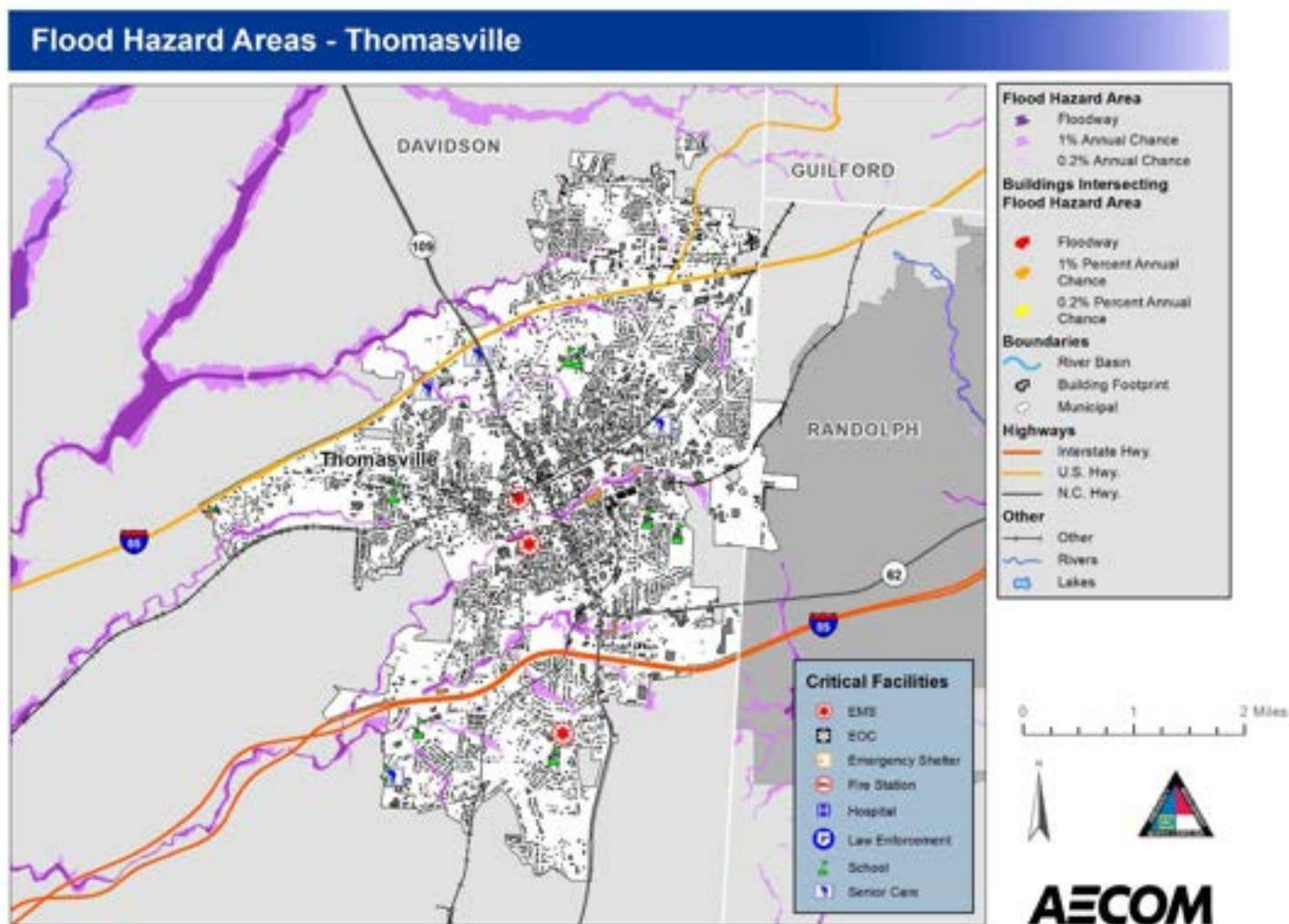


Figure 5- 71: Flood Hazard Areas – Thomasville

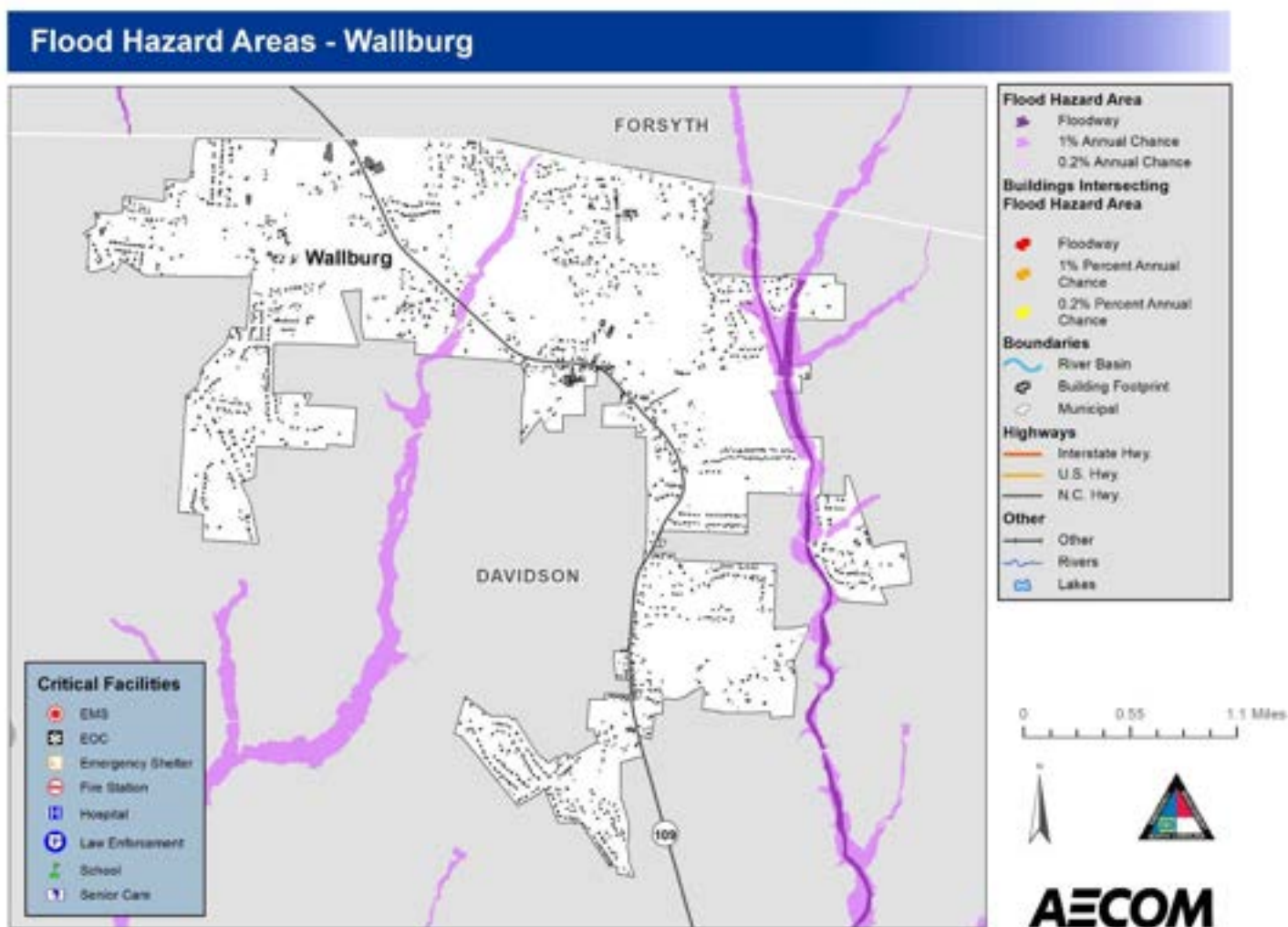


Figure 5- 72: Flood Hazard Areas – Wallburg

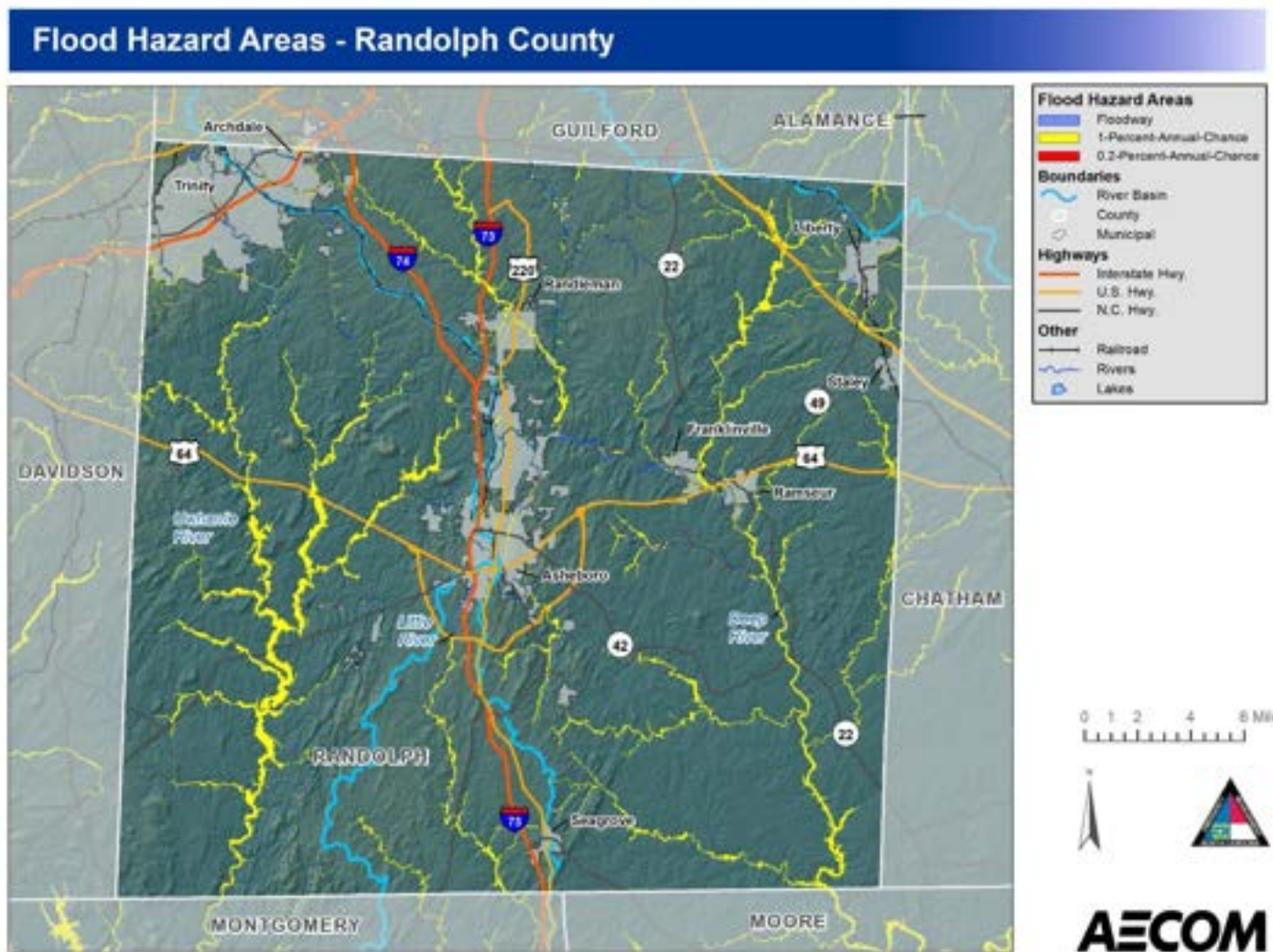


Figure 5- 73: Flood Hazard Areas – Randolph County

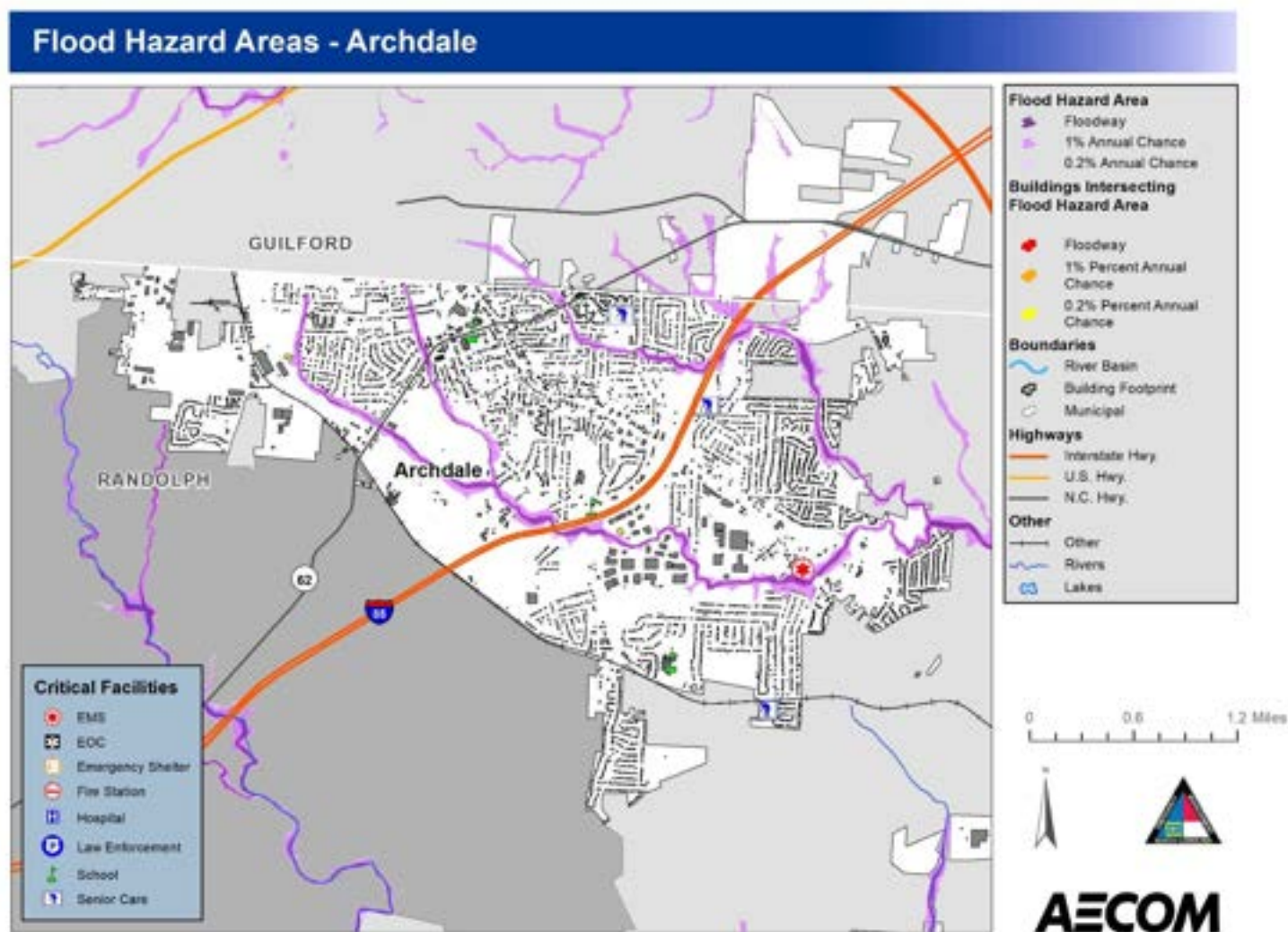


Figure 5- 74: Flood Hazard Areas - Archdale

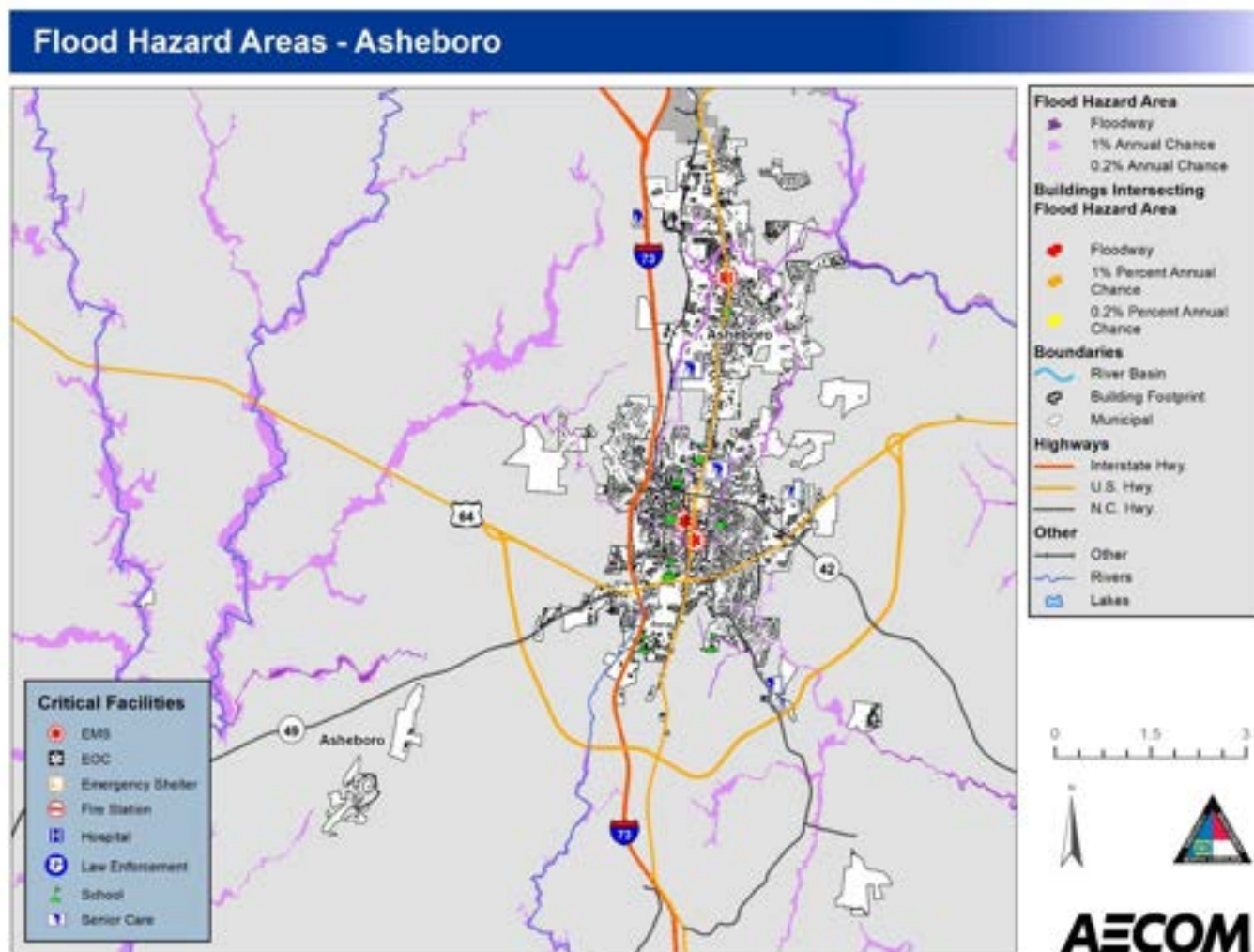


Figure 5- 75: Flood Hazard Areas - Asheboro

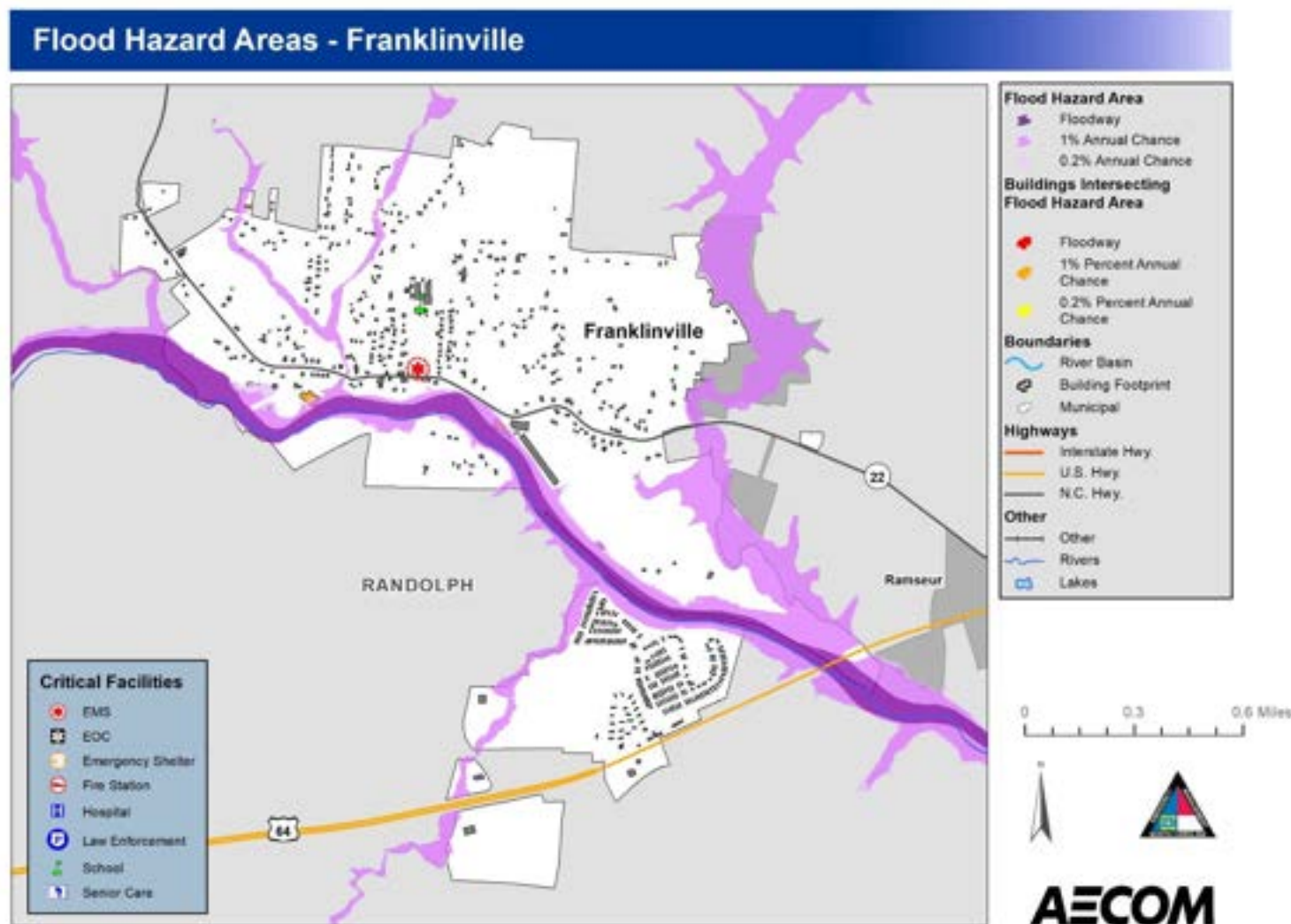


Figure 5- 76: Flood Hazard Areas – Franklinville

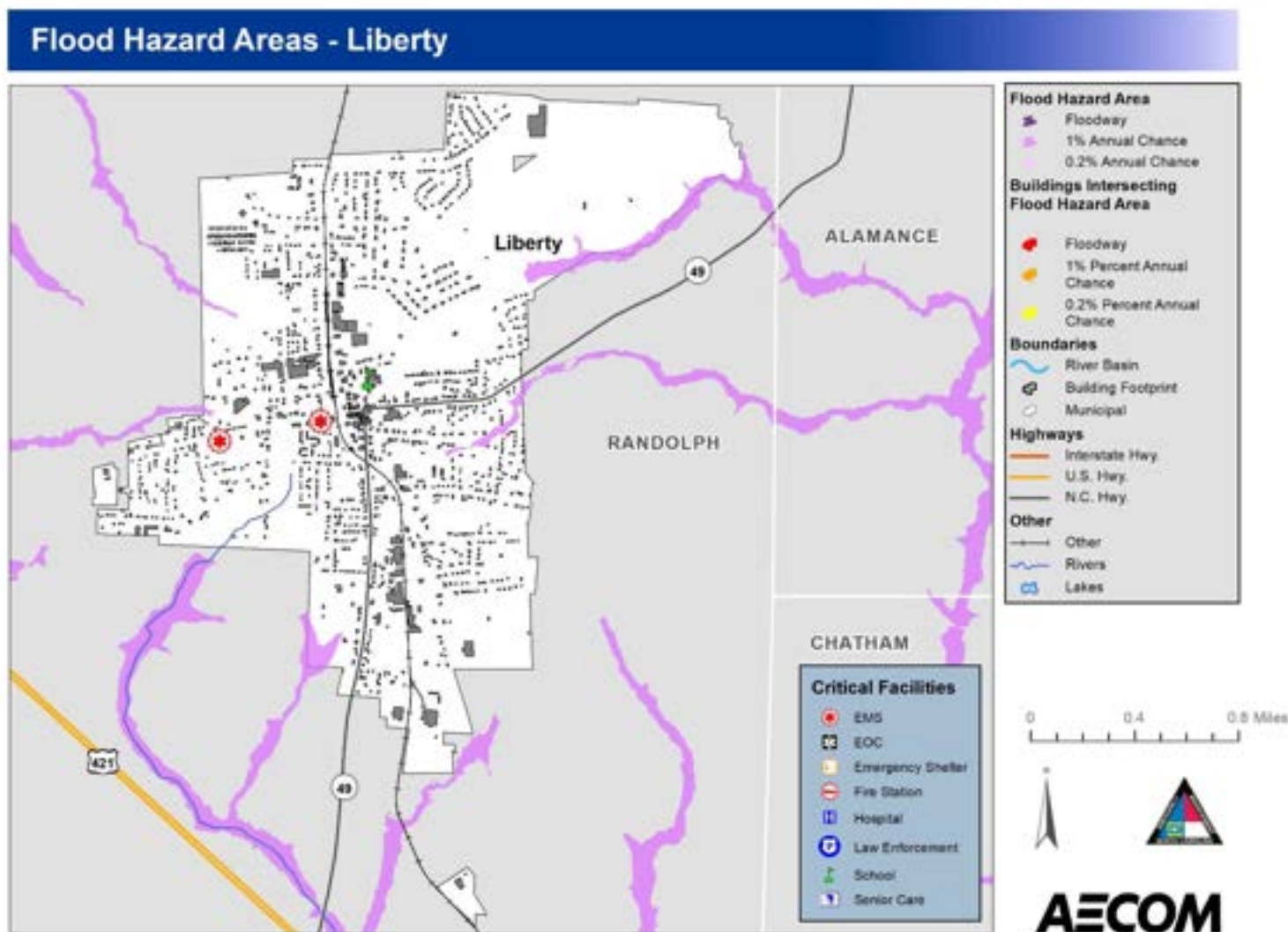


Figure 5- 77: Flood Hazard Areas – Liberty

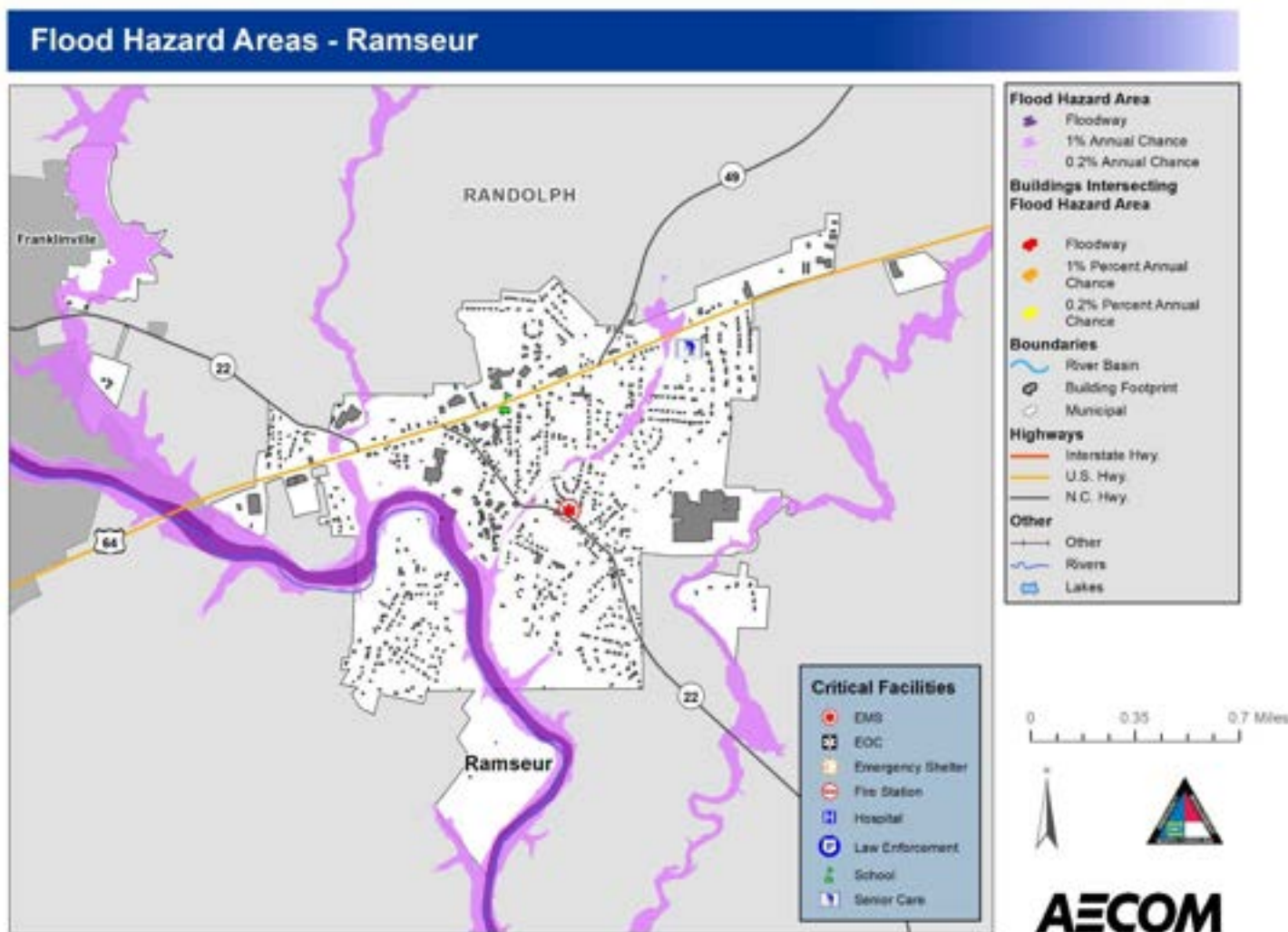


Figure 5- 78: Flood Hazard Areas - Ramseur

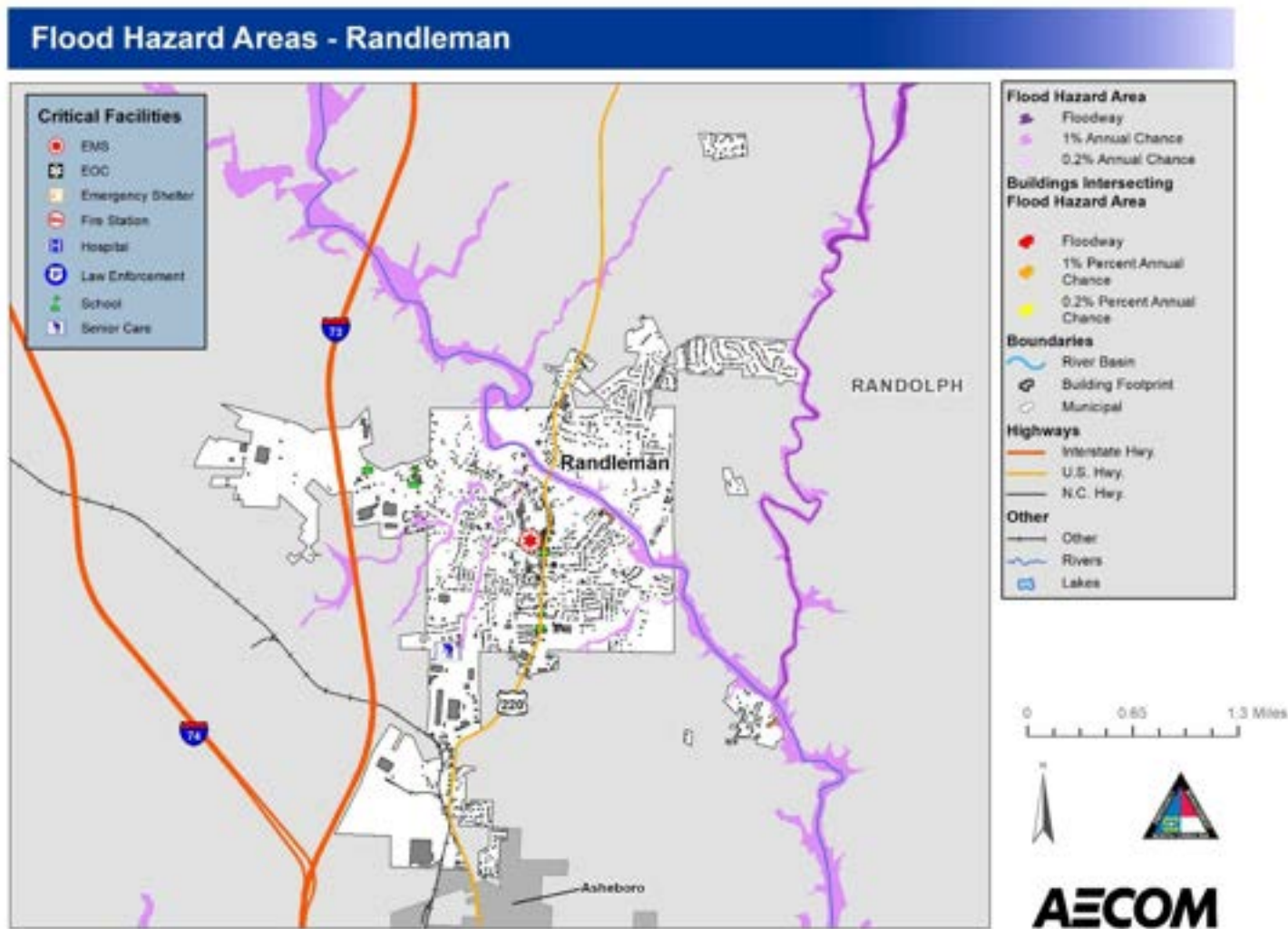


Figure 5- 79: Flood Hazard Areas - Randleman

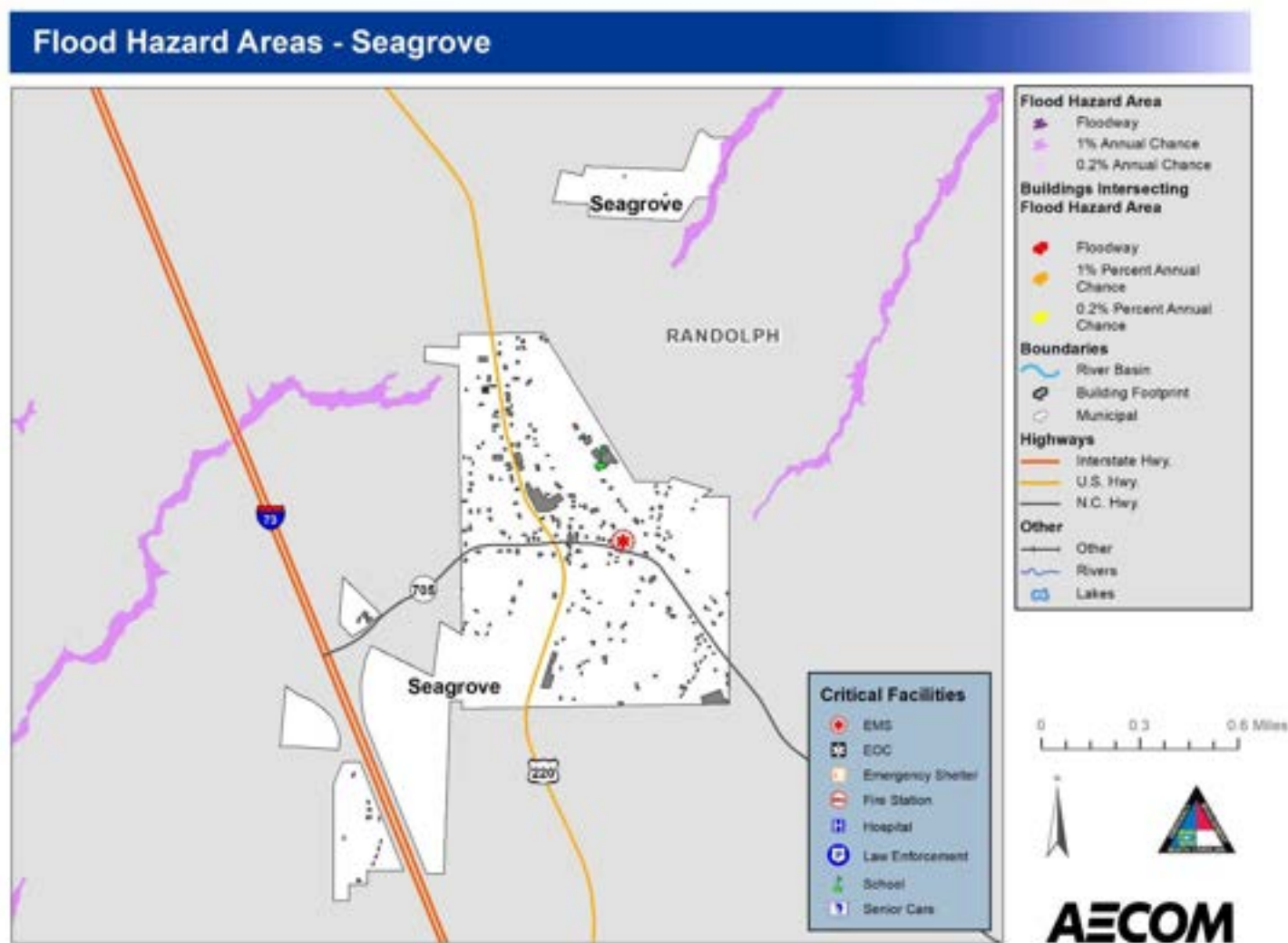


Figure 5- 80: Flood Hazard Areas – Seagrove

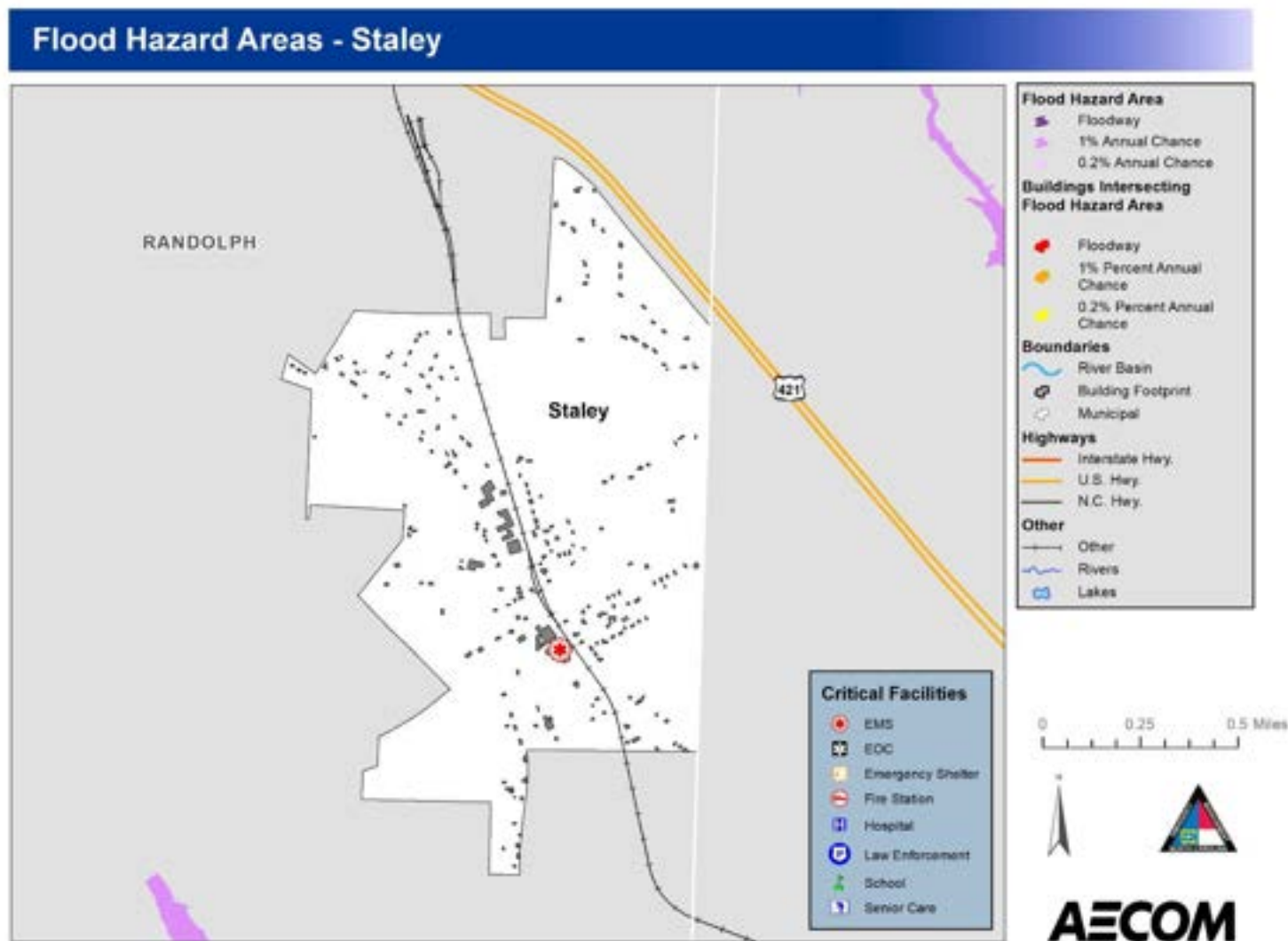


Figure 5- 81: Flood Hazard Areas – Staley

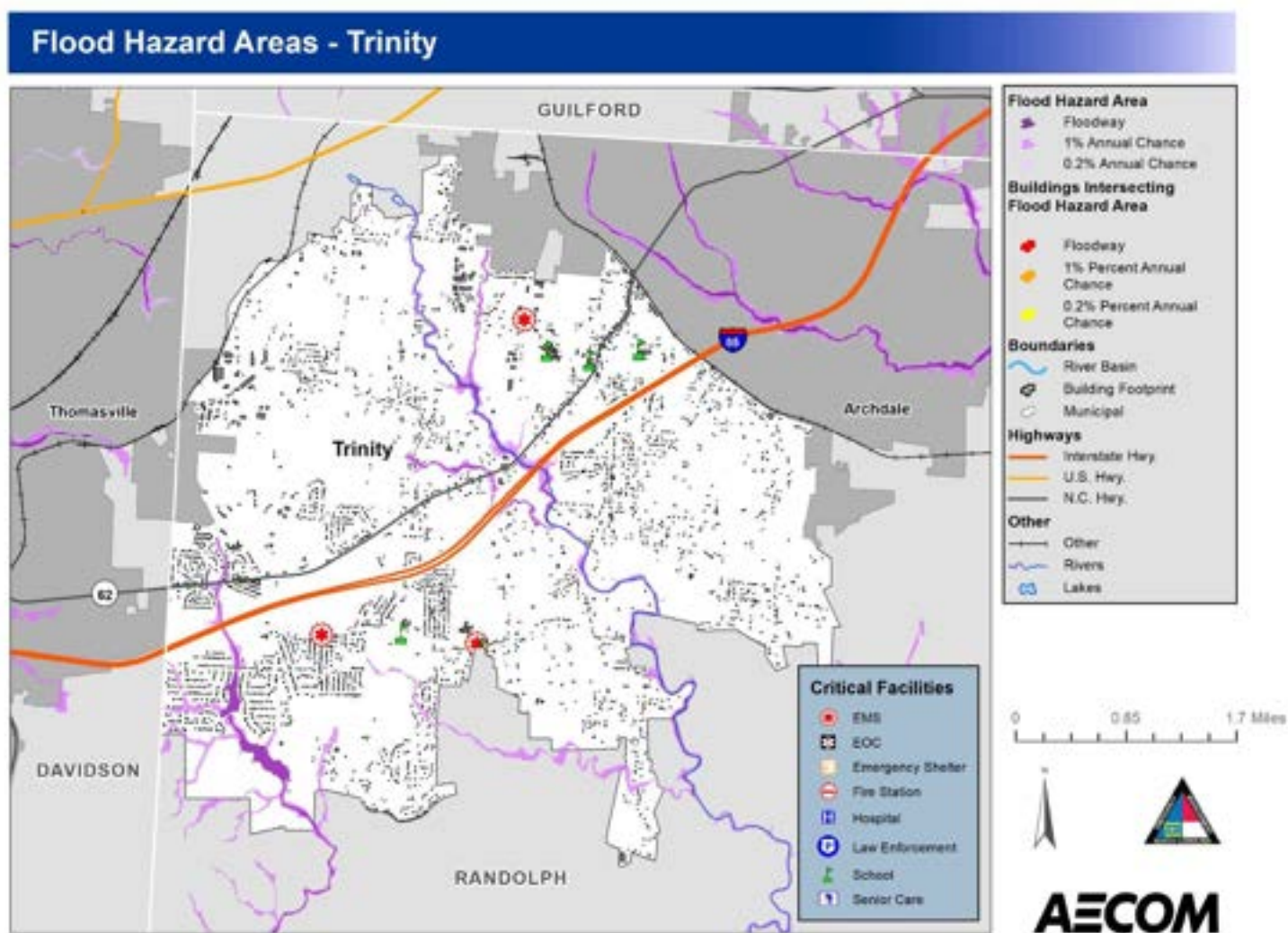


Figure 5- 82: Flood Hazard Areas - Trinity

5.11.3 Extent

Flood depth and velocity are recorded via United States Geological Survey stream gages throughout the Region. While a gage does not exist for each participating jurisdiction, there is one at or near many jurisdictions.

Table 5- 49: USGS Peak River Stage Data³⁵

USGS Gage Number	Location Description	Drainage Area (mi ²)	Peak Height (Feet)	Peak Stream Flow (cfs)	Date of Peak Streamflow
Davidson					
02121180	North Potts Creek at Linwood, NC	9.62	9.51	1540	5/28/1990
02121493	Leonard Creek Near Bethesda, NC	5.16	4.59	531	9/22/1979
02121500	Abbotts Creek at Lexington, NC	174	23.48	11800	9/23/2003
02121940	Flat Swamp Creek Near Lexington, NC	6.56	25.38	953	8/15/1969
02122500	Yadkin River at High Rock, NC	4000	22.10	----	Date of occurrence is unknown or not exact
02122560	Cabin Creek Near Jackson Hill, NC	13.70	23.40	1050	4/7/1964
02122720	Beaverdam Creek Trib Near Denton, NC	2.90	28.40	1800	124/1962
Randolph					
02099500	Deep River Near Randleman, NC	638.11	32.20	20000	9/25/1947

³⁵ US Geological Survey. (n.d.). USGS surface water for North Carolina: Peak streamflow [Dataset]. Retrieved January 27, 2025, from <https://nwis.waterdata.usgs.gov/usa/nwis/peak>

USGS Gage Number	Location Description	Drainage Area (mi ²)	Peak Height (Feet)	Peak Stream Flow (cfs)	Date of Peak Streamflow
02100000	Muddy Creek Near Archdale NC	16.70	10.46	2180	6/28/1938
02100500	Deep River at Ramseur, NC	349	34.04	43000	9/18/1945
02123000	Uwharrie River Near Trinity, NC	11.30	7.00	2190	7/17/1947

5.11.4 Historical Occurrences

The following historical occurrences ranging from 2010 to 2024 have been identified based on the National Climatic Data Center (NCDC) Storm Events database Table 5- 50. It should be noted that only those historical occurrences listed in the NCDC database are shown here and that other, unrecorded, or unreported events may have occurred within the planning area during this timeframe.

Table 5- 50: Flooding events in the planning area between 2010 to 2024 from the NCDC Storm Events Database

Location	Deaths	Injuries	Property Damage	Crop Damage	Number of Events
Arcadia	0	0	0	0	1
Arnold	0	0	0	0	1
Cotton Grove	0	0	0	0	2
Denton	0	0	\$10,000	0	4
Glen Anna	0	0	0	0	2
Gordontown	0	0	\$6,000	0	3
Gum Tree	0	0	0	0	2
Healing Springs	0	0	0	0	1
Holly Grove	0	0	0	0	1
Lambeth	0	0	0	0	2
Lexington	0	0	0	0	1
Newsom	0	0	\$1,510,000	\$5,000,000	1
Old Mill	0	0	0	0	3

Location	Deaths	Injuries	Property Damage	Crop Damage	Number of Events
Reeds Crossroads	0	0	\$20,000	0	1
Shale Brick	0	0	0	0	1
Silver Valley	0	0	0	0	1
Thomasville	0	0	\$2,000	0	6
Wallburg	0	0	\$20,000	0	2
Welcome	0	0	0	0	3
Davidson County Total	0	0	\$1,568,000	\$5,000,000	38
Archdale	0	0	\$1,000	0	3
Asheboro	0	0	\$15,000	0	6
Asheboro South	0	0	0	0	3
Asheboro West	0	0	0	0	2
Auman Corner	0	0	0	0	1
Cedar Falls	0	0	0	0	1
Erect	0	0	0	0	2
Farmer	0	0	0	0	1
Fullers	0	0	0	0	2
Glenola	0	0	0	0	3
Liberty	0	0	0	0	1
North Asheboro	0	0	0	0	1
Pinson	0	0	\$21,070,000	\$10,000,000	1
Salem	0	0	0	0	1
Staley	0	0	\$10,000	0	1
Trinity	0	0	\$10,000	0	2
Ulah	0	0	0	0	1
Randolph County Total	0	0	\$21,106,000	\$10,000,000	32
Grand Total	0	0	\$22,674,000	\$15,000,000	70

Table 5- 50 provides a summary of this historical information by participating jurisdiction. It is important to note that many of the events attributed to the county are countywide or cover large portions of the county. The individual counts by jurisdiction are for those events that are only attributed to that one jurisdiction.

5.11.5 Historical Summary of Insured Flood Losses

For a county or municipality to participate in the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by a 100-year flood event, and that new development in the floodplain will not exacerbate existing flood problems or increase damage to other properties.

A key service provided by the NFIP is the mapping of identified flood hazard areas. Once completed, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices, and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials, and the private sector about the likelihood of flooding in their community.

See **Section 6** for information about the NFIP communities in the planning area and their total insurance coverage, date that they joined the NFIP, current effective map date, NFIP policies in force, insurance in force, written premium in force, closed losses, and total payments.

5.11.6 Repetitive and Severe Repetitive Loss Properties

FEMA defines a repetitive loss property as any insurable building for which two or more claims of more than \$1,000 were paid by the NFIP within any rolling 10-year period, since 1978. A repetitive loss property may or may not be currently insured by the NFIP. FEMA defines a severe repetitive loss as a NFIP-Insured structure that has incurred flood-related damage for which four or more separate claims payments have been made, with the amount of each claim exceeding \$5,000, and with the cumulative amount of such claim's payments exceeding \$20,000. This also includes situations where a NFIP-insured structure which has made at least two separate claims payments under such coverage, with the cumulative amount of such claims exceeding the market value of the building. In both instances, at least two of the claims must be within 10 years of each other, and claims made within 10 days of each other will be counted as one claim.

Table 5- 51 provides a summary count by jurisdiction of Residential and Commercial Repetitive Loss (RL) properties identified by FEMA through the NFIP.

Table 5- 51: Numbers of multiple loss or NFIP Repetitive Loss (RL) and Severe Repetitive Loss (SRL) Properties by Jurisdiction

Jurisdiction	Repetitive Loss		Severe Repetitive Loss	
	Residential	Commercial	Residential	Commercial
Town of Denton	-	-	-	-
Town of Lexington	1	1	0	0

Jurisdiction	Repetitive Loss		Severe Repetitive Loss	
	Residential	Commercial	Residential	Commercial
Town of Midway	-	-	-	-
City of Thomasville	3	1	1	0
Town of Wallburg	-	-	-	-
Davidson County	9	1	0	0
City of Archdale	3	0	1	0
City of Asheboro	-	-	-	-
Town of Franklinville	-	-	-	-
Town of Liberty	-	-	-	-
Town of Ramseur	-	-	-	-
City of Randleman	-	-	-	-
Town of Seagrove	-	-	-	-
Town of Staley	-	-	-	-
City of Trinity	-	-	-	-
Randolph County	2	0	0	0
PLAN TOTAL				

5.11.7 Probability of Future Occurrences

The NRI defines Riverine Flooding as an event where streams and rivers exceed the capacity of their natural or constructed channels to accommodate water flood and water overflows the banks, spilling into adjacent, low-lying land. For the purposes of representing probability within the plan area, the term “riverine flooding” used in the NRI should be considered equivalent to “flood” events as described in this plan. The NRI utilizes the NCEI Storm Events Database³⁶ to represent riverine flooding hazards and the period of record used by the NRI is from January 1, 1996 to December 31, 2019.

In the planning area the total EAL attributed to riverine flooding is \$1,575,519.28 and the expected annual frequency of riverine flooding events is 1.8365. The average census EAL score in the planning area is 58.26 (relatively moderate percentile) and the average census Risk Score is 59.88 (relatively moderate percentile).

In Davidson County, the average expected annual frequency is 1.87, the total EAL value of all census tracts in the county is \$443,746.22, the average EAL score is 51.88 (relatively moderate percentile), and the average Risk Score is 53.17 (relatively moderate percentile). The three areas in the county with the highest EAL total are unincorporated areas (\$170,724.69),

³⁶ National Oceanic and Atmospheric Organization [NOAA] & National Center for Environmental Information [NCEI]. (n.d.). Storm Events Database [Dataset]. NOAA.

Thomasville (\$156,544.29), and Lexington (\$145,261.29). All areas within Davidson County are at a relatively moderate percentile of average EAL score, except for Midway and Wallburg which have a relatively low percentile average EAL. All areas within the county area are also considered to be at a relatively moderate percentile of average risk score, except for Wallburg which has a relatively low percentile risk score.

In Randolph County, the average expected annual frequency is approximately 1.71, the total EAL of all census tracts is \$1,110,886.90, the average EAL score is 66.35 (relatively high percentile), and the average Risk Score is 68.21 (relatively high percentile). The three jurisdictions with the highest total EAL are Asheboro (\$580,650.01), Archdale (\$198,698.57), Randleman (\$127,935.59). All areas in Randolph County have relatively high percentile average EAL score, except for Trinity which has a relatively moderate percentile average EAL score, and all areas within the county have relatively high percentile average Risk Score, except for Trinity which has a relatively moderate percentile average Risk Score.

Table 5- 52: NRI Riverine Flooding Jurisdictional Summary

Riverine Flooding						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	1.8710	\$443,746.22	51.88	Relatively Moderate	53.17	Relatively Moderate
Denton	1.9167	\$2,836.45	40.51	Relatively Moderate	42.44	Relatively Moderate
Lexington	1.9167	\$145,261.29	54.63	Relatively Moderate	57.53	Relatively Moderate
Midway	1.4375	\$16,285.34	34.12	Relatively Low	33.76	Relatively Moderate
Thomasville	1.8788	\$156,544.29	55.48	Relatively Moderate	57.52	Relatively Moderate
Wallburg	1.4375	\$27,118.91	39.95	Relatively Low	39.05	Relatively Low
Unincorporated Area	1.92	\$170,724.69	54.68	Relatively Moderate	54.73	Relatively Moderate
Randolph County	1.7083	\$1,110,886.90	66.35	Relatively High	68.21	Relatively High
Archdale	2.0602	\$198,698.57	61.13	Relatively High	63.34	Relatively High
Asheboro	1.7083	\$580,650.01	66.57	Relatively High	69.20	Relatively High
Franklinville	1.7083	\$120,196.54	65.25	Relatively High	67.71	Relatively High
Liberty	1.7083	\$58,512.06	68.81	Relatively High	72.90	Relatively High
Ramseur	1.7083	\$90,155.14	69.53	Relatively High	73.07	Relatively High
Randleman	1.7083	\$127,935.59	64.13	Relatively High	65.69	Relatively High
Seagrove	1.7083	\$24,600.53	67.77	Relatively High	64.97	Relatively High
Staley	1.7083	\$16,953.32	62.19	Relatively High	64.65	Relatively High
Trinity	1.7604	\$72,004.42	53.36	Relatively Moderate	54.52	Relatively Moderate
Unincorporated Area	1.71	\$58,679.33	62.48	Relatively High	61.65	Relatively High

Riverine Flooding						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Total	1.8365	\$1,575,519.28	58.26	Relatively Moderate	59.88	Relatively Moderate

5.11.8 Impact

Flood events will remain a threat to all jurisdictions in the Region, and the probability of future occurrences will remain highly likely (100 percent annual probability). The probability of future flood events based on magnitude and according to best available data is illustrated in the figure above, which indicates those areas susceptible to the 1-percent annual chance flood (100-year floodplain) and the 0.2-percent annual chance flood (500-year floodplain).

It can be inferred from the floodplain maps, previous occurrences, and repetitive loss properties that risk varies throughout the Region. For example, the City of Asheboro has more floodplains and thus likely has more property at risk of flooding than the other municipalities. Mitigation actions may be warranted, particularly for repetitive loss properties.

People

Certain health hazards are common to flood events. While such problems are often not reported, three general types of health hazards accompany floods. The first comes from the water itself. Floodwaters carry anything that was on the ground that the upstream runoff picked up, including dirt, oil, animal waste, and lawn, farm, and industrial chemicals. Pastures and areas where farm animals are kept, or their wastes are stored can contribute polluted waters to the receiving streams.

Floodwaters also saturate the ground, which leads to infiltration into sanitary sewer lines. When wastewater treatment plants are flooded, there is nowhere for the sewage to flow. Infiltration and lack of treatment can lead to overloaded sewer lines that can back up into low-lying areas and homes. Even when it is diluted by flood waters, raw sewage can be a breeding ground for bacteria such as E. coli and other disease-causing agents.

The second type of health problem arises after most of the water has gone. Stagnant pools can become breeding grounds for mosquitoes, and wet areas of a building that have not been properly cleaned breed mold and mildew. A building that is not thoroughly cleaned becomes a health hazard, especially for small children and the elderly.

Another health hazard occurs when heating ducts in a forced air system are not properly cleaned after inundation. When the furnace or air conditioner is turned on, the sediments left in the ducts are circulated throughout the building and breathed in by the occupants. If the City water system loses pressure, a boil order may be issued to protect people and animals from contaminated water. 14.8% of residents in Davidson County and 15% of residents in Randolph County reported that they had a disability. Residents in the planning area who require medical

equipment, have limited mobility, or have limited overall ability to respond or prepare for flooding are expected to be disproportionately impacted by flooding damages and at an increased risk of injury or death.

Although technology has become a crucial resource in the communication of extreme heat impacts, occurrences, preparedness and safety, not all residents in the area have access to the internet, a computer, or even telephone service in their housing units. Residents in the planning area without a computer (5.7% of residents in Davidson County and 4.7% of residents in Randolph County), telephone service (0.6% of residents in Davidson County and 0.8% of residents in Randolph County), or internet access (0.6% of residents in Davidson County and 0.8% of residents in Randolph County) in their households may not be able to receive important messages about drought conditions, including notifications about water quality or water shortages. Communication of emergency alerts through telephone messages and reverse 911 systems have become a crucial tool to alert residents of imminent hazardous conditions, which is a problem for those residents who do not have telephone service in their housing units.

The third problem is the long-term psychological impact of having been through a flood and seeing one's home damaged and personal belongings destroyed. The cost and labor needed to repair a flood-damaged home puts a severe strain on people, especially the unprepared and uninsured. There is also a long-term problem for those who know that their homes can be flooded again. The resulting stress on floodplain residents takes its toll in the form of aggravated physical and mental health problems.

Economy

During floods (especially flash floods), roads, bridges, farms, houses, and automobiles are destroyed. Additionally, the local government must deploy firemen, police and other emergency response personnel and equipment to help the affected area. It may take years for the affected communities to be re-built and businesses to return to normal. Property damage to impacted areas can have a negative impact for residents in the planning area who are impacted by the effects of flooding to replace property, repair damages, or restore property to its original state.

Natural Environment

During a flood event, chemicals and other hazardous substances may end up contaminating local water bodies. Flooding kills animals and in general disrupts the ecosystem. Snakes and insects may also make their way to the flooded areas.

First Responders

First responders are at risk when attempting to rescue people from their homes. They are subject to the same health hazards as the public mentioned above. Flood waters may prevent access to areas in need of response or the flood may prevent access to the critical facilities themselves which may prolong response time.

Climate Change

According to the NCCSR³⁷, it is likely that extreme precipitation will lead to increases in inland flooding in NC. The NCCSR also reports there is a high confidence that frequency and intensity of heavy precipitation are projected to increase over the 21st century, and medium confidence that future heavy rainfall will increase flooding statewide.

OTHER HAZARDS

5.12 Wildfire

5.12.1 Background

A wildfire is any outdoor fire (i.e., grassland, forest, brush land) that is not under control, supervised, or prescribed.³⁸ Wildfires are part of the natural management of forest ecosystems but may also be caused by human factors.

Nationally, over 80 percent of forest fires are started by negligent human behavior such as smoking in wooded areas or improperly extinguishing campfires. The second most common cause of wildfire is lightning. In North Carolina, most fires are caused by debris burning.

There are three classes of wildland fires: surface fire, ground fire, and crown fire. A surface fire is the most common of these three classes and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire (muck fire) is usually started by lightning or human carelessness and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees. Wildfires are usually signaled by dense smoke that fills the area for miles around.

Wildfire probability depends on local weather conditions, outdoor activities such as camping, debris burning, construction, and the degree of public cooperation with fire prevention measures. Drought conditions and other natural hazards (such as tornadoes, hurricanes, etc.) increase the probability of wildfire by producing fuel in both urban and rural settings.

Many individual homes and cabins, subdivisions, resorts, recreational areas, organizational camps, businesses, and industries are located within high wildfire hazard areas. Furthermore, the increasing demand for outdoor recreation places more people in wildlands during holidays, weekends, and vacation periods. Unfortunately, wildland residents and visitors are rarely educated or prepared for wildfire events that can sweep through the brush and timber and destroy property within minutes.

Wildfires can result in severe economic losses as well. Businesses that depend on timber, such as paper mills and lumber companies, experience losses that are often passed on to consumers

³⁷ North Carolina Institute for Climate Studies [NCICS]. (2020). North Carolina Climate Science Report. NCICS. Retrieved January 29, 2025, from https://ncics.org/wp-content/uploads/2020/10/NC_Climate_Science_Report_FullReport_Final_revised_September2020.pdf

³⁸ Prescription burning, or “controlled burn,” undertaken by land management agencies is the process of igniting fires under selected conditions, in accordance with strict parameters.

through higher prices and sometimes jobs are lost. The high cost of responding to and recovering from wildfires can deplete State resources and increase insurance rates. The economic impact of wildfires can also be felt in the tourism industry if roads and tourist attractions are closed due to health and safety concerns.

State and local governments can impose fire safety regulations on home sites and developments to help curb wildfire. Land treatment measures such as fire access roads, water storage, helipads, safety zones, buffers, firebreaks, fuel breaks, and fuel management can be designed as part of an overall fire defense system to aid in fire control. Fuel management, prescribed burning, and cooperative land management planning can also be encouraged to reduce fire hazards.

5.12.2 Location and Spatial Extent

The entire the Region is at risk to a wildfire occurrence. However, several factors such as drought conditions or high levels of fuel on the forest floor, may make wildfire more likely. Furthermore, areas in the wildland-urban interface are particularly susceptible to fire hazards as populations about formerly undeveloped areas. The Wildfire Ignition Density data shown in the figure below gives an indication of historic location of wildfires in the Region. Data was collected from the South Wildfire Risk Assessment Portal³⁹. The Fire Intensity Scale (FIS) layer was used to develop maps used to show risk. The Fire Intensity Scale is based on the severity wildfire would be if it occurred but does not provide a measure of susceptibility. See Table 5- 53 for descriptions of the FIS.

Table 5- 53: SWRAP Fire Intensity Scale Descriptions and definitions

Class	Rating	Description
1	Very Low	Very small, discontinuous flames, usually less than 1 foot in length; very low rate of spread; no spotting. Fires are typically easy to suppress by firefighters with basic training and non-specialized equipment.
2	Low	Small flames, usually less than two feet long; small amount of very short-range spotting possible. Fires are easy to suppress by trained firefighters with protective equipment and specialized tools.
3	Moderate	Flames up to 9 feet in length; short-range spotting is possible. Trained firefighters will find these fires difficult to suppress without support from aircraft or engines, but dozer and plows are generally effective. Increasing potential for harm or damage to life and property.
4	High	Large Flames, up to 40 feet in length; short-range spotting common; medium range spotting possible. Direct attack by trained firefighters, engines, and dozers is generally ineffective, indirect attack may be effective. Significant potential for harm or damage to life and property.

³⁹ Pyrologix. (2023). Characteristic Fire Intensity Scale [Dataset]. In Southern Wildfire Risk Assessment Portal. Southern Wildfire Risk Assessment.

Class	Rating	Description
5	Very High	Flames exceed 200 feet in length; expect extreme fire behavior.

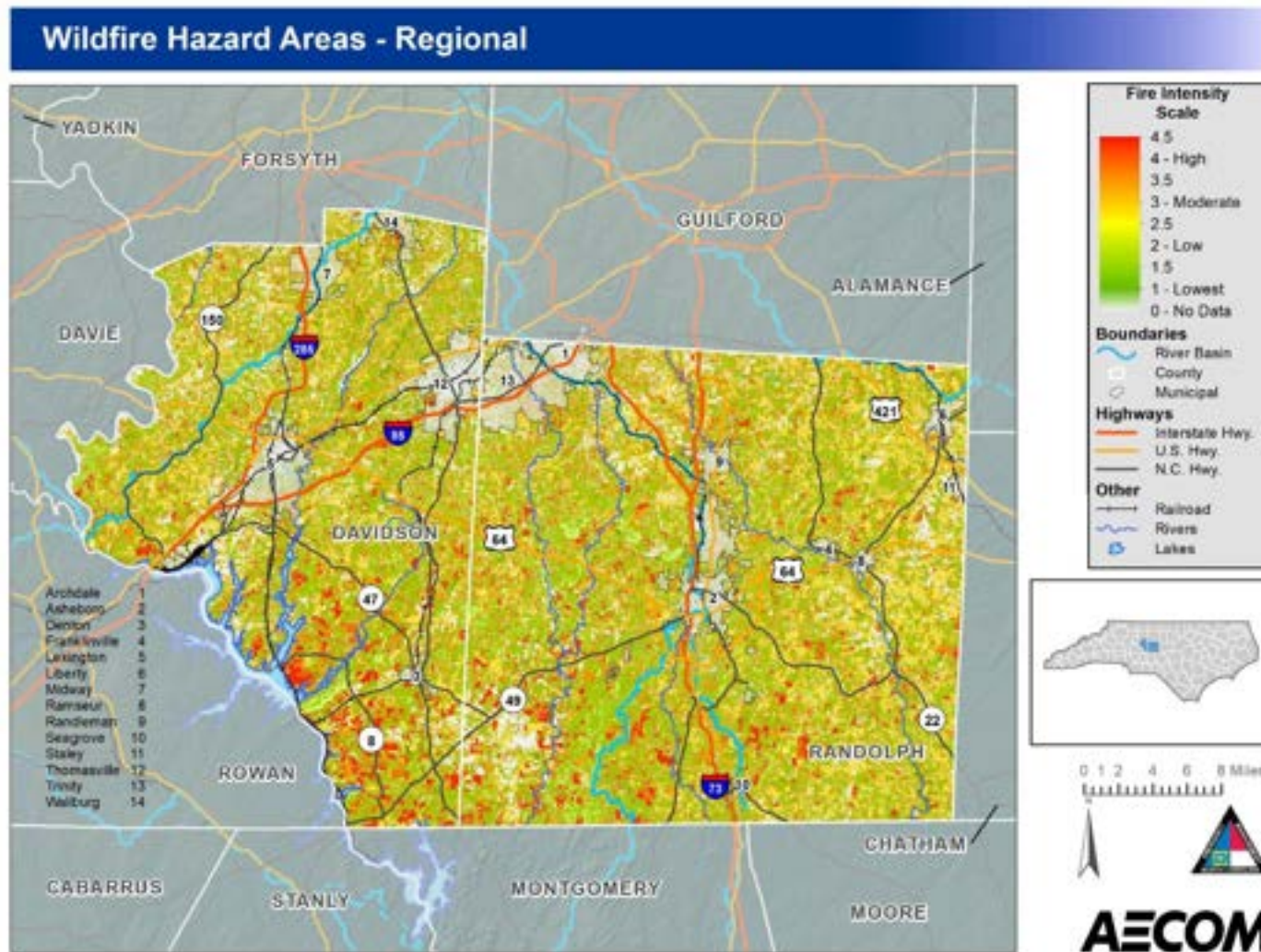


Figure 5- 83: Wildfire Hazard Areas - Regional

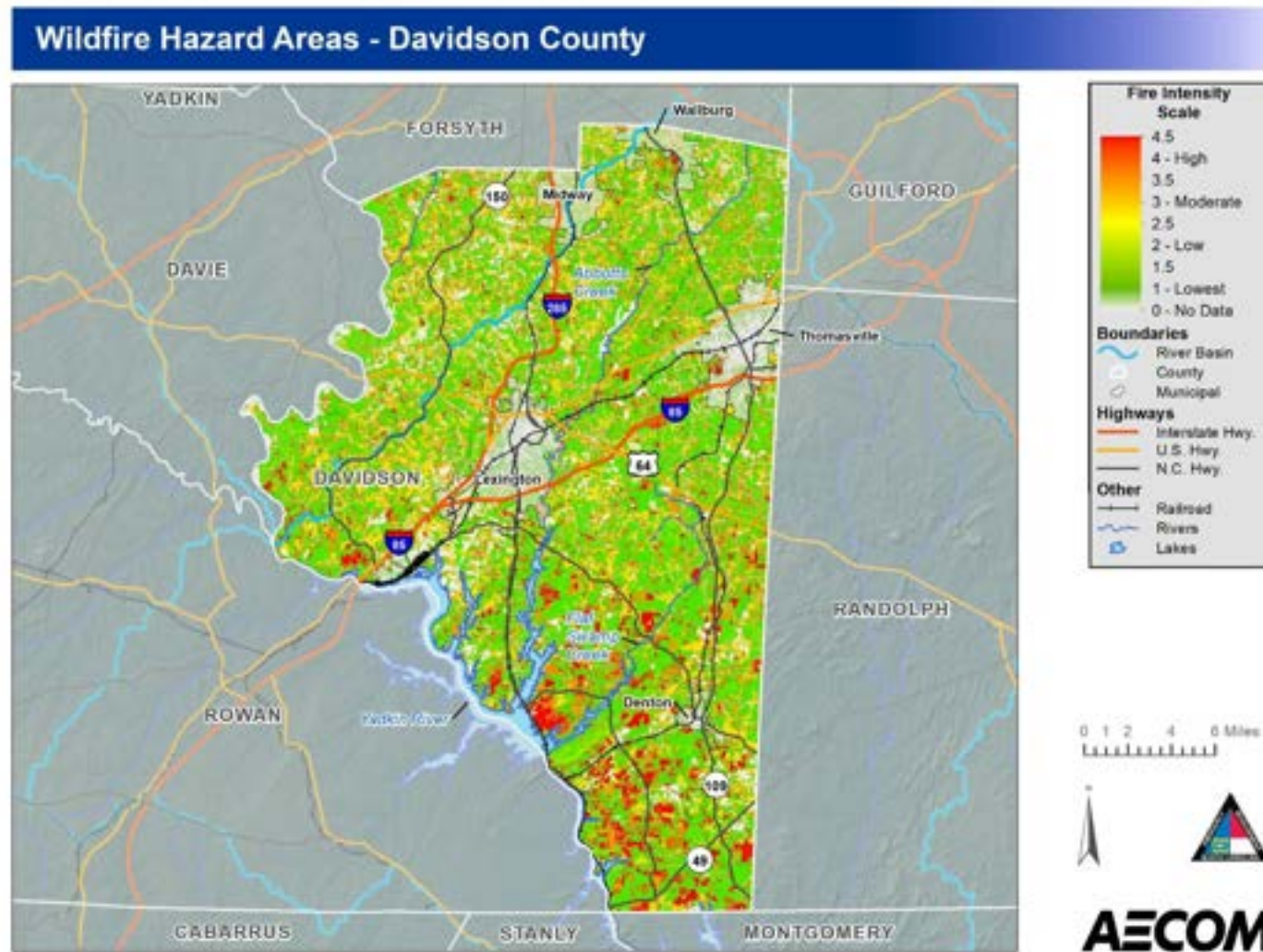


Figure 5- 84: Wildfire Hazard Areas – Davidson County

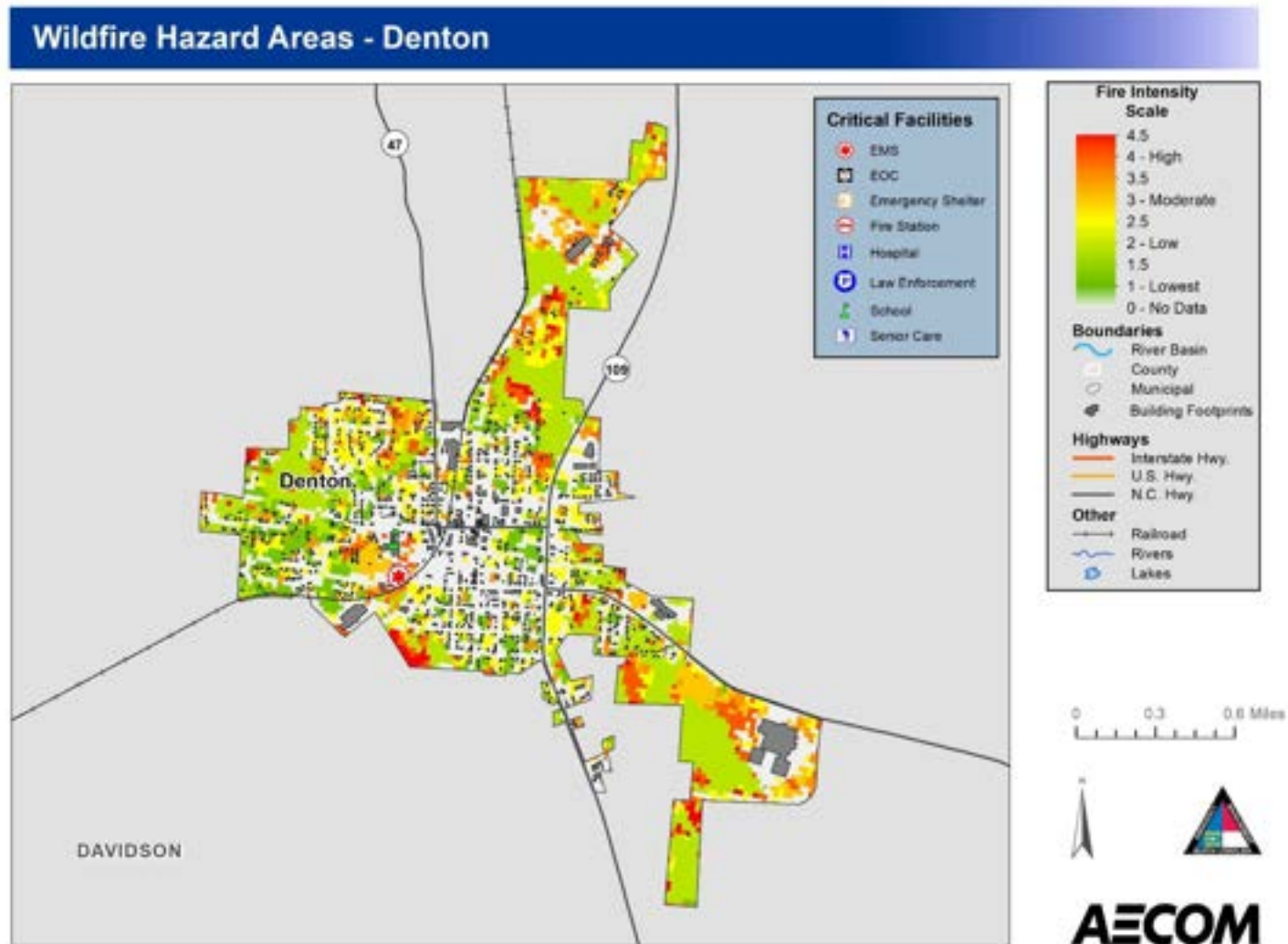


Figure 5- 85: Wildfire Hazard Areas - Denton

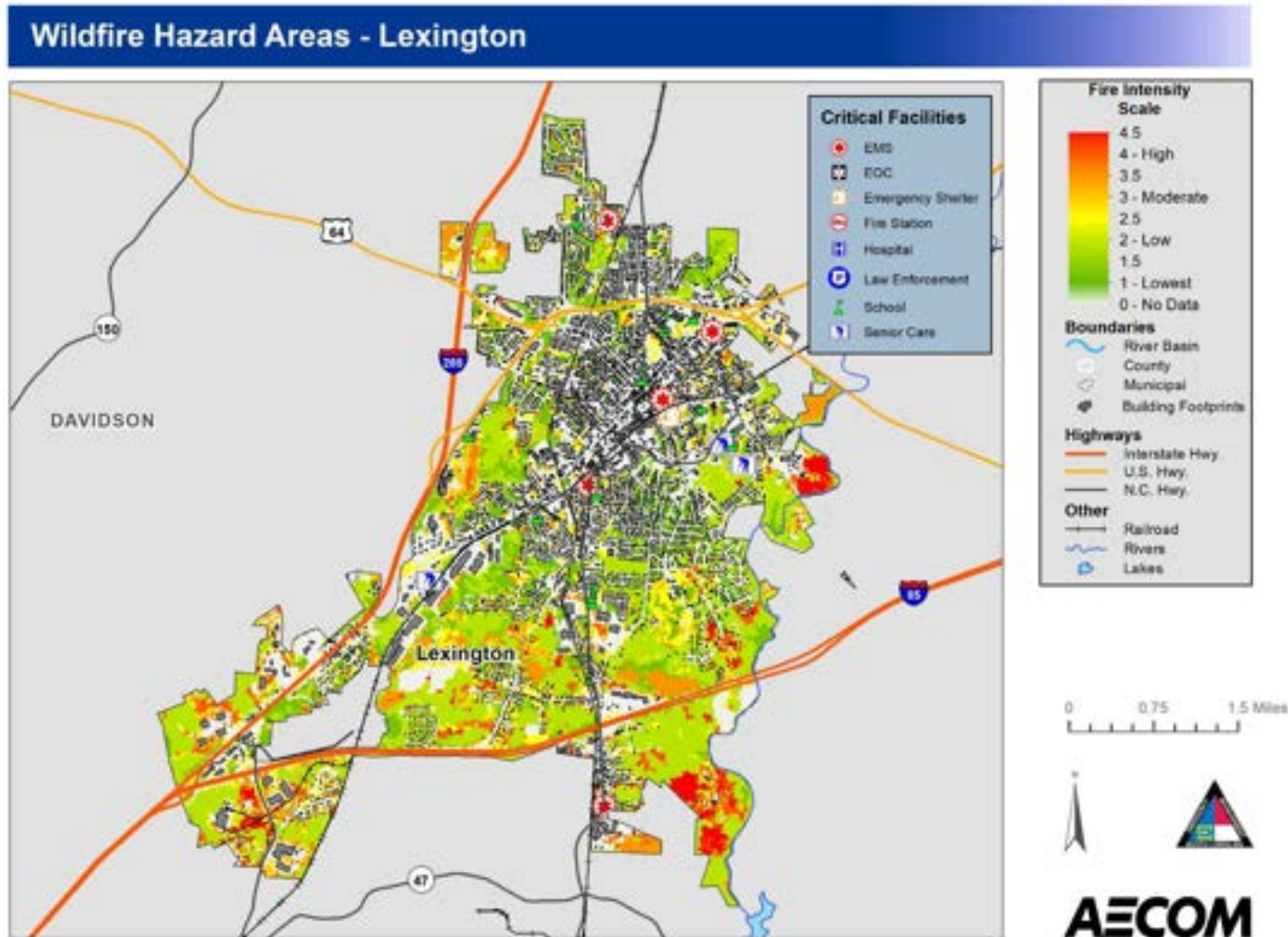


Figure 5- 86: Wildfire Hazard Areas - Lexington

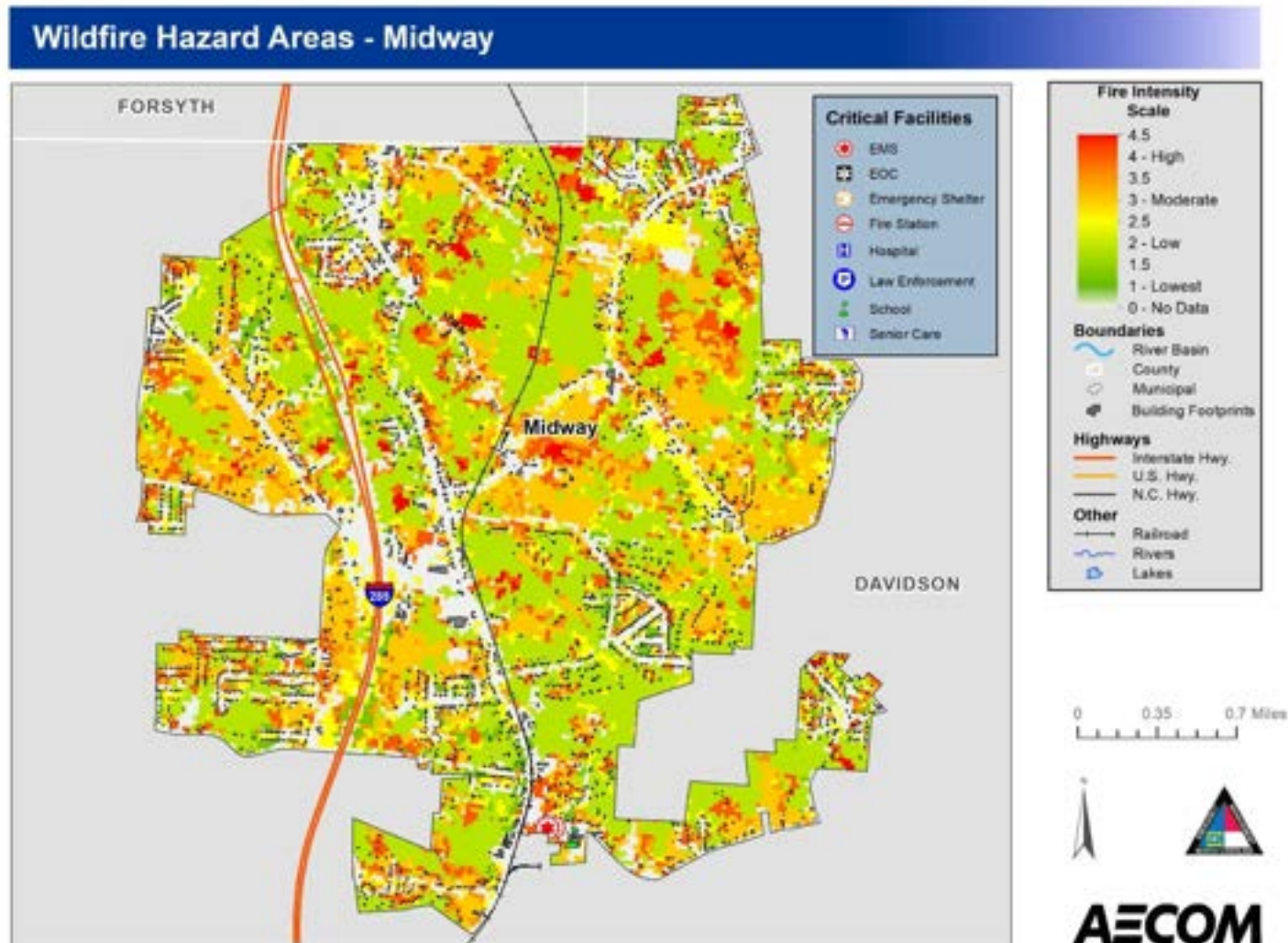


Figure 5- 87: Wildfire Hazard Areas - Midway

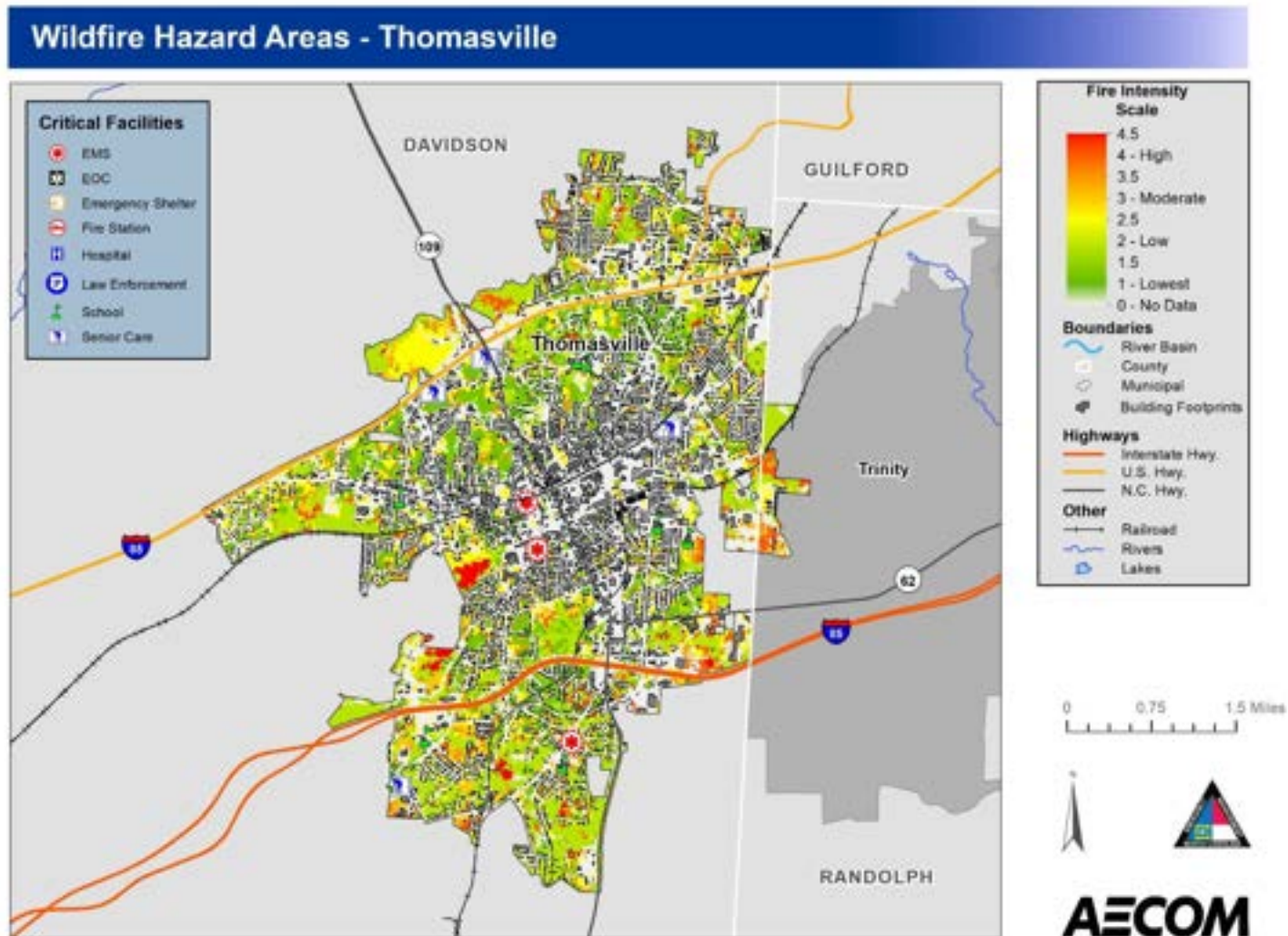


Figure 5- 88: Wildfire Hazard Areas - Thomasville

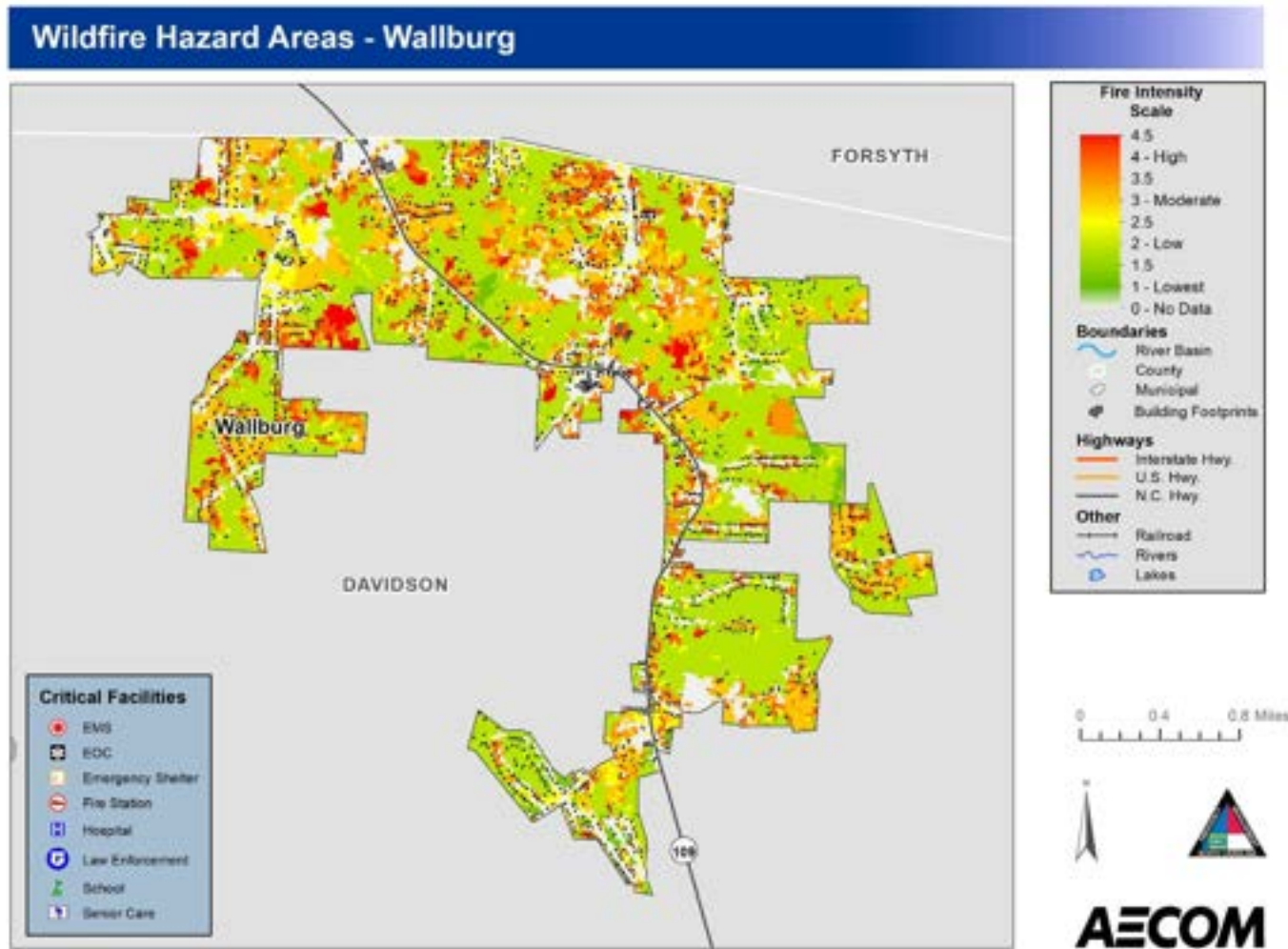


Figure 5- 89: Wildfire Hazard Areas - Wallburg

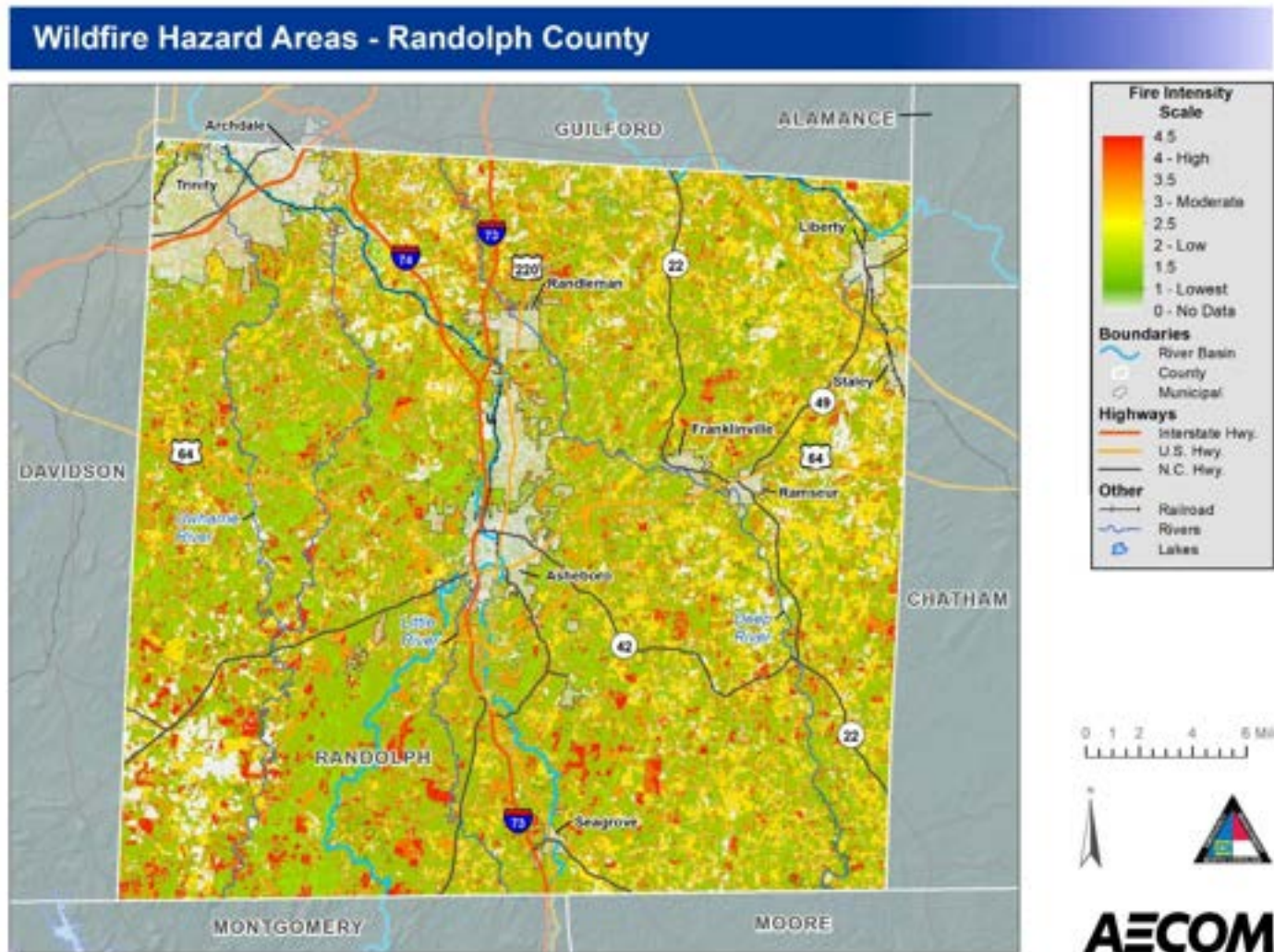


Figure 5- 90: Wildfire Hazard Areas – Randolph County

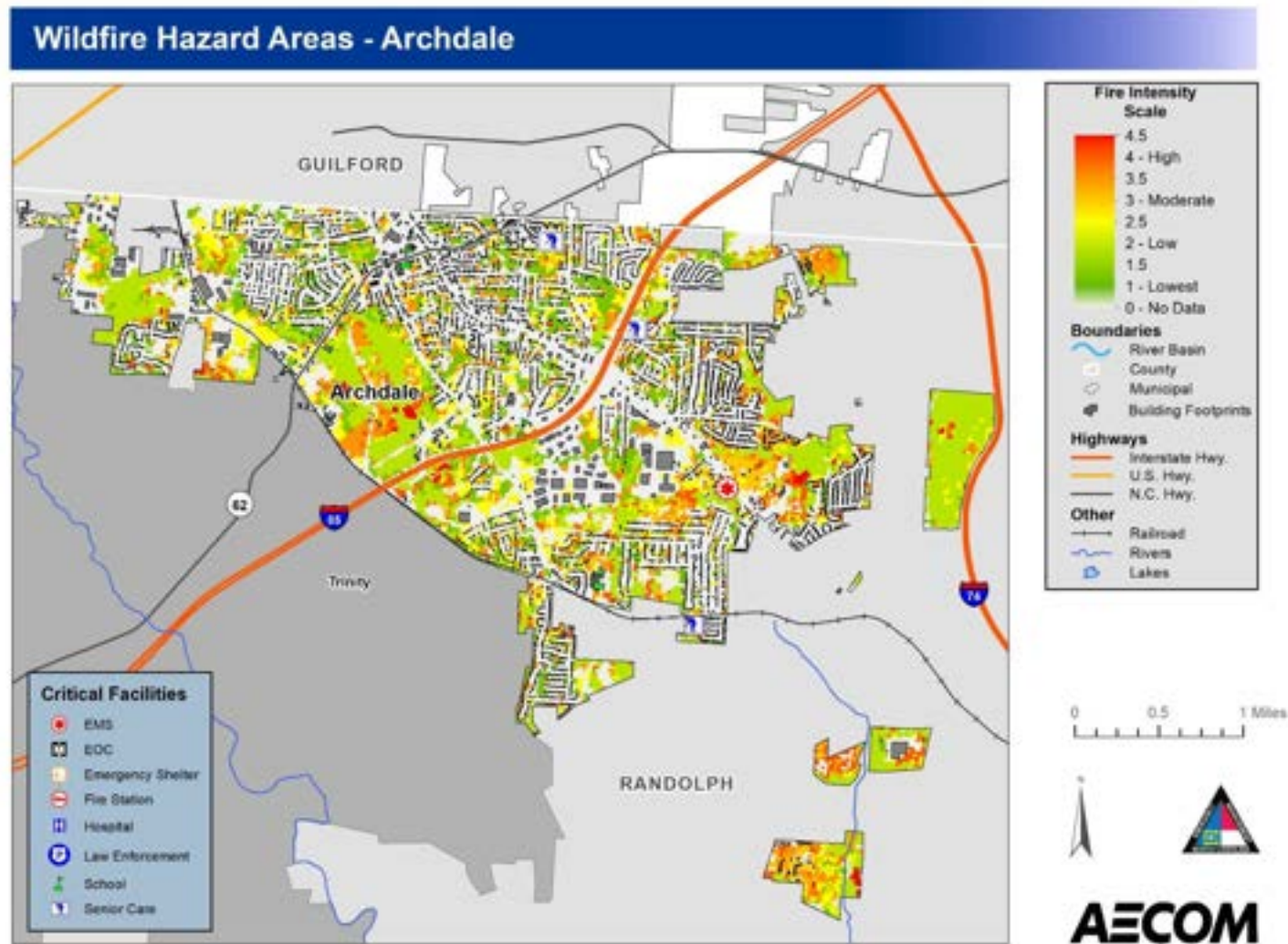


Figure 5- 91: Wildfire Hazard Areas - Archdale

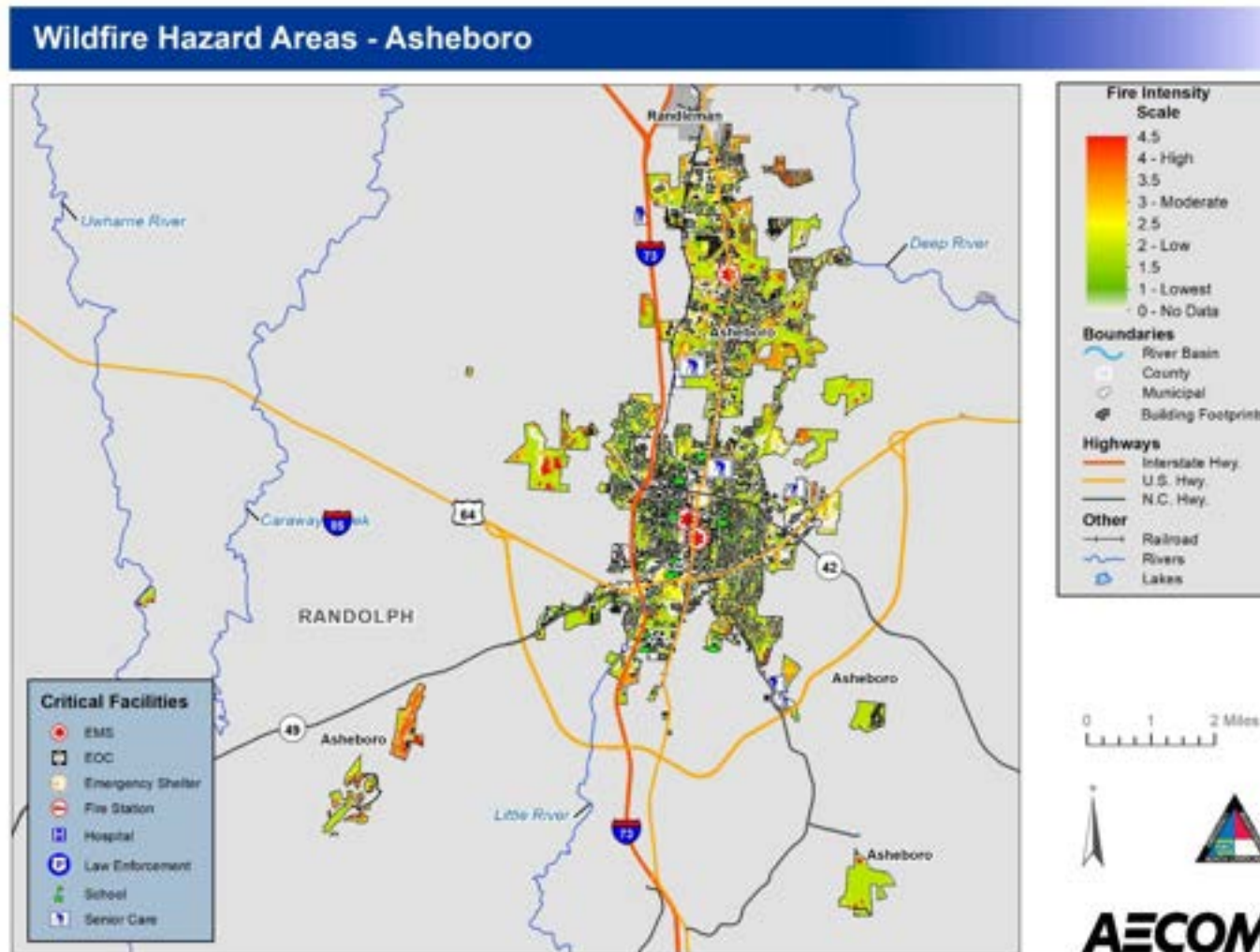


Figure 5- 92: Wildfire Hazard Areas - Asheboro

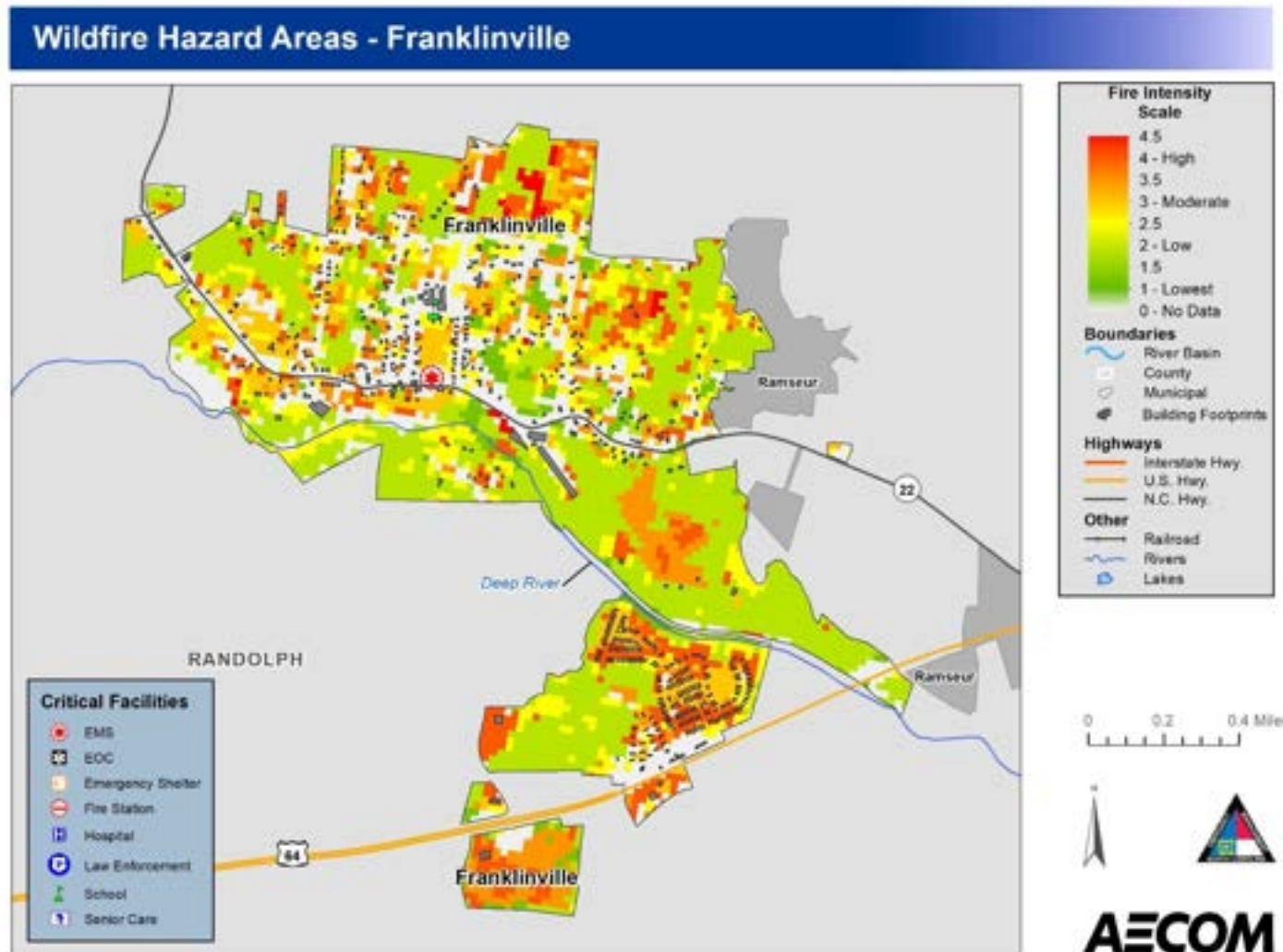


Figure 5- 93: Wildfire Hazard Areas - Franklinville

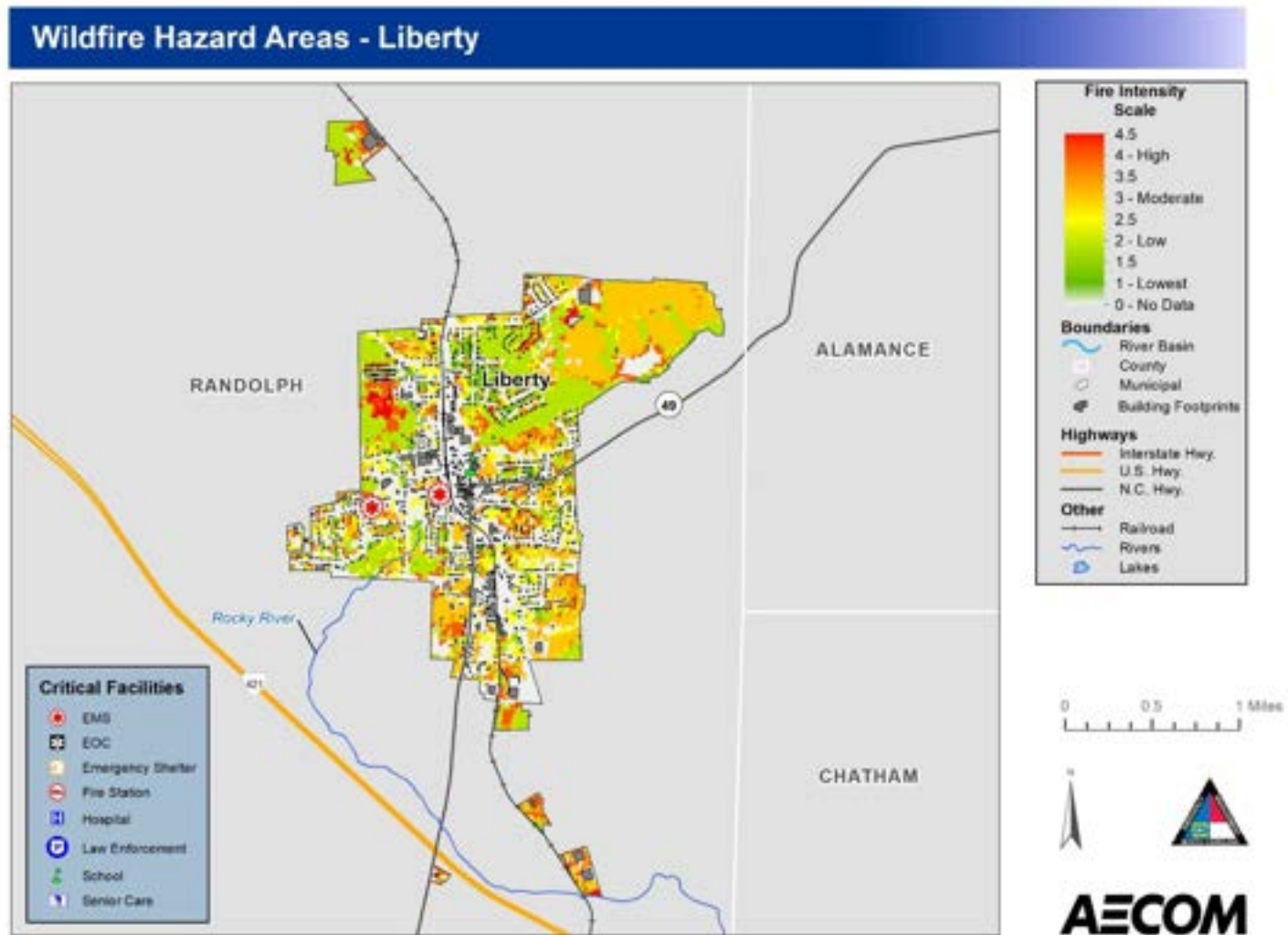


Figure 5- 94: Wildfire Hazard Areas - Liberty

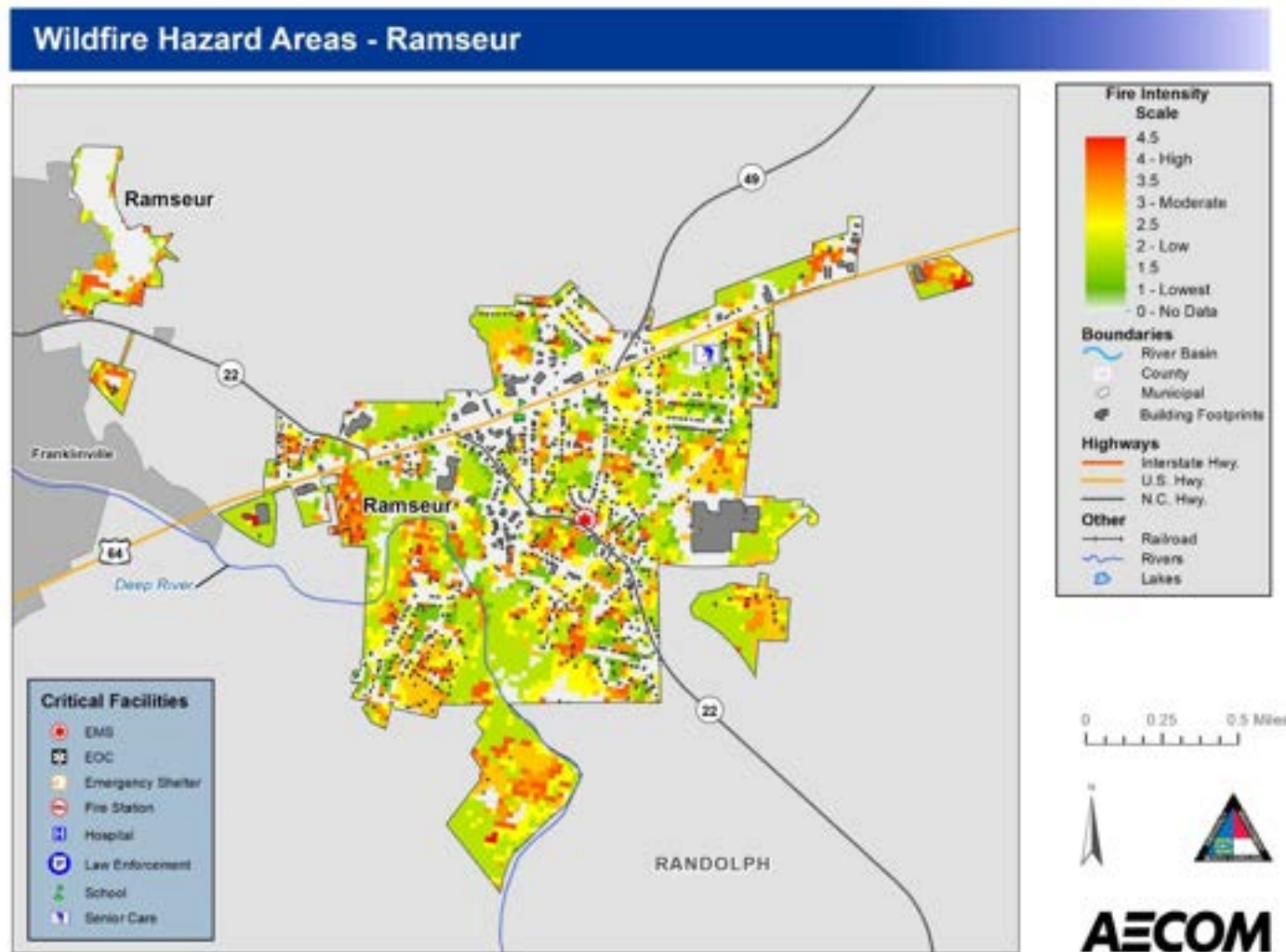


Figure 5- 95 Wildfire Hazard Areas - Ramseur

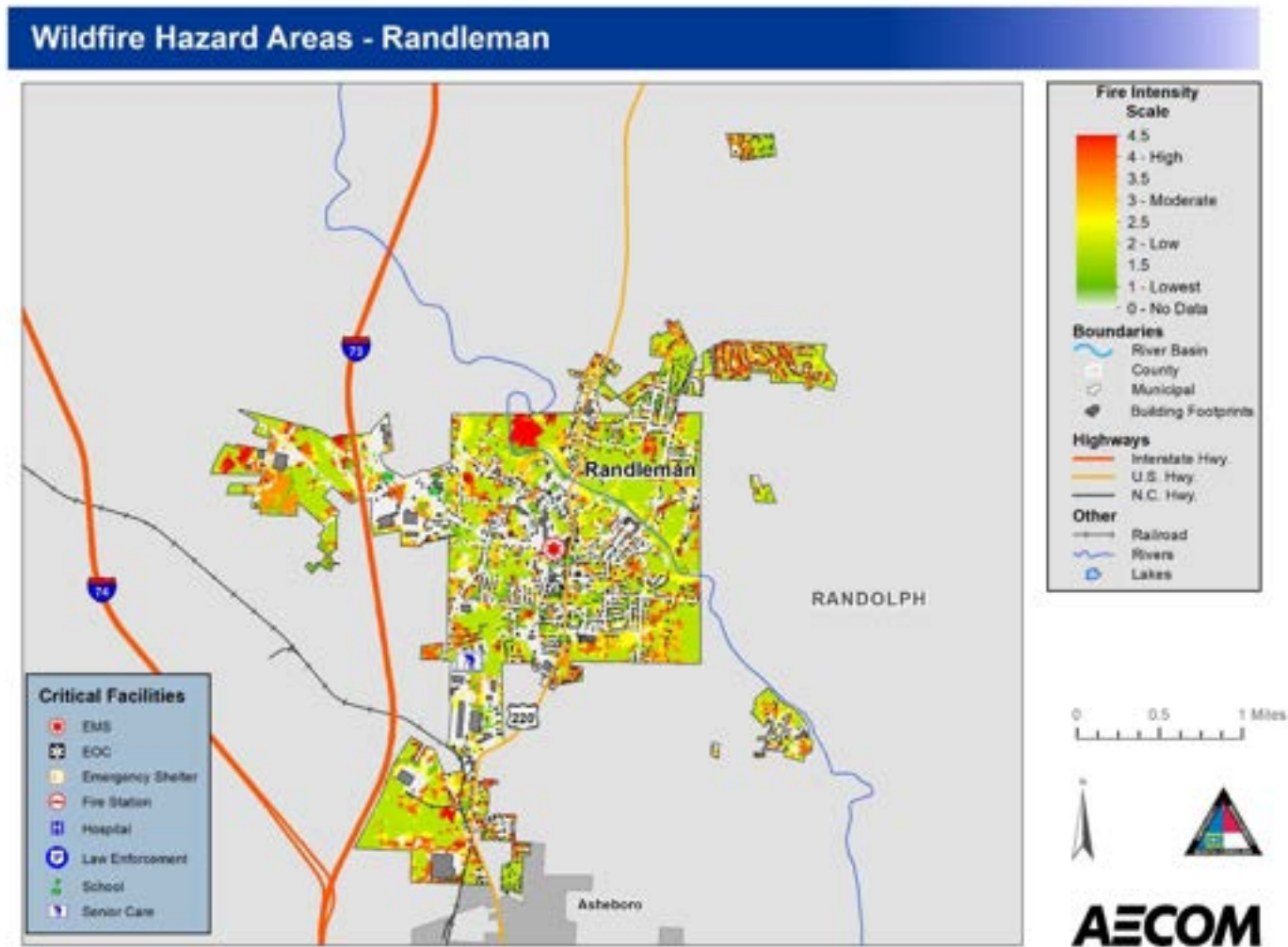


Figure 5- 96: Wildfire Hazard Areas - Randleman

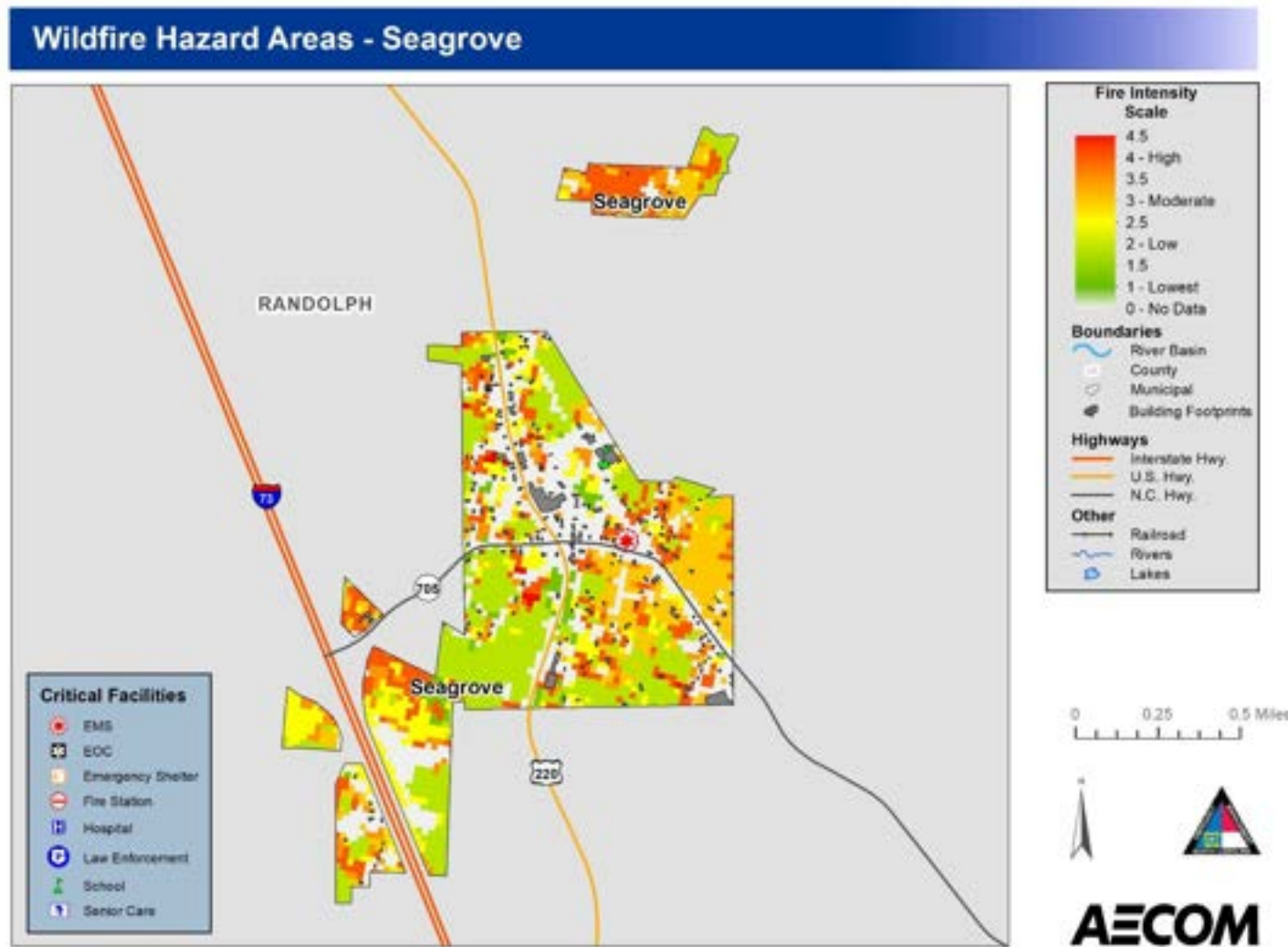


Figure 5- 97: Wildfire Hazard Areas - Seagrove

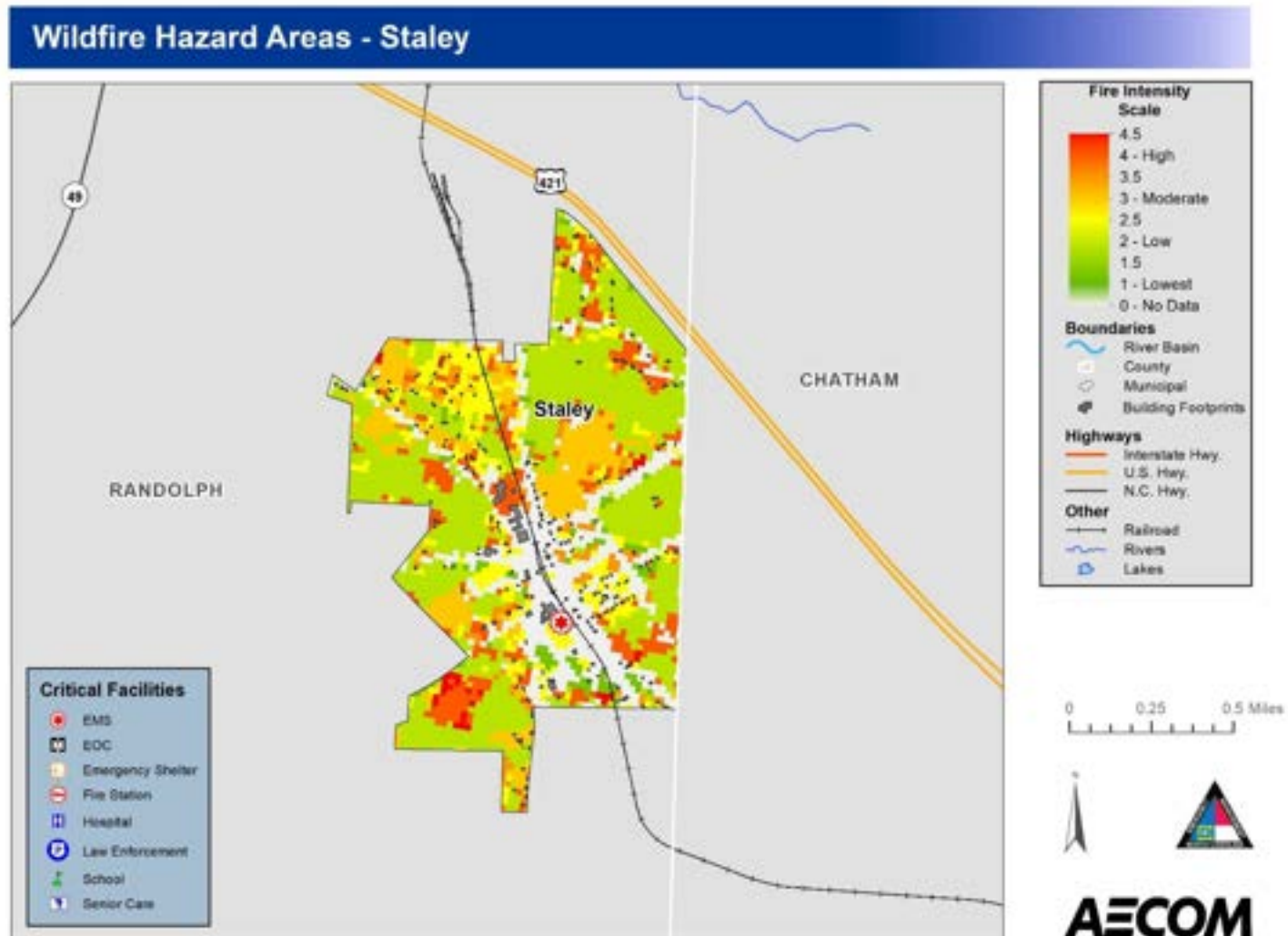


Figure 5- 98: Wildfire Hazard Areas - Staley

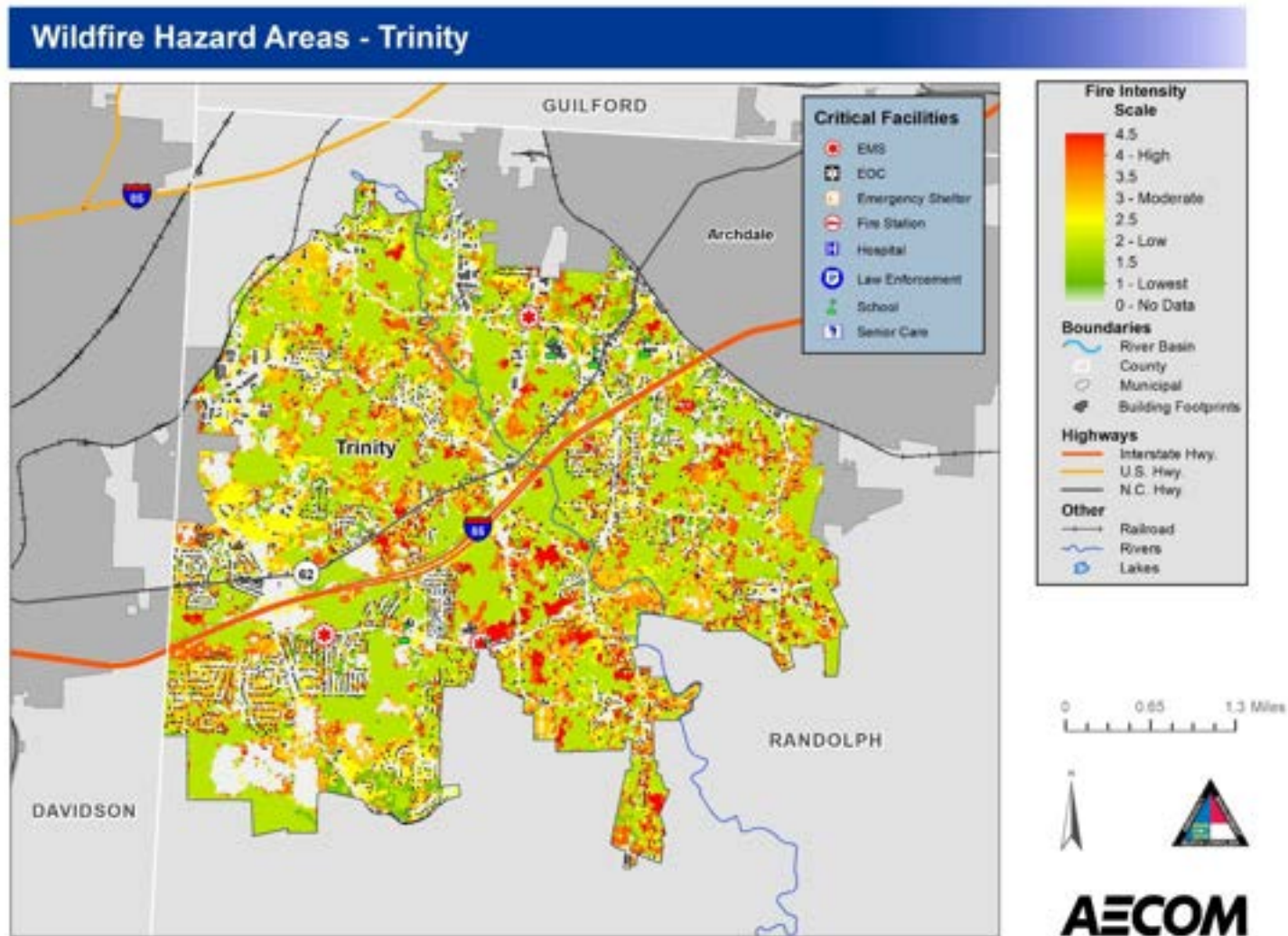


Figure 5- 99 Wildfire Hazard Areas - Trinity

5.12.3 Extent

The National Interagency Fire Center (NIFC) reports wildfire incidents throughout the U.S. and provides detailed information about discovery size of wildfires, incident overall sizes, causes of wildfires, fire discovery dates, and other important details to understand the prevalence of wildfires in the planning area. In Davidson County, there were 0.93 acres of area burned by wildfires between 2014 and 2024, and in Randolph County, there were 128.5 acres of area burned by wildfires between 2014 and 2024, according to the NIFC.

Table 5- 54: Incidents reported from 2014 to 2024 from the National Interagency Fire Center⁴⁰

Incident Size	Fire Acres when Discovered	Cause of Fire	Fire Discovery Date	Incident Name	City	County
0.03		Undetermined	11/22/2016	Decker Road	Thomasville	Davidson
0.5		Human	7/7/2014	Honeybee		Davidson
		Human	7/6/2014	Cedar		Davidson
0.3	0.3	Human	3/4/2018	49 FIRE		Davidson
0.1		Human	12/6/2024	Bob Allred	Lexington	Davidson
120		Unknown	3/12/2020	UWH Thornburg RX		Randolph
0.5		Human	7/8/2014	Allentate		Randolph
5.5	5.5	Human	4/3/2020	ROBBINS BRANCH		Randolph
0.5		Human	11/20/2016	LASITER MILL		Randolph
2	2	Human	12/28/202	COOLERS KNOB 2		Randolph
129.43	Davidson Randolph Total Acres Burned Reported					

5.12.4 Historical Occurrences

Figure 5- 100 shows the Wildfire Ignition Density in the Region based on data from the Southern Group of State Foresters. This data is based on historical fire ignitions and the likelihood of a wildfire igniting in an area. Occurrence is derived by modeling historic wildfire ignition locations

⁴⁰ National Interagency Fire Center. (2025). Wildland Fire Incident Locations [Dataset]. <https://data-nifc.opendata.arcgis.com/datasets/nifc::wildland-fire-incident-locations/about>

to create an average ignition rate map. This is measured in the number of fires per year per 1,000 acres.

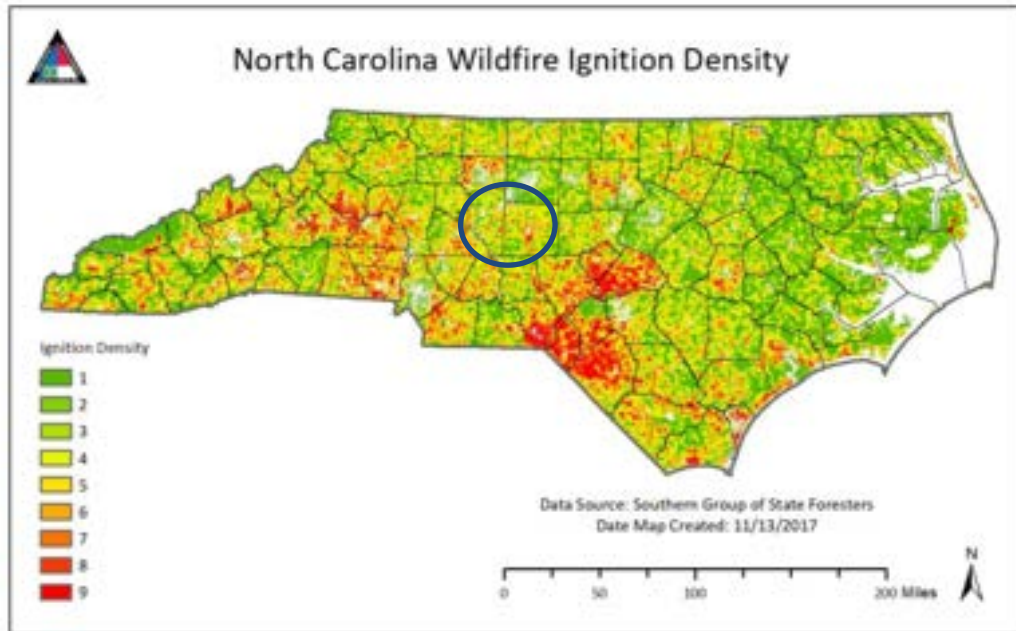


Figure 5- 100 North Carolina Wildfire Ignition Density

Source: Southern Wildfire Risk Assessment

Table 5- 55 provides a summary table for wildfire occurrences in the Region from 2014 to 2024, and Table 5- 54 shows the different fire incidents, their locations, and acres burned according to the NIFC. The largest fire reported between 2014 and 2024 was the UWH Thornburg RX fire which burned approximately 120 acres in Randolph County and the cause of the fire is unknown.

Table 5- 55: Summary Table of Wildfire Occurrences (2014-2024)⁴¹ *

	Davidson County	Randolph County
Total Acres Burned	0.93	128.5

5.12.5 Probability of Future Occurrences

Wildfire events will be an ongoing occurrence in the Region. Wildfire hazard maps above show that there is some probability a wildfire will occur throughout the Region. However, the likelihood of wildfires increases during drought cycles and abnormally dry conditions. Fires are likely to stay small but could increase due local climate and ground conditions. Dry, windy conditions with an accumulation of forest floor fuel (potentially due to ice storms or lack of fire) could create

⁴¹ National Interagency Fire Center. (2025). Wildland Fire Incident Locations [Dataset]. <https://data-nifc.opendata.arcgis.com/datasets/nifc::wildland-fire-incident-locations/about>

conditions for a large fire that spreads quickly. It should also be noted that some areas do vary in risk. For example, highly developed areas are less susceptible unless they are located near the urban- wildland boundary. The risk will also vary due to assets. Areas in the urban-wildland interface will have much more property at risk, resulting in increased vulnerability and need to mitigate compared to rural, forested areas.

To represent the wildfire risk in the planning area, the NRI wildfire risk data was used. The NRI defines wildfire as an unplanned fire that burns in natural or wildland areas such as forest, shrubs, grasslands, or prairies. The NRI utilizes the USDA Forest Service Spatial Datasets of Probabilistic Wildfire Risk Components for the United States⁴². According to the NRI, census tracts in the planning area have an average of 0.000019 expected annual chance, a total of \$105,883.83 EAL, an average EAL score of 66 (relatively high percentile), and an average Risk Score of 68.73 (relatively high percentile).

Davidson County has an average expected annual frequency of 0.000012, a total EAL of \$57,016.12, an average EAL of 67.72 (Relatively High percentile), and an average Risk Score of 69.41 (relatively high percentile). The three areas with the highest EAL total are unincorporated areas (\$19,243.89), Lexington (\$15,460.32), and Thomasville (\$13,938.01).

Randolph County has an average expected annual frequency of 0.000028, a total EAL of \$47,578.29, an average EAL rating of 65.84 (relatively high percentile), and an average risk score of 68.18 (relatively high percentile). The three jurisdictions with the highest total EAL are Asheboro (\$15,886.50), Franklinville (\$8,414.75), and unincorporated areas (\$8,044.58).

Table 5- 56: NRI jurisdictional wildfire risk summary

Wildfire						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Davidson County	0.000012	\$57,016.12	67.72	Relatively High	69.41	Relatively High
Denton	0.000012	\$1,491.48	71.12	Relatively High	73.94	Relatively High
Lexington	0.000011	\$15,460.32	65.46	Relatively High	68.38	Relatively High
Midway	0.000017	\$6,242.75	66.46	Relatively High	66.57	Relatively High
Thomasville	0.000011	\$13,938.01	66.60	Relatively High	69.38	Relatively High
Wallburg	0.000018	\$5,893.99	65.63	Relatively High	65.30	Relatively High

⁴² Short, K. C., Finney, M. A., Vogler, K. C., Scott, J. H., Gilbertson-Day, J. W., & Grenfell, I. C. (2020). Spatial datasets of probabilistic wildfire risk components for the United States (270m) (2nd Edition) [Dataset]. In Forest Service Research Data Archive. <https://doi.org/10.2737/rds-2016-0034-2>

Wildfire						
Jurisdiction	Expected Annual Frequency	EAL			Risk Score	
		Value	Score	Rating	Score	Rating
Unincorporated Area	0.000012	\$19,243.89	70.53	Relatively High	71.04	Relatively High
Randolph County	0.000028	\$47,578.29	65.84	Relatively High	68.18	Relatively High
Archdale	0.000012	\$7,955.48	61.27	Relatively High	63.55	Relatively High
Asheboro	0.000014	\$15,886.50	63.80	Relatively High	67.41	Relatively High
Franklinville	0.000057	\$8,414.75	68.29	Relatively High	70.91	Relatively High
Liberty	0.000041	\$4,896.70	76.46	Relatively High	78.76	Relatively High
Ramseur	0.000045	\$3,794.34	65.08	Relatively High	68.79	Relatively High
Randleman	0.000017	\$6,855.74	69.75	Relatively High	72.21	Relatively High
Seagrove	0.000102	\$2,879.77	77.75	Relatively High	76.48	Relatively High
Staley	0.000045	\$2,366.79	76.15	Relatively High	77.70	Relatively High
Trinity	0.000011	\$4,150.99	65.89	Relatively High	68.27	Relatively High
Unincorporated Area	0.000068	\$8,044.58	69.74	Relatively High	69.20	Relatively High
Total	0.000019	\$105,883.83	66.68	Relatively High	68.73	Relatively High

Table 5- 57: Acres of area and percent of total area within the planning area within the FIS scale from the SWRAP⁴³.

Characteristic Fire Intensity Scale Category	Randolph County		Davidson County	
	Acres	Percent	Acres	Percent
0	90,180	18 %	88,407	24 %
1	29,570	6 %	25,965	7 %
1.5	197,874	39 %	132,852	37 %
2	50,772	10 %	31,441	9 %

⁴³ Pyrologix. (2023). Characteristic Fire Intensity Scale [Dataset]. In Southern Wildfire Risk Assessment Portal. Southern Wildfire Risk Assessment.

Characteristic Fire Intensity Scale Category	Randolph County		Davidson County	
	Acres	Percent	Acres	Percent
2.5	5,065	1 %	4,470	1 %
3	105,729	21 %	69,338	19 %
3.5	15,596	3 %	5,991	2 %
4	10,907	2 %	4,821	1 %
4.5	1	0 %	1	0 %
5	0	0 %	0	0 %
> 5	0	0 %	0	0 %
Total	505,694	100 %	363,286	100 %

5.12.6 Impact

People

The potential health risk from wildfire events and the resulting diminished air quality is a concern to all jurisdictions in the Region. Exposure to wildfire smoke can cause serious health problems within a community, including asthma attacks and pneumonia, and can worsen chronic heart and lung diseases. Vulnerable populations include people with respiratory problems or with heart disease. Even healthy citizens may experience minor symptoms, such as sore throats and itchy eyes. 14.8% of Davidson County residents and 15% of Randolph County residents reported that they had a disability, and individuals with disabilities may be at an increased risk of health issues from wildfires.

Changes in Development or Housing Characteristics

There are no increased risks of future development or housing to wildfire hazards expected.

Economy

Wildfires can have significant short-term and long-term effects on the local economy. Wildfires, and extreme fire danger, may reduce recreation and tourism in and near the fires. If aesthetics are impaired, local property values can decline. Extensive fire damage to trees can significantly alter the timber supply, both through a short-term surplus from timber salvage and a longer-term decline while the trees regrow. Water supplies can be degraded by post-fire erosion and stream sedimentation.

Natural Environment

Wildfires cause damage to the natural environment, killing vegetation and occasionally animals. The risk of floods and debris flows increases due to the exposure of bare ground and the loss of vegetation. In addition, the secondary effects of wildfires, including erosion, landslides, introduction of invasive species, and changes in water quality, are often more disastrous than the fire itself.

First Responders

Public and firefighter safety is the priority in all wildland fire management activities. Wildfires are a real threat to the health and safety of the emergency services. Most fire-fighters in rural areas are 'retained'. This means that they are part-time and can be called away from their normal work to address fires.

Climate Change

According to the North Carolina Climate Science Report, higher annual and seasonal average temperatures and increase in vegetation drying will lead to an increased frequency of conditions which are favorable for fires. Increases in wildfires will pose a major threat to human health, emergency services, continuity of operations, the economy, and the planning area. As drought conditions are expected to increase in frequency, the likelihood of wildfires is also likely to increase.

5.13 Solar Flare

5.13.1 Background

According to NOAA, a solar flare is a large outburst of electromagnetic radiation from the Sun that can last from minutes to several hours. They are caused by large scale eruptions of magnetic flux known as coronal mass ejections (CMEs). These CMEs cause X-rays and extreme ultraviolet light to ionize in the Earth's atmosphere and impact the dayside of the planet by enhancing the absorption power of the ionosphere. In normal conditions, the ionosphere reflects radio waves, which allows for long distance radio communication without having a clear line-of-sight between the transmitter and the receiver.

However, when the absorption power of the ionosphere is enhanced by the activities of a solar flare, all radio waves are absorbed, and radio communication is reduced or impossible. These types of events are often referred to as radio blackouts and can have a drastic impact on communications, especially for emergency services officials who rely on radio communication. In addition, these events can disrupt GPS navigation systems, airline communications, military and environmental satellites, and electrical power grids.⁴⁴

Solar flares are classified physically on a logarithmic scale that increases in intensity by ten times at each new level. The scale is based on the intensity of the flare in a one-minute averaged NOAA/GOES XRS instrument's 0.1-0.8 nm spectral band. The scale measures five levels of intensity with "A" flares as the least intense, followed by "B" flares, "C" flares, "M" flares, and "X" flares as the largest. The naming scale corresponds with descriptors for each event: "C" flares are "Common," "M" flares are "Medium," and "X" flares are "Extreme."

In addition to the physical classification of the solar flare itself, NOAA has also developed a five-level scale to classify the radio blackout itself. Table 5- 58 shows the radio blackout scale and

⁴⁴ NOAA. The Serendipitous Discovery of Solar Flares.
http://www.noaa.gov/features/02_monitoring/1859solarstorm.html

provides descriptions of the typical solar flare intensity that is associated with each scale of radio blackout.

Table 5- 58: NOAA Radio Blackout Scale

SCALE	DESCRIPTION	EFFECT	PHYSICAL MEASURE	AVERAGE FREQUENCY (1 CYCLE = 11 YEARS)
R 5	Extreme	HF Radio: Complete HF (high frequency) radio blackout on the entire sunlit side of the Earth lasting for several hours. This results in no HF radio contact with mariners and enroute aviators in this sector. Navigation: Low-frequency navigation signals used by maritime and general aviation systems experience outages on the sunlit side of the Earth for many hours, causing loss in positioning. Increased satellite navigation errors in positioning for several hours on the sunlit side of Earth, which may spread into the night side.	X20 (2×10^{-3})	Less than 1 per cycle
R 4	Severe	HF Radio: HF radio communication blackout on most of the sunlit side of Earth for one to two hours. HF radio contact lost during this time. Navigation: Outages of low-frequency navigation signals cause increased error in positioning for one to two hours. Minor disruptions of satellite navigation are possible on the sunlit side of Earth.	X10 (10^{-3})	8 per cycle (8 days per cycle)
R 3	Strong	HF Radio: Wide area blackout of HF radio communication, loss of radio contact for about an hour on sunlit side of Earth. Navigation: Low-frequency navigation signals degraded for about an hour.	X1 (10^{-4})	175 per cycle (140 days per cycle)
R 2	Moderate	HF Radio: Limited blackout of HF radio communication on sunlit side, loss of radio contact for tens of minutes. Navigation: Degradation of low-frequency navigation signals for tens of minutes.	M5 (5×10^{-5})	350 per cycle (300 days per cycle)
R 1	Minor	HF Radio: Weak or minor degradation of HF radio communication on the sunlit side, occasional loss of radio contact. Navigation: Low-frequency navigation signals degraded for brief intervals.	M1 (10^{-5})	2000 per cycle (950 days per cycle)

Source: Space Weather Prediction Center, National Oceanic and Atmospheric Administration Source: Space Weather Prediction Center, National Oceanic and Atmospheric Administration Source: Space Weather Prediction Center, National Oceanic and Atmospheric Administration

5.13.2 Location and Spatial Extent

Because these events occur on a global scale and could have wide-ranging impacts on the entire dayside of the planet simultaneously, all areas of the Region are equally susceptible to a solar flare.

5.13.3 Historical Occurrences

There is an extensive history of solar flares being observed in the United States, but the first observation of a solar flare was in England in 1859 when Richard Carrington observed what is still considered the largest solar flare in recorded history. This event, now known as the Carrington event, was a critical discovery as it connected solar flares with many of the impacts that we recognize they cause today. In the direct aftermath of Carrington's discovery, the Earth was engulfed in a magnetic storm that created auroras all over the sky, caused compass needles to spin uncontrollably, and prevented telegraph operators from sending messages. These early observations of impacts from solar flares would lay the groundwork for recognizing future impacts from solar flare events such as the disruption of communications systems and electrical power.

Although there has not been another solar flare in the magnitude of the Carrington event in the last 150 years, there have been several large events that have impacted various areas of the Country and the world. Several of these events are described below and it should be noted that since solar flares could have effects anywhere in the world, similar impacts could be expected in the Region.

August 4, 1972: A major solar storm caused a voltage surge on telephone lines in Illinois as reported by AT&T. This resulted in a temporary shutdown of communications lines for around thirty minutes. This was one of the first storms that scientists were able to predict with some degree of accuracy.

March 13, 1989: Known as the Quebec Blackout Storm, this event knocked out power to the electric grid of the Hydro-Quebec Power Authority. Roughly six million people were impacted as they lost electricity and thus, in many cases, their source of heat. Power companies restored power within about nine hours, but the event was considered very close to a large-scale disaster.

July 14, 2000: The Bastille Day Flare was an X5.7 class flare that was the largest on record since the 1989 event. This event was considered the most well-observed solar flare event on record and helped astronomers better understand the causes of solar flares and the sun's cycle of activity.

5.13.4 Probability of Future Occurrences

Based on historic observations of major events and the knowledge of the Sun's eleven-year cycle of activity, a major solar flare event that has impacts on Earth is considered likely (between 10 and 100 percent annual probability).

5.14 Nuclear Power Accident

5.14.1 Background

A nuclear and radiation accident is defined by the International Atomic Energy Agency (IAEA) as “an event that has led to significant consequences to people, the environment, or the facility. Often, this type of incident results from damage to the reactor core of a nuclear power plant which can release radioactivity into the environment. The degree of exposure from nuclear accidents has varied from serious to catastrophic.

By some estimates, over 50 percent of nuclear accidents that have ever occurred were in the United States.⁴⁵ However, it is also important to note that generally, nuclear accidents are a rare occurrence. Many incidents are extremely well known due to their large-scale impact and serious effects on people and the environment.

One of the most notorious accidents in the United States was the Three Mile Island accident which occurred in 1979 and released small amounts of radioactive gases and iodine into the environment. Although no deaths have been directly attributed to the accident, it invoked a strong public reaction and demonstrated the potential dangers associated with nuclear power generation.

McGuire Nuclear Power Plant, which is located closest to Davidson County, is a 2,258-megawatt power plant that began commercial operation in 1981. It has pressurized water reactors and operates with a very high level of security. Shearon Harris Nuclear Power Plant, which is the plant located closest to Randolph County, is a 2,948-megawatt power plant that began commercial operation in 1987. It has pressurized water reactors and operates with a very high level of security.

5.14.2 Location and Spatial Extent

The eastern portion of the Region is at risk to a nuclear incident. Areas in this part of the Region are susceptible due to their relative proximity to the Shearon Harris Power Plant. The IAEA has developed a scale called the International Nuclear and Radiological Event Scale (INES) which provides a quantitative means of assessing the extent of a nuclear event. This scale, like the MMI used for earthquakes, is logarithmic which means that each increasing level on the scale represents an event ten times more severe than the previous level (Figure 5- 101).

⁴⁵ Benjamin K. Sovacool. A Critical Evaluation of Nuclear Power and Renewable Electricity in Asia *Journal of Contemporary Asia*, Vol. 40, No. 3, August 2010, pp. 393–400.

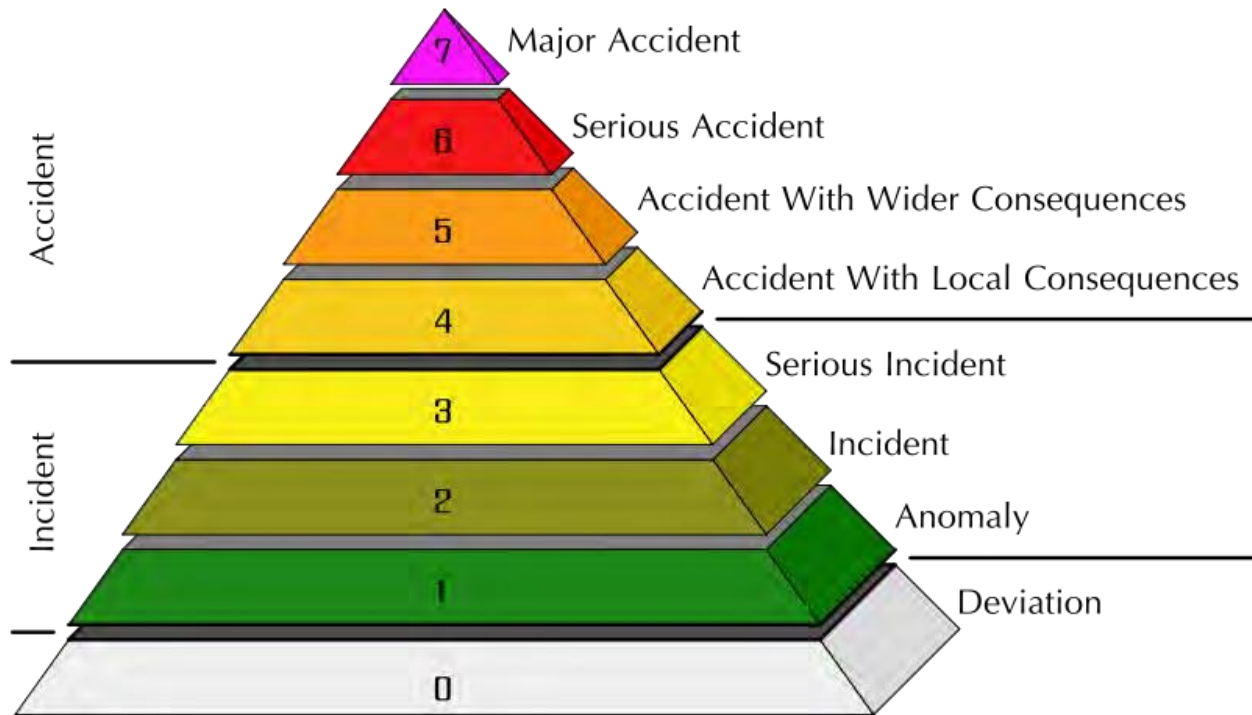


Figure 5- 101: International Nuclear Event Scale

Source: International Atomic Energy Agency, <http://www-ns.iaea.org/tech-areas/emergency/ines.asp>

The Nuclear Regulatory Commission (NRC) defines two emergency planning zones around nuclear plants. Areas located within ten miles of the station are within the zone of highest risk to a nuclear incident and this radius is the designated evacuation radius recommended by the NRC. Within the ten-mile zone, the primary concern is exposure to and inhalation of radioactive contamination. The most concerning effects in the secondary fifty-mile zone are related to ingestion of food and liquids that may have been contaminated. None of the Region is located within the ten-mile radius of the power plant; however, a portion of the Region is located within this fifty-mile radius which is still considered to be at some risk from a nuclear incident (Error! Reference source not found.).

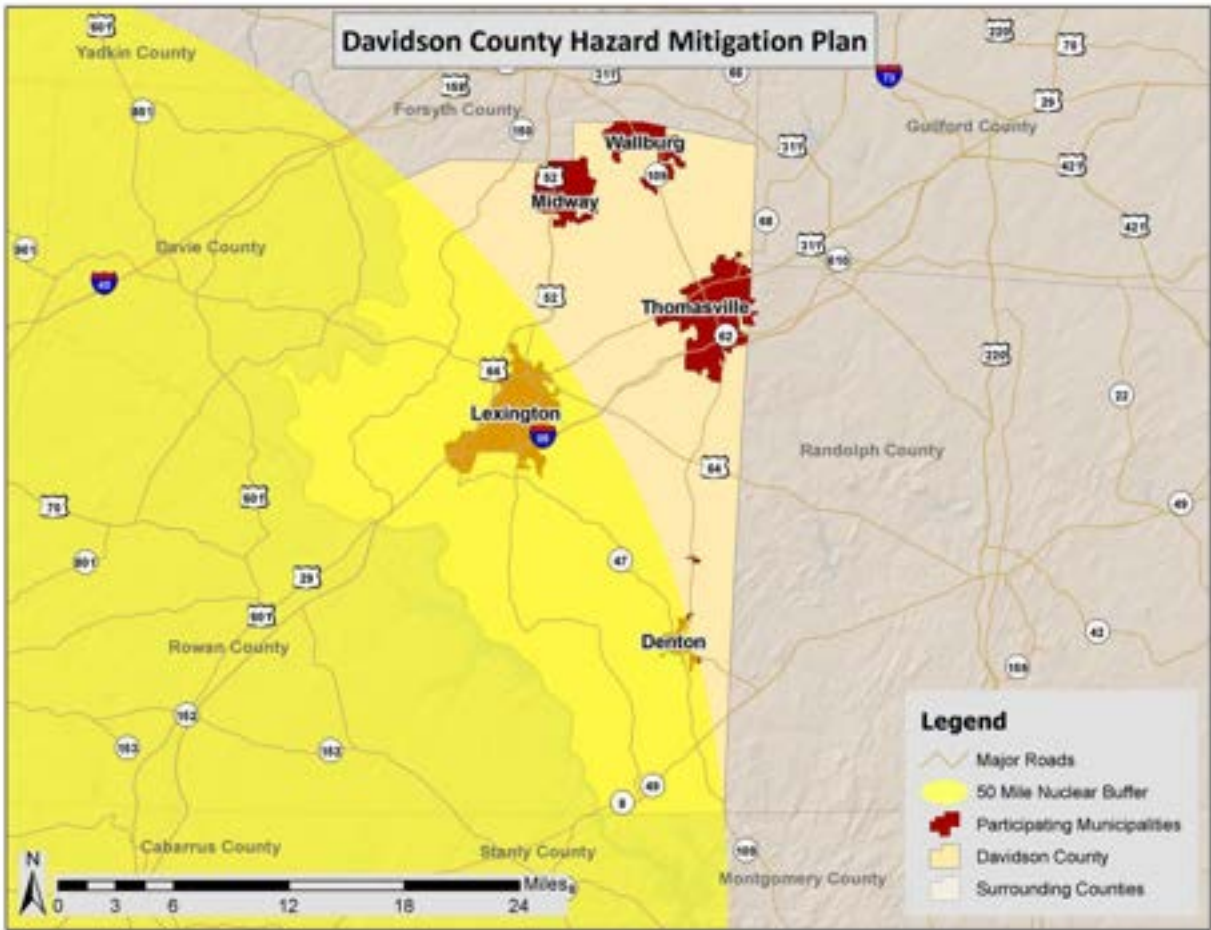


Figure 5- 102: : Nuclear Power Plant Incident Hazard Zones in Davidson County

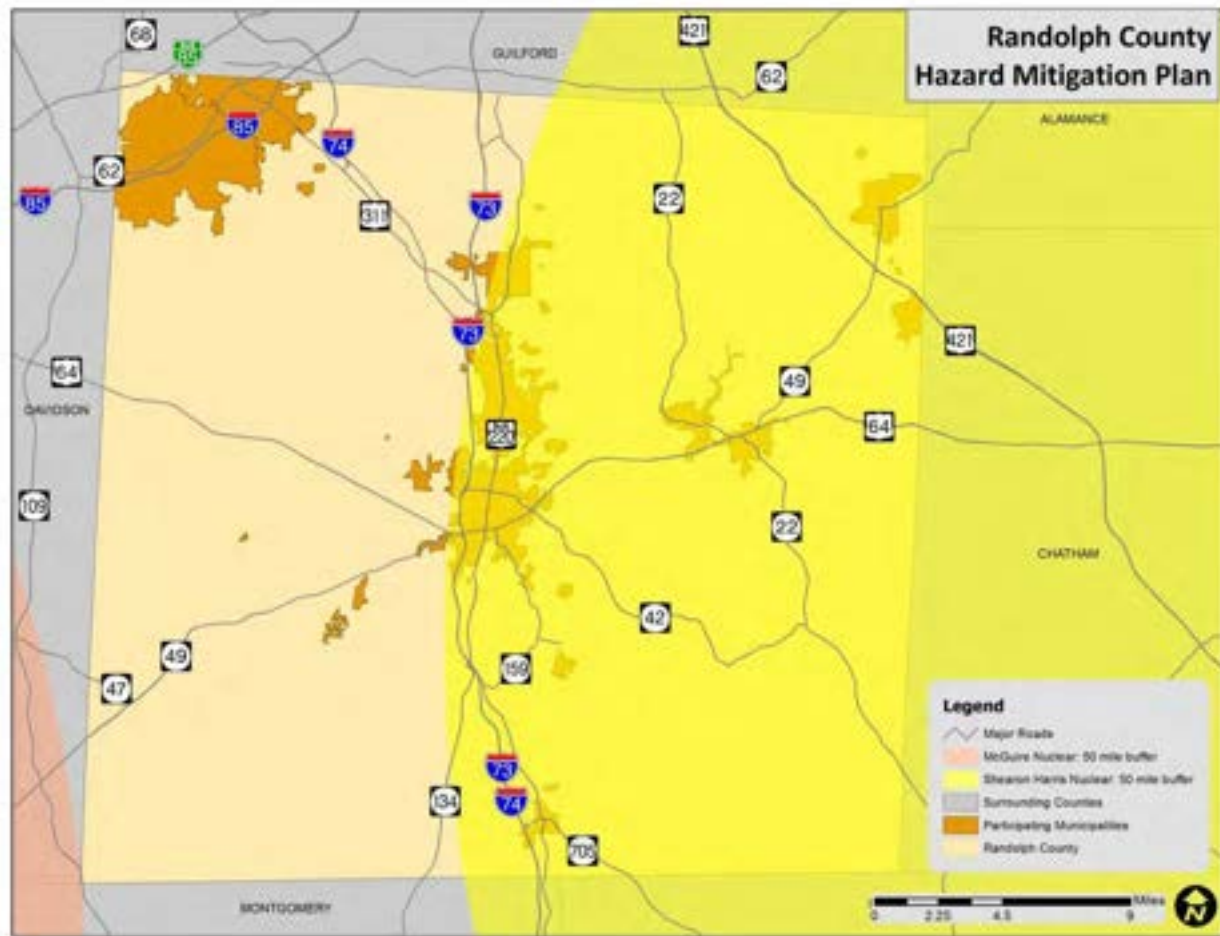


Figure 5- 103: Nuclear Power Plant Incident Hazard Zones in Randolph County

Source: International Atomic Energy Agency

5.14.3 Historical Occurrences

Although there have been no major nuclear events at the McGuire Nuclear Power Plant in Davidson County and Shearon Harris Nuclear Power Plant in Randolph County, there is some possibility that one could occur as there have been incidents in the past in the United States at other facilities and at facilities around the world.

5.14.4 Probability of Future Occurrences

A nuclear event is a very rare occurrence in the United States due to the intense regulation of the industry. There have been incidents in the past, but it is considered unlikely (less than 1 percent annual probability).

5.15 Terror Threat

5.15.1 Background

Terrorism is defined in the United States Code of Federal Regulations as “the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives.”⁴⁶ Academic literature identifies some overarching political goals that terrorism seeks to achieve, including spreading anxiety and alarm among immediate victims, families, and the general public; eliminating opponents and destroying symbolic targets; and generating direct damage on society, such as affecting business confidence. In the following sections, some general background information about terrorism is presented prior to the Region’s hazard identification and risk assessment findings.

There are two general types of terrorist groups: network and hierarchical. The type of organization a group adopts depends on how long the group has existed. More recently developed groups tend to organize or adapt to the possibilities of the network model. Older, more established groups lean toward the hierarchical structure and are often more associated with violence of a political nature.⁴⁷ Terrorist acts can be committed by large, formally organized groups with terrorist cells in different parts of the world or they can originate from smaller groups or individuals from a small city or domestic “homegrown” location. In the United States, terrorists that are “homegrown” do not belong to a defined group, may operate very effectively “under the radar,” and may pose the biggest threat initially at the local level.⁴⁸

5.15.2 Location and Spatial Extent

A terror threat could potentially occur at any location in the Region. However, the very definition of a terrorist event indicates that it is most likely to be targeted at a critical or symbolic resource, location, or event. Ensuring and protecting the continuity of critical infrastructure and key resources (CIKR) of the United States is essential to the Nation’s security, public health and safety, economic vitality, and way of life. CIKR includes physical and/or virtual systems or assets that, if damaged, would have a detrimental impact on national security, including large-scale human casualties, property destruction, economic disruption, and significant damage to morale and public confidence. Table 5- 59 lists the U.S. Department of Homeland Security’s (DHS) identified main critical infrastructure sectors.

Table 5- 59: U.S. Department of Homeland Security Critical Infrastructure Sectors

• Agriculture and Food • Banking and Finance	• Government Facilities • Healthcare and Public Health

⁴⁶ U.S. Code of Federal Regulations. 23 C.F.R. Section 0.85

⁴⁷ Terrorism Research. *Terrorist groups*. Retrieved December 27, 2011, from <http://www.terrorism-research.com/groups/>

⁴⁸ Ibid.

• Chemical • Commercial Facilities • Communications • Critical Manufacturing • Dams • Defense Industrial Base • Emergency Services • Energy	• Information Technology • National Monuments and Icons • Nuclear Reactors, Materials, and Waste • Postal and Shipping • Transportation Systems • Water

Source: Department of Homeland Security, <https://www.dhs.gov/critical-infrastructure-sectors>

Although all critical facilities are at a heightened level of risk in the Region, there are several facilities and events in the Region that have been identified as the primary targets. Randolph and Davidson County Emergency Management Agencies maintain a list of facilities and events at elevated risk of terror threat.

5.15.3 Historical Occurrences

Although there have been no major terror events in the Region, there is some possibility that one could occur in the future as there have been incidents in the United States in the past and there are several facilities and events that could be potential targets.

5.15.4 Probability of Future Occurrences

The Region has had no recorded terrorist events. Due to no recorded incidents against the Region, the probability of future occurrences of a terrorist attack is unlikely (less than 1 percent annual probability).

5.16 Public Health/Infectious Disease Threat

5.16.1 Background

People

Communicable, or infectious, diseases are conditions that result in clinically evident illnesses which are transmissible directly from one person to another or indirectly through vectors such as insects, air, water, blood, or other objects. The impact of communicable disease can range from the mild effects of the common cold to the extreme lethality of pneumonic plague or anthrax. The public health system in the United States was developed in large part as a response to the often urgent need to respond to or prevent outbreaks of communicable diseases. Through public health methods of disease reporting, vaccinations, vector control, and effective treatments, most communicable diseases are well controlled in the United States and the Region. However, control systems can fail and when people come together from locations outside of the Region, State, and the country, outbreaks can occur, even in the most modern of communities. In this section, some of the more significant potential communicable disease concerns are described.

The threats discussed in this section usually do not occur on a regular basis, though some are more frequent. The diseases described herein do not originate from intentional exposure (such as through terrorist actions) but do present significant issues and concerns for the public health

community. There are numerous infectious diseases that rarely, if ever, occur in the Region, such as botulism or bubonic plague. Some highly dangerous diseases which could potentially be used as biological weapons, such as anthrax, pneumonic plague, and smallpox, are safely housed and controlled in laboratory settings such as at the Centers for Disease Control and Prevention (CDC). Other diseases have not (yet) mutated into a form that can infect humans or otherwise lie dormant in nature.

There have been two significant viral outbreaks from emerging diseases in recent years of both national and international importance. The West Nile Virus is a virus that typically is passed to humans or animals by mosquitoes. Severe Acute Respiratory Syndrome (SARS) is a respiratory syndrome that is transmitted by airborne droplets. While both conditions caused a great deal of public health concern when they were first identified, SARS has virtually all but disappeared, while West Nile Virus occurs with low frequency and causes serious disease in only a very small percentage of cases.

Other communicable diseases pose a greater threat to the residents of the Region. Some of the infectious diseases of greatest concern include influenza, particularly in a pandemic form, as well as norovirus, and multiple antibiotic-resistant tuberculosis. Even in one of its normal year-to-year variants, influenza (commonly referred to as “flu”) can result in serious illness and even death in young children, the elderly, and immune-compromised persons. There is always the potential risk of the emergence of influenza in one of the pandemics H1N1 forms, such as in the “Spanish Flu” outbreak of 1918-19, which killed over 50 million people worldwide. Every year, the Region sees hundreds of cases of influenza, leading to hundreds of hours of lost productivity in businesses due to sick employees. A vaccine for influenza is produced every year and, according to the CDC, is highly effective in preventing the disease.

Norovirus is recognized as the leading cause of foodborne-disease outbreaks in the United States. The virus can cause diarrhea, vomiting, and stomach pain, and is easily spread from person to person through contaminated food or water and by surface-to-surface contact. Especially vulnerable populations to this virus include those living or staying in nursing homes and assisted living facilities and other healthcare facilities such as hospitals. Norovirus could also be a threat in the event of large public gatherings such as sporting events, concerts, festivals, and so forth. The Region and the State of North Carolina experience numerous norovirus outbreaks every year. No vaccine or treatment exists for the Norovirus, making it especially dangerous for the public in the event of an outbreak.

Tuberculosis (TB) is a bacterial infection that originates from airborne exposure. Currently there are only a couple of new tuberculosis cases in the Region each year. However, multiple drug-resistant strains, and even new extreme drug-resistant strains, are showing up with increasing frequency, so TB is a disease that could become a cause of greater concern in coming years.

Public health threats can occur at any time and can have varying impacts. Discussions between public health professionals, planning officials, and first response agencies are essential to facilitate safe, effective, and collaborative efforts toward outbreaks.

Livestock/Agriculture

Plants and animals can also be impacted by infectious disease outbreaks. Livestock are susceptible to various diseases including avian flu, classical swine fever, mad cow disease, hand, foot, and mouth disease, while crops may be impacted by pests and crop diseases. The outcome of such an outbreak could be devastating, resulting in loss of livestock and crops, disruption of the agriculture industry, and decreased food production.

5.16.2 Location and Spatial Extent

Due to the nature of a public health/infectious disease event, it would be difficult to predict a precise location where this type of event would occur. Moreover, a large-scale event may have impacts that spread throughout the Region. Therefore, all areas in the Region are considered equally susceptible to public health/infectious diseases.

5.16.3 Historical Occurrences

People

In 2003, the SARS outbreak that began in Southeast Asia began showing up in the United States. There was a single confirmed case of SARS in North Carolina in 2003, with eight suspected cases, as described by the North Carolina Division of Public Health.

An outbreak of the West Nile Virus first began in the United States in 1999. No cases have been reported in Randolph County; however, most cases in North Carolina have been reported from the Piedmont counties. Across North Carolina, seven cases were reported in seven counties in 2012, and forty-three cases were reported in twenty-six counties from 2003 to 2012.

As stated previously, influenza, norovirus, and tuberculosis are regularly occurring health issues in the Region. Except for tuberculosis, these conditions are not legally reportable to County or State public health agencies, so data on disease incidence is not readily available. However, these diseases are monitored through local epidemiological surveillance systems in hospitals and health departments, and any potential outbreaks are investigated promptly.

During events involving outbreaks, as stated in NCGS § 130A – 145, the State Health Director and a local health director are empowered to exercise quarantine and isolation authority. Quarantine and isolation authority shall be exercised only when and so long as the public health is endangered, all other reasonable means for correcting the problem have been exhausted, and no less restrictive alternative exists.

Livestock/Agriculture

Avian flu outbreaks can occur among poultry from time to time in the US. According to the World Organization for Animal Health, between 1997 and 2014, the US experienced an outbreak of highly pathogenic avian influenza in commercial poultry that was restricted to one poultry farm. (There are two types of avian flu; one is low pathogenic, and the other is highly pathogenic. Pathogenicity refers to the ability of the virus to produce disease.) Beginning in 2015, the virus has been detected in some US commercial poultry flocks, but no cases have been reported in the Region.

The USDA reports that there have been several instances of pest and plant disease activities in the US; however, none has impacted the Region.

There have been no other recent reports of significant disease events in the US or the Region.

5.16.4 Probability of Future Occurrences

Due to some recent incidents that have been recorded in the Region, future occurrences are considered possible (between 1 and 10 percent annual probability).

CONCLUSIONS

5.17 Conclusions on Hazard Risk

The hazard profiles presented in this section were developed using the best available data and result in what may be considered principally a qualitative assessment as recommended by FEMA in its “Local Mitigation Planning Handbook (May 2023)”⁴⁹. It relies heavily on historical and anecdotal data, stakeholder input, and professional and experienced judgment regarding observed and/or anticipated hazard impacts. It also carefully considers the findings in other relevant plans, studies, and technical reports.

5.18 Final Determinations

The conclusions drawn from the hazard profiling process for the Region are from the NRI jurisdictional summaries that were developed for each natural hazard profile available. The summaries represent an overall expected impact based on NRI census tract level data summary which utilizes census tracts located within the designated jurisdictional boundaries. This includes the EAL Value for each natural hazard reported in the census tracts within each jurisdictional boundary to demonstrate the annual loss expected to be attributed to each reported natural hazard. But these estimates are approximate and may vary depending on the actual frequency or severity of the hazard occurrence. For more detailed information about how the NRI census tract and county level hazard data is developed, please refer to the NRI Technical Documentation.⁵⁰

⁴⁹ Local Mitigation Planning Handbook. (2024, March 25). FEMA.gov. <https://www.fema.gov/emergency-managers/practitioners/recovery-resilience-resource-library/local-mitigation-planning>

⁵⁰ Zuzak, C., Sheehan, A., Goodenough, E., McDougall, A., Stanton, C., McGuire, P., Mowrer, M., Roberts, B., & Rozelle, J. (2023). National Risk Index: Technical Documentation. In Federal Emergency Management Agency, FEMA.gov. Retrieved May 28, 2024, from https://www.fema.gov/sites/default/files/documents/fema_national-risk-index_technical-documentation.pdf

Figure 5- 104: Average Risk Score for Jurisdictions in the Planning Area based on NRI Census Tract Level Data

Jurisdiction	Drought	Earthquake	Hail	Heat Wave	Hurricane	Ice Storm	Landslide	Lightning	Riverine Flooding	Strong Wind	Tornado	Wildfire	Winter Weather
Davidson County	Relatively High	Relatively Moderate	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively Moderate	Relatively Moderate	Relatively High	Relatively High	Relatively High	Relatively Moderate
Denton	Very High	Relatively High	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Relatively High	Very High
Lexington	Relatively High	Relatively Moderate	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively Moderate	Relatively Moderate	Relatively High	Relatively High	Relatively High	Relatively High
Midway	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively High	Relatively Low	Relatively High	Relatively High	Relatively High	Relatively Moderate
Thomasville	Relatively Moderate	Relatively Moderate	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Relatively High	Relatively High
Wallburg	Very High	Relatively Moderate	Relatively High	Relatively Low	Relatively High	Very High	Very High	Relatively Moderate	Relatively Low	Relatively High	Relatively High	Relatively High	Relatively Moderate
Unincorporated Area	Very High	Relatively Moderate	Relatively High	Relatively Low	Relatively High	Very High	Very High	Relatively Moderate	Relatively Moderate	Relatively High	Relatively High	Relatively High	Relatively Moderate
Randolph County	Relatively High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High
Archdale	Relatively Moderate	Relatively Moderate	Relatively High	Relatively Low	Relatively High	Relatively High	Very High	Relatively High	Relatively High	Relatively Low	Relatively High	Relatively High	Very High
Asheboro	Relatively Moderate	Relatively Moderate	Very High	Relatively Moderate	Relatively High	Relatively High	Very High	Relatively High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High
Franklinville	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively Moderate	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High

Section 5: Hazard Profile

Jurisdiction	Drought	Earthquake	Hail	Heat Wave	Hurricane	Ice Storm	Landslide	Lightning	Riverine Flooding	Strong Wind	Tornado	Wildfire	Winter Weather
Liberty	Very High	Relatively High	Very High	Relatively Moderate	Relatively High	Very High	Very High	Relatively High	Relatively High	Relatively Moderate	Very High	Relatively High	Very High
Ramseur	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High
Randleman	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High
Seagrove	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively Moderate	Relatively High	Relatively Low	Relatively High	Relatively High	Very High
Staley	Very High	Relatively High	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively High	Relatively High	Relatively Moderate	Relatively High	Relatively High	Very High
Trinity	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Very High	Very High	Relatively High	Relatively Moderate	Relatively Moderate	Relatively High	Relatively High	Very High
Unincorporated Area	Very High	Relatively Moderate	Very High	Relatively Low	Relatively High	Relatively High	Very High	Relatively Moderate	Relatively High	Relatively Low	Relatively High	Relatively High	Very High

Table 5- 60: Davidson County Hazard EAL Values and Expected Annual Frequency from the NRI for each jurisdiction in the planning area

Hazard	Expected Impact	Davidson County						
		Davidson County	Denton	Lexington	Midway	Thomasville	Wallburg	Unincorporated Area
Drought	EAL Value	24.12	23.23	25.38	22.59	21.69	22.11	25.31
	Expected Annual Frequency	\$217,159.96	\$17,980.18	\$67,684.42	\$11,164.44	\$12,234.59	\$15,166.17	\$105,982.46
Heat Wave	EAL Value	5.25	0.1238	0.1238	0.1238	0.1238	0.1238	1.6099
	Expected Annual Frequency	\$805,277.88	\$3,250.45	\$38,313.90	\$15,922.15	\$43,590.30	\$13,454.99	\$46,136.27
Hurricane	EAL Value	0.0881	0.1015	0.0876	0.0877	0.0866	0.0877	1.1435
	Expected Annual Frequency	\$4,085,780.71	\$133,404.92	\$1,089,546.57	\$525,005.85	\$1,151,263.76	\$392,331.21	\$1,190,266.78
Strong Wind	EAL Value	2.45	2.16	2.46	2.46	2.39	2.46	2.44
	Expected Annual Frequency	\$968,172.78	\$21,671.11	\$257,866.43	\$115,429.07	\$246,912.03	\$91,820.38	\$294,020.95
Hail	EAL Value	5.25	4.85	5.26	5.27	5.24	5.27	5.24
	Expected Annual Frequency	\$805,277.88	\$19,851.35	\$214,699.45	\$97,657.69	\$242,746.68	\$76,764.05	\$244,045.18
Lightning	EAL Value	61.67	58.88	62.44	63.39	62.85	63.89	59.53
	Expected Annual Frequency	\$294,742.99	\$6,636.93	\$78,654.72	\$8,716.88	\$96,571.31	\$28,596.02	\$88,229.51
Tornado	EAL Value	0.0051	0.0145	0.0037	0.0041	0.0031	0.0044	0.01
	Expected Annual Frequency	\$4,878,736.49	\$179,125.03	\$1,285,659.68	\$578,487.89	\$1,461,121.86	\$450,420.48	\$1,474,147.56
Ice Storm	EAL Value	2.11	2.0911	2.1166	2.1144	2.057	2.1144	2.12
	Expected Annual Frequency	\$613,500.92	\$17,227.50	\$164,596.97	\$79,019.73	\$166,549.54	\$58,880.87	\$177,240.48
Riverine Flooding	EAL Value	1.871	1.9167	1.9167	1.4375	1.8788	1.4375	1.92
	Expected Annual Frequency	\$443,746.22	\$2,836.45	\$145,261.29	\$16,285.34	\$156,544.29	\$27,118.91	\$170,724.69
Earthquakes	EAL Value	0.000362	0.000423	0.00034	0.000373	0.000343	0.000383	0.000376
	Expected Annual Frequency	\$15,477.26	\$18,275.01	\$220,135.34	\$71,787.90	\$180,801.98	\$48,842.49	\$158,721.84
	EAL Value	1.8	1.8	1.8	1.8	1.78	1.8	1.8

Hazard	Expected Impact	Davidson County						
		Davidson County	Denton	Lexington	Midway	Thomasville	Wallburg	Unincorporated Area
Winter Weather	Expected Annual Frequency	\$82,306.77	\$1,951.55	\$21,749.52	\$9,253.41	\$52,129.98	\$7,674.75	\$25,890.65
Wildfire	EAL Value	0.000012	0.000012	0.000011	0.000017	0.000011	0.000018	0.000012
	Expected Annual Frequency	\$57,016.12	\$1,491.48	\$15,460.32	\$6,242.75	\$13,938.01	\$5,893.99	\$19,243.89

Table 5- 61: Randolph County EAL Value and Expected Annual Frequency from the NRI for the jurisdictions in the planning area

Hazard	Expected Impact	Randolph County										
		Randolph County	Archdale	Asheboro	Franklinville	Liberty	Ramseur	Randleman	Seagrove	Staley	Trinity	Unincorporated Areas
Drought	EAL Value	19.77	20.15	19.88	19.09	18.77	18.98	19.6	19.41	18.77	20.76	19.41
	Expected Annual Frequency	\$384,562.05	\$51,667.73	\$169,124.70	\$60,255.76	\$53,645.95	\$48,500.05	\$31,428.71	\$11,106.16	\$29,127.73	\$11,699.59	\$57,825.65
Heat Wave	EAL Value	0.1238	0.1238	0.1238	0.1238	0.1238	0.1238	0.1238	0.1238	0.1238	0.1238	0.3715
	Expected Annual Frequency	\$123,732.55	\$28,506.85	\$58,917.84	\$14,730.17	\$8,311.74	\$8,366.49	\$19,095.05	\$3,371.16	\$3,832.29	\$15,758.68	\$9,029.57
Hurricane	EAL Value	0.0848	0.0819	0.0851	0.0818	0.0818	0.0818	0.0818	0.1178	0.0818	0.0834	0.2611
	Expected Annual Frequency	\$3,431,928.53	\$695,669.39	\$1,519,081.38	\$407,533.26	\$301,211.17	\$260,426.39	\$440,849.07	\$187,738.65	\$131,932.53	\$389,530.75	\$380,261.48

Section 5: Hazard Profile

Hazard	Expected Impact	Randolph County										
		Randolph County	Archdale	Asheboro	Franklinville	Liberty	Ramseur	Randleman	Seagrove	Staley	Trinity	Unincorporated Areas
Strong Wind	EAL Value	2.02	2.03	2.01	2.02	2.02	2.02	2.02	1.98	2.02	2.14	2.01
	Expected Annual Frequency	\$230,281.12	\$47,146.95	\$108,338.03	\$26,521.96	\$16,835.92	\$15,801.83	\$34,574.88	\$6,720.87	\$7,482.29	\$48,282.25	\$17,229.48
Hail	EAL Value	5.05	5.08	5.05	5.08	5.08	5.08	5.08	4.75	5.08	5.13	5.03
	Expected Annual Frequency	\$834,329.86	\$158,272.06	\$369,413.78	\$108,516.79	\$74,408.41	\$67,059.74	\$116,691.33	\$30,081.10	\$33,330.02	\$93,112.78	\$86,950.42
Lightning	EAL Value	54.28	60.68	51.39	49.92	52.05	49.75	51.97	51.6	49.85	61.87	56.39
	Expected Annual Frequency	\$305,703.99	\$83,610.96	\$138,612.30	\$33,472.73	\$19,570.58	\$6,302.58	\$45,276.22	\$8,039.87	\$8,628.76	\$41,227.68	\$22,882.30
Tornado	EAL Value	0.0092	0.0034	0.01	0.009	0.0135	0.0088	0.0073	0.0242	0.0138	0.0044	0.02
	Expected Annual Frequency	\$4,734,885.93	\$954,925.72	\$2,240,766.50	\$523,109.14	\$332,426.67	\$311,776.92	\$683,988.23	\$199,227.72	\$147,616.89	\$572,876.94	\$365,937.42

Section 5: Hazard Profile

Hazard	Expected Impact	Randolph County										
		Randolph County	Archdale	Asheboro	Franklinville	Liberty	Ramseur	Randleman	Seagrove	Staley	Trinity	Unincorporated Areas
Ice Storm	EAL Value	1.7957	1.792	1.7952	1.7868	1.7868	1.7868	1.7868	1.8784	1.7868	1.8747	1.8
	Expected Annual Frequency	\$299,982.83	\$68,504.69	\$139,699.24	\$32,800.70	\$23,826.37	\$6,908.54	\$43,331.14	\$10,248.08	\$10,178.62	\$46,415.98	\$23,204.15
Riverine Flooding	EAL Value	1.7083	2.0602	1.7083	1.7083	1.7083	1.7083	1.7083	1.7083	1.7083	1.7604	1.71
	Expected Annual Frequency	\$1,110,886.90	\$198,698.57	\$580,650.01	\$120,196.54	\$58,512.06	\$90,155.14	\$127,935.59	\$24,600.53	\$16,953.32	\$72,004.42	\$58,679.33
Earthquakes	EAL Value	0.00035	0.000476	0.000316	0.000283	0.031062	0.029895	0.000259	0.039464	0.033278	0.000391	0.000299
	Expected Annual Frequency	\$412,486.17	\$112,467.06	\$175,658.64	\$51,111.90	\$39,824.78	\$33,715.78	\$57,300.46	\$16,897.29	\$18,526.16	\$47,835.78	\$35,145.53
Winter Weather	EAL Value	1.73	1.82	1.73	1.73	1.73	1.73	1.73	1.73	1.73	1.75	1.73
	Expected Annual Frequency	\$469,393.79	\$107,187.13	\$211,135.83	\$52,712.08	\$30,610.98	\$30,284.13	\$68,149.83	\$12,448.77	\$13,994.53	\$45,303.94	\$32,958.62

Hazard	Expected Impact	Randolph County										
		Randolph County	Archdale	Asheboro	Franklinville	Liberty	Ramseur	Randleman	Seagrove	Staley	Trinity	Unincorporated Areas
Wildfire	EAL Value	0.000028	0.000012	0.000014	0.000057	0.000041	0.000045	0.000017	0.000102	0.000045	0.000011	0.000068
	Expected Annual Frequency	\$47,578.29	\$7,955.48	\$15,886.50	\$8,414.75	\$4,896.70	\$3,794.34	\$6,855.74	\$2,879.77	\$2,366.79	\$4,150.99	\$8,044.58

SECTION 6: CAPABILITY ASSESSMENT

This section of the *Plan* discusses the capability of the jurisdictions in the Region to implement hazard mitigation activities. It consists of the following four subsections:

- ◆ 6.1 What is a Capability Assessment?;
- ◆ 6.2 Conducting the Capability Assessment;
- ◆ 6.3 Capability Assessment Findings; and
- ◆ 6.4 Conclusions on Local Capability.

6.1 What is a Capability Assessment?

The purpose of conducting a capability assessment is to determine the ability of a local jurisdiction to implement a comprehensive mitigation strategy and to identify potential opportunities for establishing or enhancing specific mitigation policies, programs, or projects.¹ As in any planning process, it is important to try to establish which goals, objectives, and/or actions are feasible based on an understanding of the organizational capacity of those agencies or departments tasked with their implementation. A capability assessment helps to determine which mitigation actions are practical, and likely to be implemented over time, given a local government's planning and regulatory framework, level of administrative and technical support, number of fiscal resources, and current political climate.

A capability assessment has two primary components: 1) an inventory of a local jurisdiction's relevant plans, ordinances, or programs already in place and 2) an analysis of its capacity to carry them out. Careful examination of local capabilities will detect any existing gaps, shortfalls, or weaknesses with ongoing government activities that could hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. A capability assessment also highlights the positive mitigation measures already in place or being implemented at the local government level, which should continue to be supported and enhanced through future mitigation efforts.

The capability assessment completed for the Region and its municipalities serves as a critical planning step and an integral part of the foundation for designing an effective hazard mitigation strategy. Coupled with the Risk Assessment, the Capability Assessment helps identify and target meaningful mitigation actions for incorporation in the Mitigation Strategy portion of the *Plan*. It not only helps establish the goals and objectives for the county to pursue under this Plan, but it also ensures that those goals and objectives are realistically achievable under given local conditions.

¹ While the Final Rule for implementing the Disaster Mitigation Act of 2000 does not require a local capability assessment to be completed for local hazard mitigation plans, it is a critical step in developing a mitigation strategy that meets the needs of the region while taking into account their own unique abilities. The Rule does state that a community's mitigation strategy should be "based on existing authorities, policies, programs and resources, and its ability to expand on and improve these existing tools" (44 CFR, Part 201.6(c)(3)).

6.2 Conducting the Capability Assessment

To facilitate the inventory and analysis of local government capabilities for the Region and its municipalities, a detailed Capability Assessment Survey was completed for each of the participating jurisdictions based on the information found in the existing *Hazard Mitigation Plans* and local government websites. The survey questionnaire compiled information on a variety of “capability indicators” such as existing local plans, policies, programs, or ordinances that contribute to and/or hinder the jurisdictions’ ability to implement hazard mitigation actions. Other indicators included information related to the communities’ fiscal, administrative, and technical capabilities, such as access to local budgetary and personnel resources for mitigation purposes. The current political climate, an important consideration for any local planning or decision-making process, was also evaluated with respect to hazard mitigation.

At a minimum, survey results provide an extensive inventory of existing local plans, studies, reports, technical information, ordinances, programs, and resources that are in place or under development in addition to their overall effect on hazard loss reduction. However, the survey instrument can also serve to identify gaps, weaknesses, or conflicts that the county and local jurisdictions can recast as opportunities for specific actions to be proposed as part of the hazard mitigation strategy.

The information collected in the survey questionnaire was incorporated into a database for further analysis. A general scoring methodology² was then applied to quantify each jurisdiction’s overall capability. According to the scoring system, each capability indicator was assigned a point value based on its relevance to hazard mitigation.

Using this scoring methodology, a total score, and an overall capability rating of “high,” “moderate,” or “limited” could be determined according to the total number of points received. These classifications are designed to provide nothing more than a general assessment of local government capability. The results of this capability assessment provide critical information for developing an effective and meaningful mitigation strategy.

6.3 Capability Assessment Findings

The findings of the capability assessment are summarized in this Plan to provide insight into the relevant capacity of the jurisdictions in the Region to implement hazard mitigation activities. All information is based upon the review of the existing *Hazard Mitigation Plans* and local government websites through the Capability Assessment Survey and input provided by local government officials during meetings of the Planning Team.

6.3.1 Planning and Regulatory Capability

Planning and regulatory capability is based on the implementation of plans, ordinances, and programs that demonstrate a local jurisdiction’s commitment to guiding and managing growth, development, and redevelopment in a responsible manner while maintaining the general welfare of the community. It includes emergency response and mitigation planning, comprehensive land use planning, and transportation planning; the enforcement of zoning or subdivision ordinances

² The scoring methodology used to quantify and rank the jurisdictions’ capability can be found on page 7:22.

and building codes that regulate how land is developed, and structures are built; as well as protecting environmental, historic, and cultural resources in the community. Although some conflicts can arise, these planning initiatives generally present significant opportunities to integrate hazard mitigation principles and practices into the local decision-making process.

This assessment is designed to provide a general overview of the key planning and regulatory tools and programs that are in place or under development for the jurisdictions in the Region along with their potential effect on loss reduction. This information will help identify opportunities to address existing gaps, weaknesses, or conflicts with other initiatives in addition to integrating the implementation of this Plan with existing planning mechanisms where appropriate.

Table 6- 1 provides a summary of the relevant local plans, ordinances, and programs already in place or under development for the Region. Listed below are existing plans, studies, reports and technical information reviewed for plan development and update. Relevant information such as, hazard analysis, NFIP data, building codes, ordinances and communication procedures, existing data, and shared objectives were incorporated into the mitigation plan via coordination with relevant agencies, prioritizing hazards, prioritizing mitigation actions.

An (X) indicates that the given item is currently in place and being implemented. An asterisk (*) indicates that the given item is currently being developed for future implementation. Each of these local plans, ordinances, and programs should be considered available mechanisms for incorporating the requirements of the *Plan*.

Table 6- 1: Relevant Plans, Ordinances, and Programs

Planning/ Regulatory Tool	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Hazard Mitigation Plan	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X
Comprehensive Land Use Plan		X	X	X	X	X	X		X	X	X	X	X	X	X	
Floodplain Management Plan	X	X	X	X					X	X			X			
Open Space Management Plan (Parks & Rec/Greenway Plan)		X		X			X			X	X		X			
Stormwater Management Plan/Ordinance		X		X			X			X			X		X	
Emergency Operations Plan	X	X	X	X	X	X	X		X	X	X		X	X	X	X

Section 6: Capability Assessment

Planning/ Regulatory Tool	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Continuity of Operations Plan	X	X		X			X			X						
Evacuation Plan		X		X			X			X						
Disaster Recovery Plan		X		X			X			X						
Capital Improvements Plan	X	X	X	X	X		X	X		X		X	X		X	
Economic Development Plan									X				X		X	
Historic Preservation Plan																
Transportation Plan		X	X				X									
Flood Damage Prevention Ordinance		X	X	X		X	X			X	X		X	X	X	X
Zoning Ordinance	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Subdivision Ordinance		X	X	X	X	X	X		X	X	X	X	X	X	X	X
Unified Development Ordinance		X		X			X			X			X			
Post-Disaster Redevelopment Ordinance		X		X						X						
Building Code	X	X	X	X		X	X		X	X	X	X	X	X	X	X
Fire Code	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X
National Flood Insurance Program (NFIP)		X	X			X	X			X	X	X	X		X	
NFIP Community Rating System							X						X			

A more detailed discussion on the Region's planning and regulatory capability follows.

6.3.2 Emergency Management

Hazard mitigation is widely recognized as one of the four primary phases of emergency management. The three other phases include preparedness, response, and recovery. Each phase is interconnected with hazard mitigation, as Figure 6-1 suggests. Opportunities to reduce potential losses through mitigation practices are most often implemented before disaster strikes, such as the elevation of flood prone structures or the continuous enforcement of policies that prevent and regulate development that is vulnerable to hazards due to its location, design, or other characteristics. Mitigation opportunities will also be presented during immediate preparedness or response activities, such as installing storm shutters in advance of a hurricane, and certainly during the long-term recovery and redevelopment process following a hazard event.



Figure 6-1: The Four Phases of Emergency Management

Planning for each phase is a critical part of a comprehensive emergency management program and a key to the successful implementation of hazard mitigation actions. As a result, the Capability Assessment Survey asked several questions across a range of emergency management plans to assess the participating jurisdictions' willingness to plan and their level of technical planning proficiency.

Hazard Mitigation Plan: A Hazard Mitigation Plan represents a community's blueprint for how it intends to reduce the impact of natural and human-caused hazards on people and the built environment. The essential elements of a hazard mitigation plan include a risk assessment, capability assessment, and mitigation strategy.

- The Region has previously adopted a Hazard Mitigation Plan. Each participating municipality was included in the Region's plan.

Disaster Recovery Plan: A Disaster Recovery Plan serves to guide the physical, social, environmental, and economic recovery and reconstruction process following a disaster. In many instances, hazard mitigation principles and practices are incorporated into local disaster recovery plans with the intent of capitalizing on opportunities to break the cycle of repetitive disaster losses. Disaster recovery plans can also lead to the preparation of disaster redevelopment policies and ordinances to be enacted following a hazard event.

- Neither the Counties nor any of the participating municipalities have adopted a disaster recovery plan. They should consider developing a plan to guide the recovery and reconstruction process following a disaster.

Emergency Operations Plan: An Emergency Operations Plan outlines responsibility and how resources are deployed during and following an emergency or disaster.

- The Region maintains an Emergency Operations Plan through the Region's Department of Emergency Services. All 14 participating municipalities have adopted the County plans.

Continuity of Operations Plan: A Continuity of Operations Plan establishes a chain of command, line of succession, and plans for backup or alternate emergency facilities in case of an extreme emergency or disaster event.

- The Region has developed a Region Continuity of Operations Plan.
- None of the municipal jurisdictions have developed a continuity of operations plan for their jurisdiction.

Flood Response Plan: A Flood Response Plan establishes procedures for responding to a flood emergency including coordinating and facilitating resources to minimize the impacts of flood.

- Neither the Counties nor any of the participating municipalities have adopted a flood response plan.

6.3.3 General Planning

The implementation of hazard mitigation activities often involves agencies and individuals beyond the emergency management profession. Stakeholders may include local planners, public works officials, economic development specialists, and others. In many instances, concurrent local planning efforts will help to achieve or complement hazard mitigation goals, even though they are not designed as such. Therefore, the Capability Assessment Survey also asked questions regarding general planning capabilities and the degree to which hazard mitigation is integrated into other on-going planning efforts in the Region.

Comprehensive Land Use Plan: A Comprehensive Land Use Plan establishes the overall vision for what a community wants to be and serves as a guide for future governmental decision making. Typically, a comprehensive plan contains sections on demographic conditions, land use, transportation elements, and community facilities. Given the broad nature of the plan and its regulatory standing in many communities, the integration of hazard mitigation measures into the comprehensive plan can enhance the likelihood of achieving risk reduction goals, objectives, and actions.

- The Region has adopted a Growth Management Plan.
- Each of the participating municipalities, except the Towns of Seagrove, Staley, Denton and Wallburg has adopted a municipal land use or land development plan.

Capital Improvements Plan: A Capital Improvements Plan guides the scheduling of spending on public improvements. A capital improvements plan can serve as an important mechanism for

guiding future development away from identified hazard areas. Limiting public spending in hazardous areas is one of the most effective long-term mitigation actions available to local governments.

- The Region and the Cities of Asheboro, Trinity, Lexington, and Thomasville have capital improvement plans in place.

Historic Preservation Plan: A Historic Preservation Plan is intended to preserve historic structures or districts within a community. An often-overlooked aspect of the historic preservation plan is the assessment of buildings and sites located in areas subject to natural hazards and the identification of ways to reduce future damages. This may involve retrofitting or relocation techniques that account for the need to protect buildings that do not meet current building standards or are within a historic district that cannot easily be relocated out of harm's way.

- Neither the Counties nor any of the participating municipalities have developed a historic preservation plan.

Zoning Ordinance: Zoning represents the primary means by which land use is controlled by local governments. As part of a community's police power, zoning is used to protect the public health, safety, and welfare of those in each jurisdiction that maintains zoning authority. A zoning ordinance is the mechanism through which zoning is typically implemented. Since zoning regulations enable municipal governments to limit the type and density of development, a zoning ordinance can serve as a powerful tool when applied in identified hazard areas.

- Davidson County and Randolph County and all 14 participating municipalities have adopted zoning ordinances.

Subdivision Ordinance: A Subdivision Ordinance is intended to regulate the development of residential, commercial, industrial, or other uses, including associated public infrastructure, as land is subdivided into buildable lots for sale or future development. Subdivision design that accounts for natural hazards can dramatically reduce the exposure of future development.

- Davidson County and Randolph County and each participating municipality, except the Towns of Seagrove and Staley, have adopted subdivision ordinances.

Building Codes, Permitting, and Inspections: Building codes regulate construction standards. In many communities, permits and inspections are required for new construction. Decisions regarding the adoption of building codes (that account for hazard risk), the type of permitting process required both before and after a disaster, and the enforcement of inspection protocols all affect the level of hazard risk faced by a community.

- North Carolina has a State compulsory building code, which applies throughout the State; however, jurisdictions may adopt codes if approved as providing adequate minimum standards. The counties and all 14 participating municipalities have adopted a building code.
- Randolph County provides building inspection services for all unincorporated areas of the County and through contractual agreements for all municipalities except the City of Asheboro.

- The City of Asheboro is responsible for enforcement of the building code within its planning jurisdiction.
- Lexington includes subdivision regulations as part of its local land use ordinance.
- Davidson County, Denton, Midway, Thomasville, and Wallburg have adopted standalone subdivision ordinances.

The adoption and enforcement of building codes by local jurisdictions is routinely assessed through the Building Code Effectiveness Grading Schedule (BCEGS) program developed by the Insurance Services Office, Inc. (ISO).

In North Carolina, the North Carolina Department of Insurance assesses the building codes in effect in a community and how the community enforces its building codes *with special emphasis on mitigation of losses from natural hazards*.

The results of BCEGS assessments are routinely provided to ISO's member private insurance companies, which in turn may offer ratings credits for new buildings constructed in communities with strong BCEGS classifications. The concept is that communities with well-enforced, up-to-date codes should experience fewer disaster-related losses and, as a result, should have lower insurance rates.

In conducting the assessment, ISO collects information related to personnel qualification and continuing education as well as the number of inspections performed per day. This type of information combined with local building codes is used to determine a grade for that jurisdiction. The grades range from 1 to 10 with a BCEGS grade of 1 representing exemplary commitment to building code enforcement and a grade of 10 indicating less than minimum recognized protection.

Specific BCEGS rating for the participating jurisdictions can be obtained by contacting the department for building inspections within that jurisdiction.

6.3.4 Floodplain Management

Flooding represents the greatest natural hazard facing the nation. At the same time, the tools available to reduce the impacts associated with flooding are among the most developed when compared to other hazard-specific mitigation techniques. In addition to approaches that cut across hazards such as education, outreach, and the training of local officials, the National Flood Insurance Program (NFIP) contains specific regulatory measures that enable government officials to determine where and how growth occurs relative to flood hazards. Participation in the NFIP is voluntary for local governments; however, program participation is strongly encouraged by FEMA as a first step for implementing and sustaining an effective hazard mitigation program. It is therefore used as part of this assessment as a key indicator for measuring local capability.

For a county or municipality to participate in the NFIP, they must adopt a local flood damage prevention ordinance that requires jurisdictions to follow established minimum building standards in the floodplain. These standards require that all new buildings and substantial improvements to existing buildings will be protected from damage by a one-hundred-year flood event and that new development in the floodplain will not exacerbate existing flood problems or increase damage to other properties.

Randolph and Davidson County are both NFIP Participating Communities, which also means that each jurisdiction in the planning area is required to follow the floodplain management regulations for the county in which they are located. Therefore, the regulations set forth by the counties are the minimum floodplain management standards that each jurisdiction is required to follow, whether they administer their own floodplain management practices or are assisted by the county.

A key service provided by the NFIP is the mapping of identified flood hazard areas. Once completed, the Flood Insurance Rate Maps (FIRMs) are used to assess flood hazard risk, regulate construction practices, and set flood insurance rates. FIRMs are an important source of information to educate residents, government officials, and the private sector about the likelihood of flooding in their community.

6.3.4.1 Davidson County Floodplain Ordinance Details

The Davidson County Flood Damage Prevention Ordinance was developed to reduce public and private losses due to flood events in flood-prone areas by restricting uses, regulating development, and protecting the natural floodplains. No structures or land is allowed to be located, extended, converted, altered, or developed without compliance with the Flood Damage Protection Ordinance.

Implementation and Enforcement Details: The Planning Director in the is appointed the Floodplain Administrator by the Flood Damage Prevention Ordinance and is responsible for for administering and implementing the provisions of the ordinance. Any development in the floodplain must obtain a Floodplain Development Permit where the Floodplain Administrator is responsible for:

Reviewing all floodplain development applications, permits for proposed development, and ensuring that all state, local, and federal permit requirements have been met and or received. Prevent encroachments into the floodway and non-encroachment areas unless the flood hazard reduction provisions have been met

Conduct onsite inspections of work that is in progress, issue stop work orders, perform periodic inspections throughout the SFHAs, follow up with corrective procedures, coordinate changes according to new flood hazard data including FIRMs or FIS reports, and maintain updated floodplain maps for the community.

-
- Regulations
- All new structures and substantial improvements in the floodplain must be elevated no lower than the regulatory flood protection elevation
- All new construction and substantial improvements must be adequately anchored to prevent flotation, collapse, and lateral movement.
- New structures must be built using methods and materials that reduce the potential for flood damage.
- All water supply, sanitary sewage, and on-site waste disposal systems must be elevated above the regulatory flood protection elevation to prevent contamination and water infiltration.

- All public utilities and infrastructure should be constructed to minimize potential for flood damage.
- Subdivision and development proposals must include plans to incorporate adequate drainage and reduce risk of flood exposure.
- Any portion of the structure located within the SFHA must comply with requirements applicable to new construction and substantial improvements.

When the structures are within multiple flood zones, the most stringent flood protection standards and the highest BFE must be applied.

Use of fill in the SFHA is prohibited, including fill used for building construction.

- All development in the SFHAs must follow the Flood Damage Ordinance provisions and obtain floodplain development permits.
- Substantial Damage
- Any damage sustained by the structure within a one-year period where the cost of repairs is equal to or greater than 50% of the pre-market value of the structure.
- If two flood-related events damage a structure in a 10-year period where each event's repairs cost on average 25% or more of the pre-damage market value, the structure is considered to be substantially damaged.
- Substantial Improvement
- Any combination of repairs, reconstruction, rehabilitation, or additions during a 5-year period where the cost is equal or greater than 50% of **the** pre-improvement market, the structure is considered to be substantially improved.
- Substantial improvement procedures do not apply if the improvement corrects existing code violations necessary for safe living conditions.
- Substantial improvement procedures do not apply for historic structures, as long as the modifications do not jeopardize **the** historic structure designation and improvements are approved through the variance process outlined in the ordinance.
- Corrective Procedures
- When a violation is discovered, the Floodplain Administrator must notify the property owner and require immediate corrective action.
- If the owner is notified and fails to act, the written notice is sent by certified or registered mails.
- Hearings shall be held within 10 days of the notice where the owner is able to respond in person or with legal representation.
- Orders may be issued to vacate or demolish the structure if necessary
- The owner is **required** to take corrective action within 60 to 180 days unless the violation poses an imminent threat, where the administrator can shorten the timeline.
- Orders can be appealed within 10 days of issuance to the Board of Adjustment.
- Failure to comply without appeal, or if the appeal is denied, results in the owner being found guilty of a Class 1 Misdemeanor under NC G.S. § 143-215.58. and subject to penalties at the discretion of the court.

Penalties

Violations of the Flood Damage Prevention Ordinance or its conditions constitutes a Class 1 Misdemeanor under NC G.S. § 143-215.58.

- Violators may be fined up to \$100, jailed for up to 30 days, or both.
- Each day the violation continues is considered a separate offense of the ordinance.

provides NFIP policy and claim information for all jurisdictions taking part in the Regional plan update.

6.3.4.2 Davidson County Floodplain Ordinance Details

The Davidson County Flood Damage Prevention Ordinance was developed to reduce public and private losses due to flood events in flood-prone areas by restricting uses, regulating development, and protecting the natural floodplains. No structures or land is allowed to be located, extended, converted, altered, or developed without compliance with the Flood Damage Protection Ordinance.

Implementation and Enforcement Details: The Planning Director in the is appointed the Floodplain Administrator by the Flood Damage Prevention Ordinance and is responsible for for administering and implementing the provisions of the ordinance. Any development in the floodplain must obtain a Floodplain Development Permit where the Floodplain Administrator is responsible for:

- Reviewing all floodplain development applications, permits for proposed development, and ensuring that all state, local, and federal permit requirements have been met and or received.
- Prevent encroachments into the floodway and non-encroachment areas unless the flood hazard reduction provisions have been met
- Conduct onsite inspections of work that is in progress, issue stop work orders, perform periodic inspections throughout the SFHAs, follow up with corrective procedures, coordinate changes according to new flood hazard data including FIRMs or FIS reports, and maintain updated floodplain maps for the community.

Regulations

- All new structures and substantial improvements in the floodplain must be elevated no lower than the regulatory flood protection elevation
- All new construction and substantial improvements must be adequately anchored to prevent flotation, collapse, and lateral movement.
- New structures must be built using methods and materials that reduce the potential for flood damage.
- All water supply, sanitary sewage, and on-site waste disposal systems must be elevated above the regulatory flood protection elevation to prevent contamination and water infiltration.
- All public utilities and infrastructure should be constructed to minimize potential for flood damage.
- Subdivision and development proposals must include plans to incorporate adequate drainage and reduce risk of flood exposure.
- Any portion of the structure located within the SFHA must comply with requirements applicable to new construction and substantial improvements.
- When the structures are within multiple flood zones, the most stringent flood protection standards and the highest BFE must be applied.
- Use of fill in the SFHA is prohibited, including fill used for building construction.

- All development in the SFHAs must follow the Flood Damage Ordinance provisions and obtain floodplain development permits.

Substantial Damage

- Any damage sustained by the structure within a one-year period where the cost of repairs is equal to or greater than 50% of the pre-market value of the structure.
- If two flood-related events damage a structure in a 10-year period where each event's repairs cost on average 25% or more of the pre-damage market value, the structure is considered to be substantially damaged.

Substantial Improvement

- Any combination of repairs, reconstruction, rehabilitation, or additions during a 5-year period where the cost is equal or greater than 50% of the pre-improvement market, the structure is considered to be substantially improved.
- Substantial improvement procedures do not apply if the improvement corrects existing code violations necessary for safe living conditions.
- Substantial improvement procedures do not apply for historic structures, as long as the modifications do not jeopardize the historic structure designation and improvements are approved through the variance process outlined in the ordinance.

Corrective Procedures

- When a violation is discovered, the Floodplain Administrator must notify the property owner and require immediate corrective action.
- If the owner is notified and fails to act, the written notice is sent by certified or registered mails.
- Hearings shall be held within 10 days of the notice where the owner is able to respond in person or with legal representation.
- Orders may be issued to vacate or demolish the structure if necessary
- The owner is required to take corrective action within 60 to 180 days unless the violation poses an imminent threat, where the administrator can shorten the timeline.
- Orders can be appealed within 10 days of issuance to the Board of Adjustment.
- Failure to comply without appeal, or if the appeal is denied, results in the owner being found guilty of a Class 1 Misdemeanor under NC G.S. § 143-215.58. and subject to penalties at the discretion of the court.

Penalties

- Violations of the Flood Damage Prevention Ordinance or its conditions constitutes a Class 1 Misdemeanor under NC G.S. § 143-215.58.
- Violators may be fined up to \$100, jailed for up to 30 days, or both.
- Each day the violation continues is considered a separate offense of the ordinance.

Table 6- 2: NFIP Policy and Claim Information

CID	Jurisdiction	Initial FHB Identified	Init FIRM Identified	Reg- Emerg Date	Current Effective Map Date	CRS Entry Date	CRS Eff Date	CRS Class	% discou nt	NFIP Policies in Force	Total Coverage	Total Written Premium + FPF	Total Annual Payment
Davidson													
370081	Town of Lexington	06/21/74	11/01/79	11/01/79	06/16/09	10/01/93	05/01/08	7	15%	30	\$9,723,000	\$30,628	\$38,886
370082	City of Thomasville	03/22/74	09/28/79	09/28/79	06/16/09	--	--	--	--	45	\$12,189,000	\$45,704	\$57,601
370307	Davidson County	03/22/74	09/28/79	05/01/80	06/16/09	--	--	--	--	143	\$39,791,000	\$134,275	\$166,211
370506	Town of Denton	--	09/07/00	05/10/12	03/16/09	--	--	--	--	1	\$210,000	\$532	\$644
370393	Town of Midway	--	09/07/00	05/10/12	03/16/09	--	--	--	--	2	\$700,000	\$1,113	\$1,347
370169	Town of Wallburg	--	03/16/09	07/31/15	06/16/09	--	--	--	--	2	\$700,000	\$1,560	\$1,874
Total Davidson County		--	--	--	--	--	--	--	--	223	\$63,313,000	\$213,812	\$266,563
Randolph													
370273	City of Archdale	03/01/74	07/16/81	07/16/81	03/16/09	--	--	--	--	27	\$6,117,000	\$29,039	\$35,611
370196	City of Asheboro	03/15/74	07/16/81	07/16/81	03/16/09	--	--	--	--	45	\$9,748,000	\$38,485	\$50,429
370199	City of Randleman	11/22/74	07/01/87	07/01/87	03/16/09	--	--	--	--	--	--	--	--
370625	City of Trinity	--	01/02/08	05/18/05	03/16/09	--	--	--	--	5	\$1,297,000	\$3,687	\$4,433
370195	Randolph County	01/03/75	07/16/81	07/16/81	11/17/17	--	--	--	--	33	\$8,636,000	\$24,074	\$29,180
370197	Town of Franklinville	02/22/74	07/01/87	07/01/87	03/16/09	--	--	--	--	--	--	--	--

Section 6: Capability Assessment

CID	Jurisdiction	Initial FHBM Identified	Init FIRM Identified	Reg-Emerg Date	Current Effective Map Date	CRS Entry Date	CRS Eff Date	CRS Class	% discount	NFIP Policies in Force	Total Coverage	Total Written Premium + FPF	Total Annual Payment
370582	Town of Liberty	--	01/02/08	03/25/08	03/16/09	--	--	--	--	--	--	--	--
370198	Town of Ramseur	02/15/74	03/01/87	03/01/87	03/16/09	--	--	--	--	--	--	--	--
370613	Town of Seagrove*	Not participating in NFIP (Sanctioned 01/02/09)											
370617	Town of Staley	Not listed in NFIP											
Total for Randolph County		--	--	--	--	--	--	--	--	104	\$24,825,000	\$87,447	\$110,305
	TOTAL PLAN AREA	--	--	--	--	--	--	--	--	327	\$88,138,000	\$301,259	\$376,868

Jurisdictions listed above that are current participants in the NFIP will continue to comply with all required provisions of the program and will work to adequately comply in the future utilizing several strategies. For example, the jurisdictions will coordinate with North Carolina Emergency Management (NCEM) and Federal Emergency Management Agency (FEMA) to develop maps and regulations related to special flood hazard areas within their jurisdictional boundaries and, through a consistent monitoring process, will design and improve their floodplain management program in a way that reduces the risk of flooding to people and property.

The Town of Staley does not participate in the NFIP because they currently do not have any identified flood hazard areas within its jurisdiction. The Town of Seagrove also does not currently participate due to being sanctioned on 01/02/09.

Community Rating System: An additional indicator of floodplain management capability is the active participation of local jurisdictions in the Community Rating System (CRS). The CRS is an incentive-based program that encourages counties and municipalities to undertake defined flood mitigation activities that go beyond the minimum requirements of the NFIP by adding extra local measures to provide protection from flooding. All the eighteen creditable CRS mitigation activities are assigned a range of point values. As points are accumulated and reach identified thresholds, communities can apply for an improved CRS class rating. Class ratings, which range from ten to one, are tied to flood insurance premium reductions as shown in Table 6- 3. As class ratings improve (the lower the number the better), the percent reduction in flood insurance premiums for NFIP policyholders in that community increases.

Table 6- 3: CRS Premium Discounts, by Class

CRS Class	Premium Reduction
1	45%
2	40%
3	35%
4	30%
5	25%
6	20%
7	15%
8	10%
9	5%
10	0

Source: FEMA

Community participation in the CRS is voluntary. Any community that is in full compliance with the rules and regulations of the NFIP may apply to FEMA for a CRS classification better than class 10. The CRS application process has been greatly simplified over the past several years based on community comments. Changes were made with the intent to make the CRS more user-friendly and make extensive technical assistance available for communities who request it.

- Neither the Counties nor any of the participating municipalities, except for the Town of Lexington, currently participate in the CRS. Participation in the CRS program should be considered as a mitigation action by all the jurisdictions. The program would be most beneficial to the Cities of Archdale and Asheboro and Randolph County since they have a combined 77 NFIP policies in place.

Flood Damage Prevention Ordinance: A Flood Damage Prevention Ordinance establishes minimum building standards in the floodplain with the intent to minimize public and private losses due to flood conditions.

- All communities participating in the NFIP are required to adopt a local flood damage prevention ordinance. The Counties and each participating municipality, except the Towns of Seagrove, Franklinville, Staley and Midway, participate in the NFIP and they all have adopted flood damage prevention regulations.

Floodplain Management Plan: A Floodplain Management Plan (or a flood mitigation plan) provides a framework for action regarding corrective and preventative measures to reduce flood-related impacts.

- Neither the Counties nor any of the participating municipalities have adopted floodplain management plans.
- The Town of Lexington includes a floodplain management plan within its local land use ordinance.

Open Space Management Plan: An Open Space Management Plan is designed to preserve, protect, and restore largely undeveloped lands in their natural state and to expand or connect areas in the public domain such as parks, greenways, and other outdoor recreation areas. In many instances, open space management practices are consistent with the goals of reducing hazard losses, such as the preservation of wetlands or other flood-prone areas in their natural state in perpetuity.

- Randolph County participated in the development of the Piedmont Triad Regional Open Space Strategy which identifies a wide variety of key conservation opportunities across the region as well as a strategy meant to serve as the foundation for future conservation planning efforts within the county.
- Randolph County and the Cities of Randleman and Trinity have adopted parks and recreation master plans.
- Davidson County has adopted a greenway master plan as well as a parks and recreation and tourism development master plan, which was also adopted by Denton, Lexington, and Thomasville.
- Davidson County also participated in the development of the Piedmont Triad Regional Open Space Strategy which identifies a wide variety of key conservation opportunities across the region as well as a strategy meant to serve as the foundation for future conservation planning efforts within the county.
- The Town of Lexington has also adopted a city parks and recreation facility development master plan.

Stormwater Management Plan: A Stormwater Management Plan is designed to address flooding associated with stormwater runoff. The stormwater management plan is typically focused on design and construction measures that are intended to reduce the impact of more frequently occurring minor urban flooding.

- Although neither the Counties nor any of the participating municipalities have stormwater management plans in place, the Cities of Archdale, Trinity, and Thomasville have adopted stormwater management ordinances.
- Many of the other participating municipalities have adopted stormwater regulations through various ordinances (such as a zoning, subdivision, or watershed protection ordinance), including the Cities of Asheboro and Randleman and the Towns of Franklinville, Liberty, and Ramseur.

6.3.5 Administrative and Technical Capability

The ability of a local government to develop and implement mitigation projects, policies, and programs is directly tied to its ability to direct staff time and resources for that purpose. Administrative capability can be evaluated by determining how mitigation-related activities are assigned to local departments and if there are adequate personnel resources to complete these activities. The degree of intergovernmental coordination among departments will also affect administrative capability for the implementation and success of proposed mitigation activities.

Technical capability can generally be evaluated by assessing the level of knowledge and technical expertise of local government employees, such as personnel skilled in using Geographic Information Systems (GIS) to analyze and assess community hazard vulnerability. The Capability Assessment Survey was used to capture information on administrative and technical capability through the identification of available staff and personnel resources.

Table 6- 4 provides a summary of the capability assessment results for the Region with regard to relevant staff and personnel resources. An (X) indicates the presence of a staff member(s) in that jurisdiction with the specified knowledge or skill.

Table 6- 4: Relevant Staff/Personnel Resources

Staff / Personnel Resource	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Planners with knowledge of land development / land management practices		X	X	X	X		X		X	X	X		X	X	X	
Engineers or professionals trained in construction practices related to buildings and/or		X	X	X		X			X				X	X	X	X

Staff / Personnel Resource	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
infrastructure																
Planners or engineers with an understanding of natural and/or human-caused hazards		X	X	X		X			X	X	X		X		X	
Building Official				X					X		X				X	
Emergency Manager	X	X		X		X	X		X	X	X		X	X	X	X
Floodplain Manager	X	X	X	X	X	X	X			X	X		X	X	X	X
Land Surveyors			X	X												
Scientists familiar with the hazards of the community		X		X		X			X				X	X	X	X
Staff with education or expertise to assess the community's vulnerability to hazards		X		X	X	X	X		X		X		X	X	X	X
Personnel skilled in GIS and/or HAZUS		X	X	X	X		X			X	X		X		X	
Resource development staff or grant writers				X			X						X			
Maintenance Programs to Reduce Risk		X	X	X	X		X			X	X					
Warning Systems and Services	X	X	X	X						X	X				X	

Credit for having a Floodplain Manager was given to those jurisdictions that have a flood damage prevention ordinance, and therefore an appointed Floodplain Administrator, regardless of whether the appointee was dedicated solely to floodplain management. Credit was given for having a scientist familiar with the hazards of the community if a jurisdiction has a Cooperative Extension Service or Soil and Water Conservation Department. Credit was also given for having staff with education or expertise to assess the community's vulnerability to hazards if a staff member from the jurisdiction was a participant on the existing Planning Team.

6.3.6 Fiscal Capability

The ability of a local government to act is often closely associated with the amount of money available to implement policies and projects. This may take the form of outside grant funding

awards or locally based revenue and financing. The costs associated with mitigation policy and project implementation vary widely. In some cases, policies are tied primarily to staff time or administrative costs associated with the creation and monitoring of a given program. In other cases, direct expenses are linked to an actual project, such as the acquisition of flood-prone homes, which can require a substantial commitment from local, state, and federal funding sources.

The Capability Assessment Survey was used to capture information on the county's fiscal capability through the identification of locally available financial resources.

Table 6- 5 provides a summary of the results for the Region with regard to relevant fiscal resources. An (X) indicates that the given fiscal resource is locally available for hazard mitigation purposes (including match funds for state and federal mitigation grant funds).

Table 6- 5: Relevant Fiscal Resources

Fiscal Tool/Resource	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Capital Improvement Programming		X	X	X		X	X	X		X	X	X	X	X	X	X
Community Development Block Grants (CDBG)			X	X		X				X		X	X	X	X	X
Special Purpose Taxes (or taxing districts)					X	X							X	X	X	X
Gas/Electric Utility Fees															X	
Water/Sewer Fees		X	X	X	X	X	X			X	X				X	
Stormwater Utility Fees							X								X	
Development Impact Fees										X						
General Obligation, Revenue, and/or Special Tax Bonds			X							X						
Special Tax Bonds			X			X				X			X			
Other: HMGP, PDM, FMA, NFIP, buy out programs, Earthquake			X			X				X			X	X	X	X

Fiscal Tool/Resource	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Hazard Reduction Grants, Small Business Administration (SBA), and other state programs and non-governmental sources, etc.																

6.3.7 Political Capability

One of the most difficult capabilities to evaluate involves the political will of a jurisdiction to enact meaningful policies and projects designed to reduce the impact of future hazard events. Hazard mitigation may not be a local priority or may conflict with or be an impediment to other goals of the community, such as growth and economic development. Therefore, the local political climate must be considered in designing mitigation strategies as it could be the most difficult hurdle to overcome in accomplishing their adoption and implementation.

The Capability Assessment Survey was used to capture information on political capability of the Region. The previous *Hazard Mitigation Plans* were reviewed for general examples of local political capability, such as guiding development away from identified hazard areas, restricting public investments or capital improvements within hazard areas, or enforcing local development standards that go beyond minimum state or federal requirements (i.e., building codes, floodplain management, etc.).

- The previous *Hazard Mitigation Plans* identified existing ordinances that address natural hazards or are related to hazard mitigation such as flood damage prevention, watershed protection, soil erosion and sediment control, stormwater management, zoning, and subdivision.
- Randolph County is currently a participant in the NFIP and has adopted the required Flood Damage Prevention Ordinance. The Unified Development Ordinance also includes stormwater management regulations, sedimentation, and erosion control,³ stream buffer requirements,⁴ and watershed protection standards. This demonstrates to some extent both favorable political support and a willingness to adopt hazard mitigation efforts in an active manner.
- In Davidson County, many residents have not experienced significant natural hazard events and may be unaware of hazards that their community may face. Short-term solutions to natural hazard events are more acceptable than adopting hazard mitigation strategies in areas where the public does not perceive the threat of loss as great or imminent. It is expected that the current and future political climates will increasingly become more favorable with further education and awareness.

6.3.8 Local Self-Assessment

In addition to the inventory and analysis of specific local capabilities, the Local Capability Assessment Survey asked counties and local jurisdictions within the Region to conduct a self-assessment of their perceived capability to implement hazard mitigation activities. As part of this process, local officials were encouraged to consider the barriers to implementing proposed mitigation strategies in addition to the mechanisms that could enhance or further such strategies. In response to the survey questionnaire, county officials classified each of the capabilities as either “limited,” “moderate,” or “high.”

³ The City of Asheboro noted that the NC DEQ is the agency that reviews sedimentation/erosion control permits rather than the city.

⁴ The City of Asheboro noted that its stream buffer requirements are specific to Watershed and Flood Hazard Areas and are not citywide.

Table 6- 6 summarizes the results of the self-assessment for the Region.

Table 6- 6: summary of capabilities (blank entries indicate no response)

Fiscal Tool/Resource	Randolph County	City of Archdale	City of Asheboro	Town of Franklinville	Town of Liberty	Town of Ramseur	City of Randleman	Town of Seagrove	Town of Staley	City of Trinity	Davidson County	Town of Denton	Town of Lexington	Town of Midway	City of Thomasville	Town of Wallburg
Plans, Ordinances, Codes and Programs	Moderate	Moderate	Limited	High	Limited			Unrated	Limited	Limited	Moderate	Moderate			High	
Administrative and Technical Capability	Moderate	High	Limited	Moderate	Limited			Unrated	Limited	High	Limited	Moderate			Limited	
Fiscal Capability	Moderate	Moderate	Limited	Moderate	Limited			Unrated	High		Limited	Limited			Moderate	
Education and Outreach Capability	Limited	Moderate	Limited	High	Limited			Unrated	Moderate	Limited	Moderate	Limited			Moderate	
Mitigation Capability	Limited	Moderate	Limited	Moderate	Limited			Unrated	Unrated	Limited	Moderate	Limited			Moderate	
Political Capability	Limited	High	Moderate	Unrated	Limited			Unrated	Unrated	Moderate	Moderate	Moderate			High	
OVERALL CAPABILITY	Moderate	High	Limited	Moderate	Limited		Moderate	Unrated	Moderate	Moderate	Moderate	Moderate			Moderate	

6.3.9 Equity Questionnaire

To understand the capabilities of the communities involved in the planning process, an equity questionnaire was distributed to better represent underserved communities such as low-income communities, communities that have been systematically denied participation in parts of economic, social, and civic life. The Equity Questionnaire was distributed to community planners

to note what could be done to reduce barriers, recognize non-traditional capabilities, and highlight any barriers for underserved communities and vulnerable populations to be included in the mitigation planning process. For example, an underserved community in the planning area may have a strong network of community advocates who can support mitigation which makes it important to identify existing community resources. Some examples of the responses received are listed below:

- Which neighborhoods or groups of people do not have enough resources to prepare for disasters and become stronger against them?
 - “Western neighborhoods of Liberty where we have low-income families”
 - “Vulnerable populations”
 - “Low income and elderly rural communities throughout the county”
 - “Information/communication for Spanish speaking residents could be improved. Direct outreach to low-income census blocks would make sense”
- What resources are missing that prevent these communities from getting the help that they need to plan for and reduce risks from natural, weather-related disasters?
 - “Funds”
 - “People/manpower/ funding”
 - “Not knowing what help is available”
 - “Information in a way to ensure an understanding of hazard risk”
 - “Public education”
 - “Public information”
- Do wealthier communities or neighborhoods get more support than under-resources ones when it comes to preparing for disasters?
 - Yes: 17%
 - No: 83%
- What barriers make it harder for underserved communities to stay safe during disasters?
 - “Unable to purchase extra supplies”
 - “Communication, outreach, and building trust”
 - “Access to personal resources”
 - “Community involvement to reach all age groups”
 - “Transportation, funds for preparedness items”
- What other things (i.e., Resources or partnerships) besides money and the usual supports, can we use to make communities prepared against natural disasters?
 - “Marketing resources to reach all the citizens”
 - “Communication, outreach, and building trust”
 - “Public outreach”
 - “Public education”
 - “Continuous and consistent messaging about hazard risks”
- What issues do we need to consider when planning for disasters, preparing for support, and distributing resources in our area?
 - “Best way to push out information about resources available”

- “equity”
- “Public outreach”
- “Need unique ways to get the response from the community. The more that are involved, the more the info will spread through the community”
- “Clear hazard communications plan and strategy is essential”
- “Specific communication – municipalities know what Emergency Management (EM) expects from them and what they can expect from EM”
- How can we get everyone in the community involved in disaster planning?
 - “Make it worth their time and show the importance of disaster planning”
 - “Outreach, community involvement”
 - “Communication and public outreach”
 - “We have quarterly newsletters, reach out to churches, and having public interest meetings”
 - “Use all available communication tools. Social media, press releases, traditional print, non-print materials, and radio/tv spots”
 - “Partner with stakeholders (business, NGOs, faith based) to reach out to the entire community”

For information about the results of the equity questionnaire, see Appendix I.

6.4 Conclusions on Local Capability

To form meaningful conclusions on the assessment of local capability, a quantitative scoring methodology was designed and applied to results of the Capability Assessment Survey to assess the overall level of capability of the Region to implement hazard mitigation actions.

The overall capability to implement hazard mitigation actions varies among the participating jurisdictions. For planning and regulatory capability, most of the jurisdictions are in the moderate range. There is also some variation in the administrative and technical capability among the jurisdictions with larger jurisdictions generally having greater staff and technical resources. All of jurisdictions are in the limited to moderate range for fiscal capability.

Table 6- 7 shows the results of the capability assessment and the self-reported overall capability rating.

Table 6- 7: Capability Assessment Results

JURISDICTION	OVERALL CAPABILITY RATING
DAVIDSON COUNTY	Moderate
Town of Denton	Limited
Town of Lexington	High
Town of Midway	Limited
City of Thomasville	Moderate

JURISDICTION	OVERALL CAPABILITY RATING
Town of Wallburg	Limited
RANDOLPH COUNTY	High
City of Archdale	Moderate
City of Asheboro	Limited
Town of Franklinville	Moderate
Town of Liberty	Moderate
Town of Ramseur	Moderate
City of Randleman	Moderate
Town of Seagrove	Limited
Town of Staley	Limited
City of Trinity	Moderate

As previously discussed, one of the reasons for conducting a Capability Assessment is to examine local capabilities to detect any existing gaps or weaknesses within ongoing government activities that could hinder proposed mitigation activities and possibly exacerbate community hazard vulnerability. These gaps or weaknesses have been identified for each jurisdiction in the tables found throughout this section. The participating jurisdictions used the Capability Assessment as part of the basis for the Mitigation Actions that are identified in Section 9; therefore, each jurisdiction addresses their ability to expand on and improve their existing capabilities through the identification of their Mitigation Actions.

6.4.1 Linking the Capability Assessment with the Risk Assessment and the Mitigation Strategy

The conclusions of the Risk Assessment and Capability Assessment serve as the foundation for the development of a meaningful hazard mitigation strategy. During the process of identifying specific mitigation actions to pursue, the Planning Team considered not only each jurisdiction's level of hazard risk, but also their existing capability to minimize or eliminate that risk.

SECTION 7: MITIGATION STRATEGY

This section of the *Plan* provides the blueprint for the participating jurisdictions in the Region to follow to become less vulnerable to its identified hazards. It is based on the consensus of the Planning Team and the findings and conclusions of the *Capability Assessment* and *Risk Assessment*. It consists of the following five subsections:

- ◆ 7.1 Introduction;
- ◆ 7.2 Mitigation Goals;
- ◆ 7.3 Identification and Analysis of Mitigation Techniques;
- ◆ 7.4 Selection of Mitigation Techniques; and
- ◆ 7.5 Plan Update Requirement.

7.1 Introduction

The intent of the *Mitigation Strategy* is to provide the Region with the goals that will serve as guiding principles for future mitigation policy and project administration, along with an analysis of mitigation techniques available to meet those goals and reduce the impact of identified hazards. It is designed to be comprehensive, strategic, and functional in nature.

- In being *comprehensive*, the development of the strategy includes a thorough review of all hazards and identifies extensive mitigation measures intended to not only reduce the future impacts of high-risk hazards, but also to help the region achieve compatible economic, environmental, and social goals.
- In being *strategic*, the development of the strategy ensures that all policies and projects proposed for implementation are consistent with pre-identified, long-term planning goals.
- In being *functional*, each proposed mitigation action is linked to established priorities and assigned to specific departments or individuals responsible for their implementation with target completion deadlines. When necessary, funding sources are identified that can be used to assist in project implementation.

The first step in designing the *Mitigation Strategy* includes the identification of mitigation goals. Mitigation goals represent broad statements that are achieved through the implementation of more specific mitigation actions. These actions include both hazard mitigation policies (such as the regulation of land in known hazard areas through a local ordinance) and hazard mitigation projects that seek to address specifically targeted hazard risks (such as the acquisition and relocation of a repetitive loss structure).

The second step involves the identification, consideration, and analysis of available mitigation measures to help achieve the identified mitigation goals. This is a long-term, continuous process sustained through the development and maintenance of this *Plan*. Alternative mitigation measures will continue to be considered as future mitigation opportunities are identified, as data and technology improve, as mitigation funding becomes available, and as this *Plan* is maintained over time.

The third and last step in designing the *Mitigation Strategy* is the selection and prioritization of specific mitigation actions for the Region and its municipalities (provided separately in Section 8: *Mitigation Action Plan*). Each County and participating jurisdiction has its own *Mitigation Action*

Plan (MAP) that reflects the needs and concerns of that jurisdiction. The *MAP* represents an unambiguous and functional plan for action and is the most essential outcome of the mitigation planning process.

The *MAP* includes a prioritized listing of proposed hazard mitigation actions (policies and projects) for the Region and its municipalities to complete. Each action has accompanying information, such as those departments or individuals assigned responsibility for implementation, potential funding sources, and an estimated target date for completion. The *MAP provides* those departments or individuals responsible for implementing mitigation actions with a clear roadmap that also serves as an important tool for monitoring success or progress over time. The cohesive collection of actions listed in the *MAP* can also serve as an easily understood menu of mitigation policies and projects for those local decision makers who want to quickly review the recommendations and proposed actions of the *Plan*.

In preparing each *Mitigation Action Plan* for the Region, officials considered the overall hazard risk and capability to mitigate the effects of hazards as recorded through the *Risk and Capability Assessment* process in addition to meeting the adopted mitigation goals and unique needs of the community.

7.1.1 Mitigation Prioritization

Prioritization of the proposed mitigation actions was based on the following six factors:

- Effect on overall risk to life and property
- Ease of implementation
- Political and community support
- A general economic cost/benefit review¹
- Funding availability
- Continued compliance with the NFIP

The point of contact for each jurisdiction helped coordinate the prioritization process by reviewing each action and working with the lead agency/department responsible to determine a priority for each action using the six factors listed above.

Using these criteria, actions were classified as high, moderate, or low priority by the participating jurisdiction officials. Priorities have not changed since the plan was previously approved.

¹ Only a general economic cost/benefit review was considered by the Planning Team through the process of selecting and prioritizing mitigation actions. Qualitative benefits like quality of life, natural and beneficial values were also considered. Mitigation actions with “high” priority were determined to be the most cost effective and most compatible with the participating jurisdictions’ unique needs. Actions with a “moderate” priority were determined to be cost-effective and compatible with jurisdictional needs but may be more challenging to complete administratively or fiscally than “high” priority actions. Actions with a “low” priority were determined to be important community needs, but the community likely identified several potential challenges in terms of implementation (e.g. lack of funding, technical obstacles). A more detailed cost/benefit analysis will be applied to projects prior to the application for or obligation of funding, as appropriate.

7.2 Mitigation Goals

44 CFR Requirement

44 CFR Part 201.6(c)(3)(i): The mitigation strategy shall include a description of mitigation goals to reduce or avoid long-term vulnerabilities to the identified hazards.

The primary goal of all local governments is to promote the public health, safety, and welfare of its citizens. In keeping with this standard, the Region and the participating municipalities have developed five goal statements for local hazard mitigation planning in the Region. In developing these goals, the previous *Plans* were reviewed to determine if the goals remained applicable. The existing goals were presented, reviewed, voted on, and accepted by the Planning Team (all the goals remain unchanged). Each goal, purposefully broad in nature, serves to establish parameters that were used in developing mitigation actions. The hazard mitigation goals represent what the jurisdictions seek to accomplish through mitigation plan implementation. The Region's Mitigation Goals are presented in **Table 7- 1**. Consistent implementation of actions over time will ensure that community goals are achieved and are consistent with the hazards identified in the plan.

Table 7- 1: Mitigation Goals

	GOAL
Goal #1	Enhance local government capability to lessen the impacts of all-natural hazards.
Goal #2	Identify and protect critical services, buildings, facilities, and infrastructure that are at risk of damage due to natural hazards and to undertake cost-effective mitigation measures to minimize loss.
Goal #3	Develop an effective public awareness/education/outreach program for natural hazards the County and municipalities are most likely to experience.
Goal #4	Protect persons and property as well as reduce damage and loss to existing community assets.
Goal #5	Ensure disaster resistant future development.

7.3 Identification and Analysis of Mitigation Techniques

44 CFR Requirement

44 CFR Part 201.6(c)(3)(ii): The mitigation strategy shall include a section that identifies and analyzes a comprehensive range of specific mitigation actions and projects being considered to reduce the effect of each hazard, with particular emphasis on new and existing buildings and infrastructure.

In formulating the *Mitigation Strategy* for the Region, a wide range of activities were considered to help achieve the established mitigation goals in addition to addressing any specific hazard concerns. These activities were discussed during the Planning Team meetings. The action plan reduces risk to existing buildings and infrastructure as well as limit any risk to new development and redevelopment, with emphasis on new and existing building and infrastructure to take into consideration the actions that address the built environment. In general, all activities considered by the Planning Team can be classified under one of the following six broad categories of mitigation techniques: Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, and Public Awareness and Education. These are discussed in detail below.

7.3.1 Prevention

Preventative activities are intended to keep hazard problems from getting worse and are typically administered through government programs or regulatory actions that influence the way land is developed, and buildings are built. They are particularly effective in reducing a community's future vulnerability, especially in areas where development has not occurred, or capital improvements have not been substantial. Examples of preventative activities include:

- Planning and zoning
- Building codes
- Open space preservation
- Floodplain regulations
- Stormwater management regulations
- Drainage system maintenance
- Capital improvements programming
- Riverine/fault zone setbacks

7.3.2 Property Protection

Property protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard or removal of the structures from hazardous locations. Examples include:

- Acquisition
- Relocation
- Building elevation
- Critical facilities protection
- Retrofitting (e.g., wind proofing, floodproofing, seismic design techniques, etc.)
- Safe rooms, shutters, shatter-resistant glass
- Insurance

7.3.3 Natural Resource Protection

Natural resource protection activities reduce the impact of natural hazards by preserving or restoring natural areas and their protective functions. Such areas include floodplains, wetlands, steep slopes, and sand dunes. Parks, recreation, or conservation agencies and organizations often implement these protective measures. Examples include:

- Floodplain protection
- Watershed management
- Riparian buffers
- Forest and vegetation management (e.g., fire resistant landscaping, fuel breaks, etc.)
- Erosion and sediment control
- Wetland preservation and restoration
- Habitat preservation
- Slope stabilization

7.3.4 Structural Projects

Structural mitigation projects are intended to lessen the impact of a hazard by modifying the environmental natural progression of the hazard event through construction. They are usually designed by engineers and managed or maintained by public works staff. Examples include:

- Reservoirs
- Dams/levees/dikes/floodwalls
- Diversions/detention/retention
- Channel modification
- Storm sewers

7.3.5 Emergency Services

Although not typically considered a “mitigation” technique, emergency service measures do minimize the impact of a hazard event on people and property. These commonly are actions taken immediately prior to, during, or in response to a hazard event. Examples include:

- Warning systems
- Generators
- Evacuation planning and management
- Emergency response training and exercises
- Sandbagging for flood protection
- Installing temporary shutters for wind protection

7.3.6 Public Education and Awareness

Public education and awareness activities are used to advise residents, elected officials, business owners, potential property buyers, and visitors about hazards, hazardous areas, and mitigation techniques they can use to protect themselves and their property. Examples of measures to educate and inform the public include:

- Outreach projects
- Speaker series/demonstration events
- Hazard map information
- Real estate disclosure
- Library materials
- School children’s educational programs; and
- Hazard expositions.

7.4 Selection of Mitigation Techniques

To determine the most appropriate mitigation techniques for the communities in the Region, the Planning Team thoroughly reviewed and considered the findings of the *Capability Assessment* and *Risk Assessment* to determine the best activities for their respective communities. Other considerations included the effect of each mitigation action on overall risk to life and property, its ease of implementation, its degree of political and community support, its general cost-effectiveness, and funding availability (if necessary).

7.5 Plan Update Requirement

In keeping with FEMA requirements for plan updates, the Mitigation Actions identified in the previous plans were evaluated to determine their implementation status. Updates on the implementation status of each action are provided. The mitigation actions provided in Section 8: *Mitigation Action Plan* include the mitigation actions from the previous plans as well as any new mitigation actions proposed through the planning process.

SECTION 8: MITIGATION ACTION PLAN

This section includes the listing of the mitigation actions proposed by the participating jurisdictions in the Region. It consists of the following two subsections:

- ◆ 8.1 Overview
- ◆ 8.2 Mitigation Action Plans

44 CFR Requirement

44 CFR Part 201.6(c)(3)(iii): The mitigation strategy shall include an action plan describing how the actions identified in paragraph (c)(2)(ii) of this section will be prioritized, implemented, and administered by the local jurisdiction.

8.1 Overview

As described in the previous section, the *Mitigation Action Plan*, or *MAP*, provides a functional plan of action for each jurisdiction. It is designed to achieve the mitigation goals established in Section 8: *Mitigation Strategy* and will be maintained on a regular basis according to the plan maintenance procedures established in Section 10: *Plan Maintenance*.

Each proposed mitigation action has been identified as an effective measure (policy or project) to reduce hazard risk for the Region. Each action is listed in the *MAP* in conjunction with background information such as hazard(s) addressed and relative priority. Other information provided in the *MAP* includes potential funding sources to implement the action should funding be required (not all proposed actions are contingent upon funding). Most importantly, implementation mechanisms are provided for each action, including the designation of a lead agency or department responsible for carrying the action out as well as a timeframe for its completion. These implementation mechanisms ensure that the *Plan* remains a functional document that can be monitored for progress over time. The proposed actions are not listed in priority order, though each has been assigned a priority level of “high,” “moderate,” or “low” as described below and in Section 8 (page 8.2). Priorities have not changed since the previous plan was approved.

The *Mitigation Action Plan* is organized by mitigation strategy category (Prevention, Property Protection, Natural Resource Protection, Structural Projects, Emergency Services, or Public Education and Awareness). The following are the key elements described in the *Mitigation Action Plan*.

- **Hazard(s) Addressed** — Hazard which the action addresses.
- **Relative Priority** — High, moderate, or low priority as assigned by the jurisdiction. Mitigation actions with “high” priority were determined to be the most cost effective and most compatible with the participating jurisdictions’ unique needs. Actions with a “moderate” priority were determined to be cost-effective and compatible with jurisdictional needs but may be more challenging to complete administratively or fiscally than “high” priority actions. Actions with a “low” priority were determined to be important community needs, but the community likely identified several potential challenges in terms of implementation (e.g. lack of funding, technical obstacles).
- **Lead Agency/Department** — Department responsible for undertaking the action.
- **Potential Funding Sources** — Local, State, or Federal sources of funds are noted here, where applicable.
- **Estimated Cost** — Anticipated cost of the action. (Low- > \$10k, Medium- \$10k-\$50k, High- <\$50k)

- **Timeframe** — Date by which the action should be completed. More information is provided when possible.
- **Status** — Indication of completion, progress, deferment, or no change since the previous plan. If the action is new, that will be noted here.

8.2 Mitigation Action Plans

The mitigation actions proposed by each of the participating jurisdictions are listed in individual MAPs on the following pages.

Table 8- 1: definitions for mitigation action plan details

Category	Definition	
Hazards	Hazard which the action addresses.	
Relative Priority	High	Highly cost-effective, administratively feasible and politically feasible strategies that could be implemented in 2 fiscal years and be continued.
	Medium	Strategies that have at least two of the following characteristics (but not all three) and could be implemented in 3 fiscal years: Highly cost-effective; or administratively feasible, given current levels of staffing and resources; or are politically popular and supportable given the current environment.
	Low	Strategies that have one of the following characteristics and could be implemented in the next five years): Highly cost-effective; or administratively feasible, given current levels of staffing and resources; or are politically popular and supportable given the current environment.
Action Type	Prevention	Preventative activities are intended to keep hazard problems from getting worse and are typically administered through government programs or regulatory actions that influence the way land is developed, and buildings are built.
	Property Protection	Property protection measures involve the modification of existing buildings and structures to help them better withstand the forces of a hazard, or removal of the structures from hazardous locations.
	Natural Resource Protection	Natural resource protection activities reduce the impact of natural hazards by preserving or restoring natural areas and their protective functions. Such areas include floodplains, wetlands, steep slopes, and sand dunes.
	Structural Projects	Structural mitigation projects are intended to lessen the impact of a hazard by modifying the environmental natural progression of the hazard event through construction.

Category	Definition	
	Public Education	Public education and awareness activities are used to advise residents, elected officials, business owners, potential property buyers, and visitors about hazards, hazardous areas, and mitigation techniques they can use to protect themselves and their property.
	Emergency Services	Although not typically considered a “mitigation” technique, emergency service measures do minimize the impact of a hazard event on people and property.
Action Status	To Be Continued:	Continuing action or program; requires annual or periodic maintenance to continue the action.
	Complete:	No further action required for mitigation action to be implemented or used.
	In Progress:	Action is currently being implemented.
	Deferred:	Action will be reevaluated later.
	Deleted:	The Jurisdiction will no longer utilize the action as a viable mitigation action that can be implemented.
	New	The mitigation action has just been added to the HMP.
Estimated Cost	Low	> \$10,000
	Moderate	\$10,000 -\$50,000
	High	<\$50,000
Potential Funding Sources	Local, State, or Federal sources such as grant funds or general operating budgets are noted here, where applicable.	
Responsible Party	Department responsible for undertaking the action.	
Time frame	Short-Term	1-2 years
	Medium-Term	3-5 years
	Long-Term	greater than 5 years

8.1. Davidson County

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Davidson County	Evaluate stormwater management plan.	Prevention	Flood	Davidson County Planning	Local	High	Medium	To Be Continued	Will be evaluated annually.
2	Davidson County	Coordinate the collection and storage of damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, in digitized form for easy retrieval and for local use in hazard mitigation and land use planning.	Prevention	All	Davidson County Planning/ Emergency Management	Local	High	Medium	Complete	Data has already been collected for this task, but a GIS layer still needs to be created to complete the action.
3	Davidson County	Develop storm water management programs to increase water quality and mitigate against storm water or urban flooding.	Prevention	Flood	Davidson County Public Works	NC Division of Water Quality Loans	High	Medium	To Be Continued	County Officials are currently working with NCDEQ staff on increased regulations for stormwater management for the High Rock Lake watershed regularly.
4	Davidson County	Continued enforcement of all codes as they apply to protection from all hazards. Especially for construction in flood prone areas. Ensure adequate follow up and compliance.	Prevention	All	Davidson County Planning/ Inspections	Local	High	Medium	To Be Continued	All permitting for structures within the floodplain must first obtain a Floodplain Permit with subsequent regulations. Permits will be reviewed as needed.
5	Davidson County	Finalize COOP (Continuity of Operations Plan) for the county and its departments.	Prevention	All	Davidson County Emergency Services	Local	High	Low	In Progress	No measurable progress has been made in the last 5 years due to lack funding.
6	Davidson County	Retrofit critical facilities and county owned facilities for improved resilience to all hazards with the use new technology. This could include but is not limited to wind retrofits, low water consumption fixtures, leak detectors, ignition-resistant building materials, 320 or 361 compliant safe rooms, lightning protection, hail resistant roofing and/or anchoring fixed building equipment etc.	Property Protection	All	Davidson County Emergency Services	Local	Low	Low	In Progress	No measurable progress due to lack of funding.
7	Davidson County	Install back-up generators on critical facilities and county owned facilities for improved resilience to all hazards.	Property Protection	All	Davidson County Emergency Services	Local	High	High	In Progress	No measurable progress due to lack of funding.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
8	Davidson County	Consider additional vegetative buffering requirements beyond 50-foot buffer for large developments with extensive impervious surfaces.	Natural Resource Protection	Flood	Davidson County Planning	Local	Low	Low	In Progress	More stringent stream buffers may come in the future due to additional stormwater regulations pending from NCDEQ.
9	Davidson County	Improve countywide emergency notification system by integrating cell numbers and implementing other update features.	Emergency Services	All	Davidson County Emergency Services Department	Local	High	Medium	In Progress	No measurable progress due to lack of funding.
10	Davidson County	Finalize EOP plan for the county and its Departments.	Emergency Services	All	Davidson County Emergency Services	Local	High	Medium	In Progress	No measurable progress has been made in the last 5 years due to lack funding.
11	Davidson County	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Davidson County Planning/ Emergency Services Department	Local	High	Low	To Be Continued	The County Emergency Services (ES) department has taken steps (such as presentations at county board meetings) to provide local government officials with necessary information on mitigation to plan the budget and policymaking accordingly. However, this action will need to be continued, and new information will need to be presented as it becomes available.
12	Davidson County	Design a public information/education program targeted to mobile home/manufactured home residents explaining hazard events and alternative shelters.	Public Education and Awareness	All	Davidson County Emergency Services Department	Local	High	Low	In Progress	No measurable progress due to lack of funding and staff resources.
13	Davidson County	Incorporate flood hazard awareness materials into storm water outreach.	Public Education and Awareness	Flood	Davidson County Planning	Local	Low	Medium	In Progress	The County remains a member of Stormwater SMART (Stormwater Management and Resource Training) through the PTRC (Piedmont Triad Regional Council) which continues to educate through the school systems of Davidson County and through mass media.

8.2. Denton

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Denton	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Denton Town Manager	Local	Moderate	Low	In Progress	Although hazard mitigation has been integrated into many planning activities, the Town will attempt to improve its integration into all planning activities going forward.
2	Town of Denton	Develop a comprehensive land use plan that considers mitigation of natural hazards.	Prevention	All	Denton Town Manager	Local	Moderate	Low	Deferred	The Town does not have a comprehensive plan but is requesting funding to begin comprehensive plan. No measurable progress has been made in the last 5 years due to lack funding.
3	Town of Denton	Continue to clear debris from culverts and storm drains in flood prone areas.	Prevention	Flood	Denton Public Works	Local	High	Low	In Progress	In the past, the Town has undertaken debris removal to reduce localized flooding in areas around culverts and storm drains. The Town will continue to implement this program and will work to identify any new areas that require maintenance and check-ins.
4	Town of Denton	Consider tree ordinances or programs to encourage planting trees less susceptible to damage from ice and wind.	Prevention	Winter Storm, Severe Weather	Denton Town Manager	Urban and Community Forestry Grant Program	Low	Low	In Progress	The Town has not established an ordinance or program related to tree planting, but it will continue to investigate doing so, most likely as part of developing a comprehensive plan. No measurable progress has been made in the last 5 years due to lack of funding.
5	Town of Denton	Through subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	Winter Storm, Severe Weather	Denton Town Manager	Local	Low	Low	In Progress	The Town has not required that utility lines be buried, but it will continue to encourage this practice and will investigate establishing subdivision regulations to this effect, most likely as part of developing a comprehensive plan once more staff are available.
6	Town of Denton	Through development of land use plan, designate preferred growth areas and develop area plans for target locations considering mitigation of natural hazards.	Prevention	All	Denton Town Manager	Local	Low	Low	In Progress	Town has not established a comprehensive land use plan. No measurable progress has been made in the last 5 years due to lack of funding.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
7	Town of Denton	Consider amending subdivision ordinance to allow clustering to maximize density while preserving high hazard areas.	Prevention	All	Denton Town Manager	Local	Low	Low	In Progress	No measurable progress due to lack of staff availability and funding.
8	Town of Denton	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Denton Town Manager/Fire Service	Local	High	Medium	Deferred	No measurable progress due to lack of staff availability and funding.
9	Town of Denton	Through development of land use plan, Wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Denton Town Manager	Local	Low	Low	In Progress	The Town has not established a comprehensive land use plan due to lack of funding.
10	Town of Denton	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Denton Town Manager	Local	High	Medium	To Be Continued	Efforts have been taken to inform local government and elected officials about the need to consider hazard mitigation in planning and policy-making decisions, however, this effort will need to be continued due to turnover of officials and to keep this on the radar of those officials
11	Town of Denton	Water conservation message to be place on water bills during drought.	Public Education and Awareness	Drought	Denton Town Water Resources	Local	Low	Low	To Be Continued	The Town has included water conservation messages in water bills, but this will practice will need to be continued to keep it in the minds of citizens.

8.3. Lexington

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Lexington	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Lexington Planning	Local	High	Medium	To Be Continued	The Land Use Plan is the primary plan that incorporates hazard mitigation into planning. But all new development is approved only after a multi-department plan review process which takes into consideration hazards and risks identified in the Hazard Mitigation Plan annually.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
2	Town of Lexington	Adopt local storm water regulations to reduce urban and small stream flooding and reduce the impact of urban runoff on downstream rivers.	Prevention	Flood	Lexington Planning	Local	High	Medium	To Be Continued	Lexington is a member of Stormwater SMART, the regional program that provides stormwater and flood control public education in the county. Also, the Zoning Ordinance incorporates provisions to reduce stormwater runoff in new development. The City has now been designated urban and will soon be under Phase II rules. Performed as needed.
3	Town of Lexington	Develop in-house GIS capabilities to track the value of properties within planning areas; and easily identify land in non- buildable areas; especially hazard prone areas.	Prevention	All	Lexington Engineering Department	Local	High	Low	In Progress	Currently available on Davidson County GIS, but this is still in development.
4	Town of Lexington	Coordinate collection and storage of damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, in digitized form for easy retrieval and local use in hazard mitigation and land use planning.	Prevention	All	Davidson County Emergency Services, City and County GIS	Local	High	Low	In Progress	GIS has this capability. The City has not collected any data on events due to lack of staffing.
5	Town of Lexington	Develop program to clear debris from culverts and storm drains in flood prone areas.	Prevention	Flood	Lexington Public Works/Streets Department	FEMA	Moderate	Medium	To Be Continued	Part of current maintenance program that occurs as needed.
6	Town of Lexington	Through subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	Winter Storm, Severe Weather	Lexington Planning	Local	Moderate	Medium	To Be Continued	Regulations require all new subdivision utilities to be underground. Continuing to monitor and enforce.
7	Town of Lexington	Establish natural hazard vulnerability assessment as a component of the plans- review –approval process.	Prevention	All	Lexington Planning	Local	High	Low	To Be Continued	The Land Use Plan is the primary plan that incorporates hazard mitigation into planning. But all new development is approved only after a multi-department plan review process which takes into consideration hazards and risks identified in the Hazard Mitigation Plan.
8	Town of Lexington	Devise local policy precluding the placement public facilities within a floodplain unless the facility provides an overriding public benefit, will not worsen hazard risk, will not promote further floodplain development, and will be constructed to withstand flood	Prevention	Flood	Lexington Planning	Local	High	Medium	To Be Continued	Zoning regulations addresses this issue. Continuing to monitor and enforce.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
		damage.								
9	Town of Lexington	Set up centralized, coordinated permitting process.	Prevention	All	Lexington Planning	Local	Low	Low	To Be Continued	Consolidated through Business and Community Development. Continue to monitor and enforce.
10	Town of Lexington	Designate preferred growth areas and develop area plans for target locations that consider mitigation of natural hazards.	Prevention	All	Lexington Planning	Local	Moderate	Low	To Be Continued	Land Use Plan Ordinance 2004, updated 2010. Continue to monitor and enforce.
11	Town of Lexington	Encourage street interconnectivity in all new subdivisions to allow multiple access points for emergency vehicles.	Prevention	All	Lexington Planning	Local	Moderate	Low	To Be Continued	Land Use Plan Ordinance 2004, updated 2010. Continue to monitor and enforce.
12	Town of Lexington	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Lexington Information and Technology/ Electric Department	Local	High	High	In Progress	Every building with data network switch has at least a UPS (Uninterruptible Power Supply). Also have redundant fiber paths in most buildings. All electric substations are on wireless network. Seeking generator funding.
13	Town of Lexington	Wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Lexington Planning	Local	High	Medium	To Be Continued	Land Use Ordinance adopted 2004, updated 2010. Continue to monitor and enforce.
14	Town of Lexington	Pursue and achieve the designation of Lexington as a "Storm Ready Community" by the National Weather Service to assure timely public warning of impending natural disaster events.	Emergency Services	All	Lexington Fire Department	Local	Moderate	Low	In Progress	Work has been started to achieve the designation as a Storm Ready community and should be completed in next 5 years.
15	Town of Lexington	Develop and/or update plans for the notification and evacuation of populations downstream of the Thom-A-Lex dam.	Emergency Services	Dam and Levee Failure	Lexington Water Department, Davidson County Emergency Services	Local	High	Medium	To Be Continued	These plans were approved on March 1, 2015, and will be updated as needed.
16	Town of Lexington	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Lexington Fire Department	Local	High	Low	In Progress	City employees and elected officials training on NIMS (National Incident Management System) and other hazard related training has started and is being updated.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
17	Town of Lexington	Periodically write a letter to flood plain property owners reminding them of status and need to purchase flood insurance.	Public Education and Awareness	Flood	Lexington Engineering Department	Local	Moderate	Medium	In Progress	Letters sent to repetitive loss property owners annually by Lexington Engineering Department.
18	Town of Lexington	Use available communications resources for outreach and education to promote awareness of natural hazards and mitigation options.	Public Education and Awareness	All	Lexington Fire Department, Davidson County Emergency Services	Local	Moderate	Low	To Be Continued	Public Awareness Campaign has been developed and is implemented annually and/or after disaster events.

8.4. Midway

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Midway	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Midway Town Manager	Local	Moderate	Medium	To Be Continued	Although hazard mitigation has been integrated into many planning activities, the Town will attempt to improve its integration into all planning activities going forward.
2	Town of Midway	Consider tree ordinances or programs to encourage planting trees less susceptible to damage from ice and wind.	Prevention	Winter Storm, Severe Weather	Midway Town Manager	Local	Low	Low	In Progress	Town has not established an ordinance or program related to tree planting, but it will do so in the next 5 years with improved staffing.
3	Town of Midway	Through a subdivision regulation plan, encourage that power, cable, and telephone lines be buried. This will be implemented in phases.	Prevention	Winter Storm, Severe Weather	Midway Town Manager/Planning Zoning Board	Local	Low	Low	In Progress	Town requires that utility lines be buried in all new subdivisions. Continue to monitor and enforce.
4	Town of Midway	Through development of land use plan, designate preferred growth areas and develop area plans for target locations that consider mitigation of natural hazards. This will be implemented in phases.	Prevention	All	Midway Town Manager/Planning Zoning Board	Local	Low	Low	In Progress	Town is working to develop a land use plan and currently has a draft plan developed. It will be finalized no later than December 2029.
5	Town of Midway	Consider a subdivision ordinance to allow clustering to maximize density while preserving high hazard.	Prevention	All	Midway Town Manager/Planning Zoning Board	Local	Low	Low	In Progress	Town will be adopting a subdivision ordinance to be finalized no later than December 2029.
6	Town of Midway	Provide generators for emergency shelters and critical facilities.	Property Protection	All	Midway Fire and Rescue	Local	Low	Low	In Progress	Town is looking into investing in generators for the emergency shelter and fire station but has not purchased these yet.
7	Town of Midway	Through development of land use plan, Wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Midway Town Manager/Planning Zoning Board	Local	Low	Low	To Be Continued	Town is working to develop a land use plan and currently has a draft plan developed. It will be finalized no later than December 2029.
8	Town of Midway	Countywide 911 reverse call system.	Emergency Services	All	Midway Town Manager	FEMA	High	Medium	In Progress	A countywide reverse 911 system is in place, but the County is looking to improve and upgrade this system to meet community needs, and the Town is collaborating with these system improvements.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
9	Town of Midway	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes. Will be attending National Incident Management System course.	Public Education and Awareness	All	Midway Town Manager	Local	High	Medium	To Be Continued	Efforts have been taken to inform local government and elected officials about the need to consider hazard mitigation in planning and policy-making decisions, however, this effort will need to be continued due to turnover of officials and to keep this on the radar of those officials.

8.5. Thomasville

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	City of Thomasville	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Thomasville Planning	Local	High	Medium	To Be Continued	Yearly review by planning and zoning.
2	City of Thomasville	Designate preferred growth areas and develop area plans for target locations that consider mitigation of natural hazards.	Prevention	All	Thomasville Planning	Local	Low	Low	To Be Continued	Thomasville implemented a Land Development plan in 2008. This steers growth and development away from flood prone areas. The City will need to evaluate and update the plan in the future so this action will be continued.
3	City of Thomasville	Consider amending subdivision ordinance to allow clustering to maximize density while preserving high hazard areas.	Prevention	All	Thomasville Planning	Local	Moderate	Medium	In Progress	Researching options for amendments.
4	City of Thomasville	Pursue and participate in the Community Rating System (CRS) through the National Flood Insurance Program (NFIP)	Prevention	Flood	Thomasville Fire Department, Public Works, Planning and Zoning	Local	High	High	In Progress	Site visit requested to begin this program.
5	City of Thomasville	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Thomasville Public Services Department	Local	High	High	To Be Continued	Continued through budgetary capital improvement planning.
6	City of Thomasville	Supply critical facilities with backup power source. Priority needs • 1 generator for City Hall • 2 generators for Fire Service • 2 generators for water/wastewater plants • 1 generator for Public Works Building	Property Protection	All	Thomasville Finance Department/ Public Services Department	Local	Low	High	Completed	All items purchased, installed, and evaluated. Annual preventative maintenance scheduled. Completed May 2022.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
7	City of Thomasville	Look for sources of funding to procure and install transfer switches for critical facilities.	Property Protection	All	Thomasville Public Services Department	FEMA	Low	Low	Deferred	The City has not installed any new transfer switches but will implement as funding becomes available.
8	City of Thomasville	Build and develop property to house a new Police Department that can sustain during all hazard events.	Property Protection	All	Thomasville Police and City Manager	Local	High	Medium	Completed	This location serves as a backup EOC (Emergency Operations Center) when the primary cannot be used. Completed May 2020.
9	City of Thomasville	Wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Thomasville Planning	Local	High	High	In Progress	Awarded 2024 StRAP grant for debris removal and streambank stabilization.
10	City of Thomasville	Seek funding to support of the implementation of an emergency operating center to fund - four phone lines, four portable radios Bluetooth printer, two projectors, two laptop computers, two HD televisions, and two whiteboards. The equipment will support the EOC and serve as a reserve EOC for Davidson County Emergency Management	Emergency Services	All	Davidson County Emergency Management and Thomasville Fire Department	Local	High	High	Completed	Primary EOC was established in 2021.
11	City of Thomasville	Design and implement an emergency operating center for the entire city; EOC will be available as an alternate location for Davidson County	Emergency Services	All	Thomasville Fire Department	Local	High	High	Completed	Primary EOC was established in 2021.
12	City of Thomasville	Pursue and achieve the designation of Thomasville as a "Storm Ready Community" by the National Weather Service to assure timely public warning of impending natural disaster events.	Emergency Services	All	Thomasville Fire Department	Local	Moderate	Medium	To Be Continued	Renewal in 2025.
13	City of Thomasville	Put in place a countywide emergency notification call system for location specific warning to public of impending disaster (i.e., NIXLE)	Emergency Services	All	Davidson County Emergency Management and Thomasville Fire Department	Local	High	High	To Be Continued	Thomasville-Nixle implemented Davidson-Code Red.
14	City of Thomasville	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Thomasville Fire Department	Local	High	High	To Be Continued	Yearly budget workshops to include operational and capital funding requests.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
15	City of Thomasville	Use available communications resources for outreach and education to promote awareness of natural hazards and mitigation options.	Public Education and Awareness	All	Davidson County Emergency Management and Thomasville Fire Department	Local	Moderate	Medium	To Be Continued	Social media and website page creation for emergencies in place.
16	City of Thomasville	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Thomasville Fire Department	Local	High	High	To Be Continued	Although hazard mitigation has been integrated into many planning activities, the town will attempt to improve its integration into all planning activities going forward.
17	City of Thomasville	Work with county to improve countywide emergency notification system by integrating cell numbers and implementing other update features.	Emergency Services	All	Davidson County Emergency Services Department	Local	High	High	To Be Continued	Thomasville-Nixle implementing Davidson-Code Red.
18	City of Thomasville	Ensure customers within flood prone areas are aware of emergency procedures that are in place to ensure their safety.	Public Education and Awareness	All	Thomasville Fire Department	Local	High	Low	In Progress	Public outreach programs in the identified flood areas.
19	City of Thomasville	Review capital improvement plan to ensure CIP supports or consider mitigation activities and are not countered to hazard mitigation	Prevention	All	Thomasville Fire Department	Local	High	High	In Progress	Will be added to the FY2027 capital improvement planning meetings.
20	City of Thomasville	Include continuity of operations and continuity of government for all divisions of government	Prevention	All	Thomasville Fire Department	Local	High	Medium	In Progress	Meetings and workshops scheduled in 2025 for each division/department.
21	City of Thomasville	Evaluate vulnerabilities in water and sewer systems and information networks. Upgrade aging water, sewer infrastructure to withstand natural disasters.	Property Protection	All	Thomasville Fire Department, Public Utilities	Local	High	High	Deferred	No measurable progress due to lack of funding.
22	City of Thomasville	Establish data security and continuity by implementing cybersecurity measures to protect critical infrastructure from attacks.	Prevention	All	Thomasville Management of Information Systems	Local	High	Medium	In Progress	No measurable progress due to lack of funding.
23	City of Thomasville	Establish and inform local government and elected officials of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Wallburg Town Manager, Davidson County Planning	Local	High	High	Deleted	Duplication of item 14.

8.6. Wallburg

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Wallburg	Establish hazard mitigation as a component of all planning activities.	Prevention	All	Wallburg Town Manager	Local	High	High	To Be Continued	Although hazard mitigation has been integrated into many planning activities, the town will attempt to improve its integration into all planning activities going forward.
2	Town of Wallburg	Work with county to improve countywide emergency notification system by integrating cell numbers and implementing other update features.	Emergency Services	All	Davidson County Emergency Services Department	Local	High	High	Deferred	No measurable progress has been made due to lack of funding.
3	Town of Wallburg	Establish and inform local government and elected officials of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Wallburg Town Manager, Davidson County Planning	Local	High	High	To Be Continued	Efforts have been taken to inform local government and elected officials about the need to consider hazard mitigation in planning and policy-making decisions, however, this effort will need to be continued due to turnover of officials and to keep this on the radar of those officials.

8.7. Randolph County

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Randolph County	Planning and Emergency Management will coordinate the collection and storage of damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damages, in digitized form, and in one central location for easy retrieval. Information Planning Specialist is responsible for collection and maintenance of database.	Prevention	All	Randolph County Planning Department/ Information Specialist and Emergency Management	Local	High	Medium	To Be Continued	Continue to collect information regarding these events. This information will continue to find ways to improve the damage assessment and information collection process in coming years.
2	Randolph County	Identify potential inundation areas downstream of high hazard dams.	Prevention	Dam and Levee Failure	Randolph County Planning and Emergency Management	Local	Moderate	High	In Progress	All owners of high and medium hazard dams were required to submit Emergency Action Plans with inundation maps to NC Dam Safety effective March 2015. Randolph County is currently awaiting the approval process at the State level and will be given this data as each EAP is approved.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
3	Randolph County	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management	FEMA	Moderate	Medium	Deferred	No measurable progress due to lack of funding.
4	Randolph County	Procure generators and fuel for alternative sources of power for County School System – at least preferably fixed and wastewater treatment plants and other critical facilities.	Property Protection	All	Randolph County School Finance Director for Facilities & Construction, Randolph County Public Works	County	Moderate	High	Deferred	No measurable progress due to lack of funding.
5	Randolph County	Obtain and install transfer switches.	Property Protection	Winter Storm, Severe Weather	Randolph County Emergency Management	FEMA	Low	High	Deferred	No measurable progress due to lack of funding.
6	Randolph County	Through existing subdivision regulations, encourage that power, cable, and telephone lines be buried.	Property Protection	Severe Weather	Randolph County Planning	Local	Moderate	Low	To Be Continued	As part of the development review process, the County Planning Department ensures that the surveyor and developer place an easement on the plat for utilities to be placed underground for any new development.
7	Randolph County	Develop a plan for alternate communications in the event of loss of 9-1-1 communication system.	Emergency Services	All	Randolph County Emergency Management	County	Moderate	High	Completed	Randolph County Headquarters was opened in late 2019. The original 9-1-1 communications building is now a functional backup center. Back up drills are done monthly.
8	Randolph County	Review and revise location of emergency shelters throughout county and municipalities.	Emergency Services	All	Randolph County Emergency Management	Local	Moderate	Medium	In Progress	Shelter Annex has been adopted in the EOP (Emergency Operations Plan). We are currently coordinating with DSS (Department of Social Services) and PH (Public Health) with identifying two more shelters for the east and west of the county. We are also in the progress of identifying a secondary central shelter to the County.
9	Randolph County	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
10	Randolph County	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes. Outreach and education are part of job descriptions for Planning and Emergency Management personnel. Staff will incorporate hazard mitigation education into existing programs. Education and outreach goals are written into the Emergency Management Department goals submitted to the State annually.	Public Education and Awareness	All	Randolph County Emergency Management	Local	High	Medium	To Be Continued	County active in social media public education as well as public speaking through education establishments and Non-governmental Organizations (NGOs).
11	Randolph County	Design a seasonal public information/education program targeted to mobile home/manufactured home residents through Central Permit process. Explaining hazards events and alternative shelters. Will distribute information through existing Central Permit process with standard permitting information.	Public Education and Awareness	Flood, Severe Weather	Randolph County Planning and Emergency Management	Local	High	Medium	In Progress	Public outreach at www.ReadyRandolph.org and social media platforms occurs seasonally.
12	Randolph County	Disseminate information on the benefits of purchasing flood insurance to property owners in flood hazard areas (targeting Caraway Creek floodplain, Uwharrie River, and Little Uwharrie River floodplains). (yearly)	Public Education and Awareness	All	Randolph County Emergency Management	Local	Moderate	Medium	To Be Continued	Although information has been distributed to these areas, the County would like to continue to improve outreach and increase frequency. Mailers to be disseminated as funding allows.
13	Randolph County	To reduce the ignitability of structures the county will prioritize using fire-resistant building materials, clearing vegetation around buildings, and/r maintaining clean gutters.	Prevention	Wildfire	Randolph Public Works	Local	Moderate	High	New	

8.8. Archdale

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	City of Archdale	Maintain stormwater management program as part of required Phase II.	Prevention	Flood	Archdale Planning and Stormwater Management	Local	High	High	To Be Continued	The City has a stormwater management program in place, but it is still working on ways to improve this program so it will retain this action in the plan going forward.
2	City of Archdale	Fully assess the vulnerability of each identified critical facility to all-natural hazards.	Prevention	All	Archdale Planning and Stormwater Management	Local	Moderate	Medium	To Be Continued	Although an overall assessment of critical facilities was performed through the planning process; a full assessment of each facility's vulnerabilities needs to be performed by the city when funding becomes available.
3	City of Archdale	Maintain program for clearing debris from culverts and storm drains in priority areas as part of NPDES (National Pollutant Discharge Elimination System) Phase II stormwater control standards.	Prevention	Flood	Archdale Planning and Stormwater Management	Local	High	High	To Be Continued	The City has a program in place for clearing debris from culverts and storm drains, but it is still working on ways to improve this program so it will retain this action in the plan going forward.
4	City of Archdale	Define and identify all "critical facilities."	Prevention	All	Archdale Planning and Stormwater Management	Local	Moderate	Low	To Be Continued	Through the update of this plan, the City has been able to identify all critical facilities and will continue to update as needed over the next 5-year planning cycle.
5	City of Archdale	Maintain current floodplain regulation standards.	Prevention	Flood	Archdale Planning and Stormwater Management	Local	High	Medium	To Be Continued	The City currently maintains floodplain regulation standards but will need to update its ordinance as changes become necessary or required at the state level.
6	City of Archdale	Through existing subdivision regulations encourage and review that power, cable, and telephone lines be buried.	Prevention	All	Archdale Planning	Local	Moderate	Low	To Be Continued	The City has amended the Land Management Plan and as a part of the Land Management Plan the requirement for utilities to be buried was incorporated. It is reviewed annually.
7	City of Archdale	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, City of Archdale	FEMA	Moderate	Low	Deferred	This action is not complete due to lack of funding.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
8	City of Archdale	In land use plans and development plans: wherever possible preserve natural wetlands, designate conservation corridors, and protect streams by requiring buffering standards or through acquisition of conservation easements. (Stormwater and Watershed Ordinance provide effective standards for continuing maintenance.)	Natural Resource Protection	All	Archdale Planning and Stormwater Management	Local	High	Medium	To Be Continued	Land use and development plans currently preserve natural wetlands and conservation corridors, but these plans will be updated again and will need to be updated to continue encouraging the preservation of these natural areas.
9	City of Archdale	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
10	City of Archdale	Design a seasonal public information/education program targeted to mobile home/manufactured home residents through Central Permit Process explaining all hazards events, and alternative shelters in a storm/high wind event/flood. Pamphlets to be inserted in regular mailings to residents.	Public Education and Awareness	All	Randolph County Planning (covers Archdale)	Local	High	Low	In Progress	Public outreach at www.ReadyRandolph.org and social media platforms occurs seasonally.
11	City of Archdale	Disseminate information on the benefits of purchasing flood insurance.	Public Education and Awareness	Flood	Archdale Planning and Stormwater Management	Local	High	Low	To Be Continued	Although some information has been distributed to these areas, the City would like to continue to improve outreach and increase frequency. Mailers to be disseminated as funding allows.
12	City of Archdale	Educate and inform citizens (children and adults) of environmental and hazard issues at the Archdale Library through education seminars done on a six-week basis.	Public Education and Awareness	All	Archdale Planning and Stormwater Management	Local	High	Low	To Be Continued	Will continue to review and enhance these programs to improve the information distributed during these seminars.
13	City of Archdale	Provide flood insurance awareness through existing stormwater outreach program and permitting process.	Public Education and Awareness	Flood	Archdale Planning and Stormwater Management	Local	High	Low	To Be Continued	The stormwater management process in place does a good job of making citizens aware of flood insurance requirements, but as new information on flood insurance is available, this will need to be integrated into the process.
14	City of Archdale	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-	Public Education and Awareness	All	Archdale Planning, Emergency Management, and Public Works	Local	High	Low	To Be Continued	City active in social media public education as well as public speaking through education establishments and NGO organizations.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
		making processes.								

8.9. Asheboro

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	City of Asheboro	Evaluate the need for measures supplementing NC DEQ requirements regarding storm water control (retention/detention ponds or other storm water measure) on a case- by-case basis for uses that are environmentally sensitive and require a Conditional or Special Use Permit. Review storm water issues and best management practices in consultation with NC DEQ.	Prevention	Flood	Asheboro Planning/NC Department of Environmental Quality	Local	Moderate	Low	To Be Continued	The City continues to evaluate significant and sizeable development for stormwater quantity controls as part of governing board approvals.
2	City of Asheboro	Identify, update and map mobile home parks for use in all hazard assessments.	Prevention	All	Asheboro Planning	Local	Low	Low	To Be Continued	Expansions to two manufactured home parks have been approved by the city since 2020; the manufactured home park database is updated annually.
3	City of Asheboro	Look into funding for and developing program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Asheboro Water Resources and Public Works	Local	Moderate	Low	To Be Continued	City staff learned about NCLWF (North Carolina Land and Water Fund) Flood Risk Reduction Program and was ready to submit an application for a specific project; action was deferred due to unreadiness from the property owner. Likely will revisit engagement with this program in the future.
4	City of Asheboro	Existing zoning ordinance to be modified to require ice damage resistant trees along buffers and screens.	Prevention	Winter Storm	Asheboro Planning	Local	High	Medium	Deleted	Determined not to be sufficiently targeted to have meaningful impact.
5	City of Asheboro	Through existing subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	All	Asheboro Planning	Local	Moderate	Low	To Be Continued	This objective is built into the City's development review process.
6	City of Asheboro	Strengthen floodplain regulation to current standards. (New model regulation.)	Prevention	Flood	Asheboro Planning	Local	High	Low	In Progress	The City will move to adopt updated regulatory maps and related regulations as information becomes finalized. Action will include assisting with public awareness of the updated Special Flood Hazard Areas.
7	City of Asheboro	Develop/update a program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Asheboro Public Works	Local	High	Low	In Progress	Plan to add internal program to map these areas for operational efficiency and preparedness.
8	City of Asheboro	Consult with Asheboro Housing Authority to consider buyout (acquisition) and relocation for public housing in floodplains.	Property Protection	Flood	Asheboro City Manager/Planning	FEMA	Low	Low	In Progress	Triggering event has not occurred.
9	City of Asheboro	Procure generators and fuel for alternative source of power for: • Water plant • Water pump • Other critical facilities	Property Protection	All	Public Works/Water Resources/Finance	Local	Moderate	High	In Progress	Planning for power redundancy underway as part of Capital Planning Program.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
10	City of Asheboro	In land use plans and development plans, adopt as city policy): wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Asheboro Planning	Local	High	Low	In Progress	Projects have been approved with natural resource preservation as part of development approval.
11	City of Asheboro	Develop and review municipal Emergency Operations Plan.	Emergency Services	All	Asheboro City Manager	Local	High	Medium	To Be Continued	Review of Emergency Operations planning is on-going.
12	City of Asheboro	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster.	Emergency Services	All	Randolph County Emergency Management	FEMA	Moderate	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
13	City of Asheboro	Ensure residents within flood prone areas are aware of emergency procedures that are in place to ensure their safety.	Emergency Services	Flood	Asheboro City Manager/Planning	Local	Moderate	Low	In Progress	With new flood maps expected to become official soon, there will be new opportunities for public awareness and education campaigns.
14	City of Asheboro	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes, through ongoing hazard mitigation planning five-year cycle.	Public Education and Awareness	All	Asheboro City Manager/Planning with assistance from PTCOG	Local	High	Low	To Be Continued	Staff is planning to present highlights of the Hazard Mitigation plan to the governing board once it has been completed.
15	City of Asheboro	Disseminate information on the benefits of purchasing flood insurance.	Public Education and Awareness	Flood	Asheboro Planning	Local	High	Low	To Be Continued	In 2024, the City hired a Public Information who will assist in communicating flood hazard protection and mitigation strategies.
16	City of Asheboro	Keep the public updated through various media channels (website, newspaper, Public Access Channel 8, Facebook, Twitter, etc.) concerning road and other conditions during times of adverse weather and all hazards.	Public Education and Awareness	All	Asheboro Planning/Public Information Officer	Local	High	Low	To Be Continued	The City will work with Randolph County to disseminate consistent communications via Social Media, online and other City communication channels.

8.10. Franklinville

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Franklinville	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, narrative description of damage, not just dollar amount, for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Planning and Emergency Management	Local	High	Medium	In Progress	Randolph County EM takes responsibility to record damage and perform damage assessments after a hazard has occurred.
2	Town of Franklinville	Work with Ramseur in regular water supply planning process, develop emergency water supply capability.	Prevention	Drought	Franklinville Town Clerk and Town Council	Local	High	Low	In Progress	The Town is currently working with other municipalities on a regional solution.
3	Town of Franklinville	Strengthen mobile home/manufactured home anchoring requirements.	Prevention	Flood, Severe Weather, Tornado, Hurricane/Tropical Storm, Earthquake	Franklinville Town Clerk	Local	Moderate	Medium	In Progress	The Town has strengthened the process for Mobile home placement and requirements.
4	Town of Franklinville	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Franklinville Public Works	Local	High	Medium	Completed	The Town has adopted a plan and schedule of debris removal.
5	Town of Franklinville	Through existing subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	All	Franklinville Planning	Local	Moderate	Low	In Progress	New developments are encouraged to bury lines if possible, during the planning process.
6	Town of Franklinville	Include in land use and development plans: will encourage street interconnectivity in all new subdivisions to allow multiple exit points.	Prevention	All	Franklinville Planning	Local	High	Low	In Progress	The Town has instituted the changes in its planning process for development.
7	Town of Franklinville	Update flood prevention ordinance.	Prevention	Flood	Franklinville Town Clerk	Local	High	Low	In Progress	The Town updates the ordinance regularly.
8	Town of Franklinville	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Franklinville	FEMA	Moderate	Low	In Progress	Still working with Randolph County on grant opportunities.
9	Town of Franklinville	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Franklinville Public Works and Emergency Services	Local	Moderate	High	Deferred	No measurable progress due to lack of funding.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
10	Town of Franklinville	Identify and designate at least one emergency shelter in town.	Emergency Services	All	Franklinville Town Clerk with assistance from PTCOG/County Emergency Management	Local	Moderate	Medium	In Progress	The Town has considered a new location and is waiting for completion of the local building project.
11	Town of Franklinville	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
12	Town of Franklinville	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Franklinville Town Clerk	Local	High	Low	To Be Continued	Town active in social media public education as well as public speaking through education establishments and NGO organizations.

8.11. Liberty

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Liberty	Employ a planner.	Prevention	All	Liberty Town Manager	Local	High	High	Completed	Hired an Assistant Town Manager who focuses on planning and zoning.
2	Town of Liberty	Create planning department.	Prevention	All	Liberty Town Manager	Local	High	High	In Progress	With hiring an Assistant Town Manager, we have made some good steps, but we would need another staff or two to complete a planning department.
3	Town of Liberty	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, narrative description of damage, not just dollar value, for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Planning and Emergency Management	Local	Moderate	Medium	In Progress	With hiring an Assistant Town Manager, we have made some good steps, but we would need another staff or two to complete a planning department to be able to track these items.
4	Town of Liberty	Develop emergency water supply capability as part of local water supply planning process.	Prevention	Drought, Winter Storm	Liberty Town Manager	Local	High	High	In Progress	Secured three new wells and have a good overall water supply but no interconnection for a backup - conversations with Randolph County and Greensboro for a connection - Meter vault study being completed in conjunction with Randolph County.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
5	Town of Liberty	Consider Urban Forestry Services development.	Prevention	Winter Storm, Severe Weather, Wildfire	Liberty Town Manager	Urban and Community Forestry Grant Program	Low	Medium	In Progress	Progress has taken place, but the town will work with county forest service to complete implementation.
6	Town of Liberty	Adopt and review flood prevention ordinance.	Prevention	Flood	Liberty Town Manager	Local	High	Medium	To Be Continued	Reviewed annually.
7	Town of Liberty	Review and amend existing capital improvement plan to ensure capital improvements support mitigating activities and are not countered to hazard mitigation.	Prevention	All	Liberty Town Manager	Local	Low	Medium	To Be Continued	Reviewed every 5 years.
8	Town of Liberty	Through amendments to existing subdivision regulations, encourage and review that power, cable, and telephone lines be buried.	Prevention	All	Liberty Town Manager	Local	Low	Medium	In Progress	New Assistant Town Manager is working on updating subdivision regulations.
9	Town of Liberty	Include and review in existing land development plans, where feasible will encourage street interconnectivity in all new subdivisions to allow multiple access points.	Prevention	All	Liberty Town Manager	Local	Moderate	Medium	To Be Continued	This has been included in the Town's ordinances and is reviewed annually.
10	Town of Liberty	Adopt and review tree planning ordinances or programs and landscaping practices that encourage planting trees which are less susceptible to damage from ice storms.	Prevention	Winter Storm	Liberty Town Manager	Urban and Community Forestry Grant Program	Low	Medium	To Be Continued	This has been included in the Town's ordinances and is reviewed annually.
11	Town of Liberty	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Liberty	FEMA	Moderate	High	Deferred	No measurable progress due to lack of funding.
12	Town of Liberty	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Liberty Town Manager/Finance Officer	Local	High	Medium	In Progress	Have applied for FEMA grants for backup generators.
13	Town of Liberty	Include and review in existing land development plans, adopt as town policy: wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Liberty Town Manager	Local	High	Medium	To Be Continued	This has been included in the Town's ordinances and is reviewed annually.
14	Town of Liberty	Contract a public safety officer.	Emergency Services	All	Liberty Town Manager/EM	Local	High	High	In Progress	Added duties to a fireman who could do it part time - with growth he has become too busy to put as much time is needed into the position - need to fund a full-time safety officer

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
15	Town of Liberty	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
16	Town of Liberty	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation policy in budgetary planning and decision-making processes.	Public Education and Awareness	All	Liberty Town Manager with assistance from PTRC	Local	Moderate	Medium	Deferred	Town has minimal additional funds outside of operational funds and no progress has been made as of yet.

8.12. Ramseur

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Ramseur	Develop emergency water supply capability.	Prevention	Drought, Winter Storm	Ramseur Administration/ Town Council	Local	High	Medium	In Progress	Ramseur and Suez will begin discussion on available options in 2026.
2	Town of Ramseur	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Ramseur Public Works	Local	High	Medium	To Be Continued	Storm drains are cleaned on a regular basis to maintain a clear path for the water.
3	Town of Ramseur	Strengthen mobile home/manufactured home anchoring requirements.	Prevention	Severe Weather	Ramseur Town Clerk	Local	Moderate	Medium	In Progress	Need to review. Planning and Zoning will make sure our anchoring ordinances are as up to date as possible.
4	Town of Ramseur	Update flood damage prevention ordinance to limit and/or restrict future development in the floodplain.	Prevention	Flood	Ramseur Administration	Local	Low	Medium	In Progress	Planning and Zoning will begin work on this in 2026.
5	Town of Ramseur	Through existing subdivision regulations, encourage and review that power, cable, and telephone lines be buried.	Prevention	All	Ramseur Planning	Local	Low	Medium	To Be Continued	Commissioners adopted these guidelines as part of the update to the Land Use Ordinance and review them annually.
6	Town of Ramseur	In land use planning documents, where feasible, will encourage and review street interconnectivity in all new subdivisions to allow multiple access points.	Prevention	All	Ramseur Planning	Local	Low	Low	To Be Continued	Commissioners adopted these guidelines as part of the update to the Land Use Ordinance and review them annually.
7	Town of Ramseur	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Ramseur	FEMA	Moderate	Medium	Deferred	No measurable progress due to lack of funding.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
8	Town of Ramseur	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Ramseur Public Works	Local	Moderate	High	In Progress	Generators are available to power most pump stations, but more generators are needed to service all stations. Generators are serviced annually and maintained throughout the year. Purchase more generators to make sure all pump stations can be powered if outage occurs. Will look at budget to see if money is available.
9	Town of Ramseur	Install hookups for portable generators at sewer lift stations which do not currently have hookups.	Property Protection	All	Ramseur Public Works	Local	Moderate	High	In Progress	Hookups are installed on lift stations but not on the portable generators yet. More information is needed on the generator to know what it is capable of powering is. Hookups are needed on the portable generator and more information needed to be sure it will power the lift stations in need.
10	Town of Ramseur	Adopt and review as town policy and incorporate into land use plans that wherever possible preserve natural wetlands, designate corridors, especially along streams through acquisitions or conservation easements.	Natural Resource Protection	All	Ramseur Planning	Local	Low	Low	To Be Continued	Commissioners adopted these guidelines as part of the update to the Land Use Ordinance and review them annually.
11	Town of Ramseur	Identify and designate at least one emergency shelter in town.	Emergency Services	All	Ramseur Administration/ Randolph County Emergency Management	Local	Moderate	Low	In Progress	Working with a church in Ramseur concerning training and evaluation for shelter eligibility.
12	Town of Ramseur	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
13	Town of Ramseur	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Ramseur Administration	Local	High	Medium	In Progress	The Town is active in social media public education as well as public speaking through education establishments and NGO organizations to educate and inform local government and elected officials of the need to consider hazard mitigation planning in other planning mechanisms.
14	Town of Ramseur	Educate and inform residents of the need for and means of hazard mitigation to protect persons and property more effectively from the impacts of natural hazards.	Public Education and Awareness	All	Ramseur Administration	Local	High	Medium	In Progress	Public outreach at www.ReadyRandolph.org and social media platforms occurs regularly.

8.13. Randleman

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2025
1	City of Randleman	Continue to develop GIS capability.	Prevention	All	Randleman Planning	Local	High	High	Completed	AIA (Asset Inventory and Assessment) Grant was applied and granted- Sewer/ Water Management Plan was implemented in August 2024.
2	City of Randleman	Identify potential inundation areas downstream of high hazard dams.	Prevention	Dam and Levee Failure	Randleman Planning/Randolph County Emergency Management	Local	Moderate	Medium	Completed	Randleman City Lake EAP was completed and presented in March 2024.
3	City of Randleman	Develop and review and adopt a drought management/water shortage (conservation) ordinance as part of the regular Local Water Supply Planning process.	Prevention	Drought	Randleman City Manager and Water Resources	Local	High	Medium	Completed	The City developed a water restriction drought plan and will be reviewed annually.
4	City of Randleman	Adopt and review as City policy through Land Development Plans that wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Randleman Planning	Local	Moderate	Medium	To Be Continued	Plan was updated and City officials approved it in August 2021. The City has now implemented the new LDO (Land Development Ordinance) and UDO (Unified Development Ordinance) and reviews the ordinances annually and holds to current standard.
5	City of Randleman	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Everbridge sends emergency alerts for Whitepages and residents that sign up for alerts facilitated by Randolph County.
6	City of Randleman	Look into Stormwater Management Planning.	Prevention	Flood	Randleman Planning and Public Works	Local	Low	Low	In Progress	The City has implemented some efforts for stormwater. planning but will continue to upgrade efforts as its needs change.
7	City of Randleman	Review capital improvement plan to ensure capital improvements support or consider mitigating activities and are not countered to hazard mitigation.	Prevention	All	Randleman City Manager	Local	Moderate	Low	In Progress	Currently reviewing capital improvements and ensure mitigation measures are considered.
8	City of Randleman	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Randleman Water Resources and Public Works	Local	High	High	In Progress	Process implemented to address aging culverts and clear debris.
9	City of Randleman	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Randleman	FEMA	Moderate	High	Deferred	This action is not complete due to lack of funding.
10	City of Randleman	Evaluate current capacity of critical services to deal with power outages.	Property Protection	All	Randleman City Manager	Local	Moderate	Medium	In Progress	The City has performed some preliminary evaluation of critical services, but there needs to be more in-depth evaluation so the town will

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2025
										pursue this going forward.
11	City of Randleman	Procure generators and fuel for alternative sources of power for lift stations and boost stations, emergency shelters and other critical facilities.	Property Protection	All	Randleman City Manager and Finance Officer	Local	High	High	In Progress	Generators have been purchased for Fire Department and Wastewater Treatment Plant. City plans on purchasing additional generators for critical services (boost stations and lift stations)
12	City of Randleman	Identify and designate at least one emergency shelter in each municipality.	Emergency Services	All	Randolph County Emergency Management	Local	Moderate	Medium	In Progress	The City has not designated an emergency shelter, however, is planning to do so in the near future.
13	City of Randleman	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Randleman City Manager/Planning with assistance from PTCOG	Local	High	Medium	To Be Continued	City staff have worked on educating elected officials of the need to include mitigation in future budgeting, but as new information becomes available and officials turn over, this process will need to be updated and implemented.
14	City of Randleman	County recording damage assessment information for Randleman, such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Emergency Management and Planning	County	Moderate	Low	To Be Continued	Randolph County EM and Planning collect these events as they occur and will continue to carry out this practice going forward.
15	City of Randleman	Adopt and review tree planning ordinances or programs and landscaping practices that encourage planting trees less susceptible to damage.	Prevention	Winter Storm, Severe Weather	Randleman Planning	Urban and Community Forestry Grant Program	Low	Medium	Completed	This strategy was completed with the adoption of the new subdivision ordinance in August 2008 and is reviewed annually. The City of Randleman now has two Arborist on staff of which will help the City Manager and Planning Department to develop new ordinances focused prevention.
16	City of Randleman	Through existing subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	All	Randleman Planning	Local	Moderate	Medium	To Be Continued	New Subdivisions are required that all utility companies bury lines.
17	City of Randleman	Strengthen floodplain regulations to current standards.	Prevention	Flood	Randleman Planning	Local	High	Medium	To Be Continued	This strategy was completed as the city adopted new ordinances in 2008 that address these concerns and reviews them annually to current standards.
18	City of Randleman	Review safe growth management strategies for development downstream of dams and incorporate into Land Use Plans.	Natural Resource Protection	Flood, Dam and Levee Failure	Randleman Planning	Local	Moderate	Medium	To Be Continued	This strategy was completed as the City adopted new ordinances in 2008 that address these concerns, and the City reviews the ordinances annually

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2025
										to current standards.
19	City of Randleman	Disseminate information on the benefits of purchasing flood insurance to property owners in flood hazard areas.	Public Education and Awareness	Flood	Randleman Planning	Local	Moderate	Medium	To Be Continued	The City has disseminated information on flood insurance, but there is a need to continually update citizens, especially with any changes to maps, etc.

8.14. Seagrove

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Seagrove	Adopt a flood prevention ordinance.	Prevention	Flood	Seagrove Town Clerk	Local	High	Low	In Progress	The Town has not adopted a flood damage prevention ordinance, but it will investigate doing this in conjunction with its NFIP participation status.
2	Town of Seagrove	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, narrative description of damage (not just \$ value) for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Emergency Management and Planning (covers all municipalities)	Local	High	Low	In Progress	The Town has not kept a record of storm damage historically but will work with the county to try to track this information in the future. Randolph County is responsible for tracking and documenting storm damages, injuries, etc. for NCDC records.
3	Town of Seagrove	Become an NFIP member.	Prevention	Flood	Seagrove Town Clerk/Town Council	Local	High	Medium	In Progress	The town is not currently a member of the NFIP, but it will evaluate the merits of implementing this action going forward.
4	Town of Seagrove	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Seagrove Public Works	Local	Low	High	Deferred	Deferred due to lack of staffing and funding.
5	Town of Seagrove	Strengthen mobile home/manufactured home anchoring requirements.	Prevention	Severe Weather	Seagrove Town Clerk	Local	Low	High	In Progress	The town has not made measurable progress in strengthening its mobile home anchoring requirements, so this will be a focus for the town going forward.
6	Town of Seagrove	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Seagrove	FEMA	Moderate	Medium	Deferred	No measurable progress due to lack of funding.
7	Town of Seagrove	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Seagrove Town Clerk	Local	Moderate	High	Deferred	Currently the town does not have generators or alternative power sources available due to a lack of available funding. The town will continue to pursue generator funding going forward.
8	Town of	Adopt as town policy: preserve natural	Natural	All	Seagrove Town	Local	Low	Medium	Deferred	The Town has not adopted a policy to

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
	Seagrove	wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Resource Protection		Clerk/City Council					preserve natural wetlands due to lack of staff availability. The city will continue to pursue natural preservation areas going forward.
9	Town of Seagrove	Identify and designate at least one emergency shelter in each municipality.	Emergency Services	All	Seagrove Town Clerk/Randolph County Emergency Management	Local	High	Medium	In Progress	The Town has not designated a shelter location but will identify a shelter in the future.
10	Town of Seagrove	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	Medium	Completed	Everbridge sends emergency alerts for white pages and residents that sign up for alerts facilitated by Randolph County.
11	Town of Seagrove	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Seagrove Town Clerk/PTCOG through hazard mitigation planning process/Randolph County	Local	High	Medium	In Progress	The Town has made minor efforts to reach out to the public but overall improvements are needed to strengthen information disseminated to the public. The Town will work to improve its outreach going forward.

8.15. Staley

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Staley	Adopt a flood prevention ordinance.	Prevention	Flood	Staley Town Council	Local	High	Medium	Deleted	There is no floodplain in Staley Town limits.
2	Town of Staley	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, narrative description of damage, not just dollar value, for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Emergency Management and Planning	Local	High	Medium	In Progress	Randolph County Emergency Management is responsible for all damage assessments after a hazard.
3	Town of Staley	Become an NFIP member.	Prevention	Flood	Staley Town Clerk and Town Council	Local	High	Medium	Deferred	The town is not currently a member of the NFIP, but it will evaluate the merits of implementing this action going forward.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
4	Town of Staley	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Contract with Volunteer Fire Department	Local	Low	Medium	Deleted	There is no floodplain in the Staley Town limits, but they are in the process of developing a plan for route debris clearing from culverts and ditches.
5	Town of Staley	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Staley	FEMA	Moderate	Medium	Deleted	The Town of Staley does not have homeowners in the floodplain.
6	Town of Staley	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Staley Town Council	Local	Moderate	High	Completed	The Town does not have generators or alternative power supply options, but contracts with the Staley Volunteer Fire Department which does.
8	Town of Staley	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	Medium	Completed	Randolph County Emergency Management is responsible for an Everbridge account which allows them to make emergency alerts throughout the county. They have a volunteer resource called REACT - the community can create a free account and will receive emergency alerts automatically.
9	Town of Staley	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation in policy and budgetary planning and decision-making processes.	Public Education and Awareness	All	Staley Town Council	Local	High	Medium	To Be Continued	Town staff has taken efforts to educate elected officials but there is a need to improve and continue the current efforts. Therefore, this action will remain in place. Town is active in social media public education as well as public speaking through education establishments and NGO organizations.

8.16. Liberty

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	Town of Liberty	Employ a planner.	Prevention	All	Liberty Town Manager	Local	High	High	Completed	Hired an Assistant Town Manager who focuses on planning and zoning.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
2	Town of Liberty	Create planning department.	Prevention	All	Liberty Town Manager	Local	High	High	In Progress	With hiring an Assistant Town Manager, we have made some good steps, but we would need another staff or two to complete a planning department.
3	Town of Liberty	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged, narrative description of damage, not just dollar value, for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Planning and Emergency Management	Local	Moderate	Medium	In Progress	With hiring an Assistant Town Manager, we have made some good steps, but we would need another staff or two to complete a planning department to be able to track these items
4	Town of Liberty	Develop emergency water supply capability as part of local water supply planning process.	Prevention	Drought, Winter Storm	Liberty Town Manager	Local	High	High	In Progress	Secured three new wells and have a good overall water supply but no interconnection for a backup - conversations with Randolph County and Greensboro for a connection - Meter vault study being completed in conjunction with Randolph County.
5	Town of Liberty	Consider Urban Forestry Services development.	Prevention	Winter Storm, Severe Weather, Wildfire	Liberty Town Manager	Urban and Community Forestry Grant Program	Low	Medium	In Progress	Action has taken place, but the town will work with county forest service to complete implementation.
6	Town of Liberty	Adopt and review flood prevention ordinance.	Prevention	Flood	Liberty Town Manager	Local	High	Medium	Deleted	Reviewed annually.
7	Town of Liberty	Review and amend existing capital improvement plan to ensure capital improvements support mitigating activities and are not countered to hazard mitigation.	Prevention	All	Liberty Town Manager	Local	Low	Medium	To Be Continued	Reviewed every 5 years.
8	Town of Liberty	Through amendments to existing subdivision regulations, encourage and review that power, cable, and telephone lines be buried.	Prevention	All	Liberty Town Manager	Local	Low	Medium	In Progress	New Assistant Town Manager is working on updating subdivision regulations.
9	Town of Liberty	Include and review in existing land development plans, where feasible will encourage street interconnectivity in all new subdivisions to allow multiple access points.	Prevention	All	Liberty Town Manager	Local	Moderate	Medium	Completed	This has been included in the Town's ordinances and is reviewed annually.
10	Town of Liberty	Adopt and review tree planning ordinances or programs and landscaping practices that encourage planting trees which are less susceptible to damage from ice storms.	Prevention	Winter Storm	Liberty Town Manager	Urban and Community Forestry Grant Program	Low	Medium	To Be Continued	This has been included in the Town's ordinances and is reviewed annually.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
11	Town of Liberty	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management, Town of Liberty	FEMA	Moderate	High	Deleted	No measurable progress due to lack of funding.
12	Town of Liberty	Evaluate and/or provide generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Liberty Town Manager/Finance Officer	Local	High	Medium	In Progress	Have applied for FEMA grants for backup generators.
14	Town of Liberty	Contract a public safety officer.	Emergency Services	All	Liberty Town Manager/EM	Local	High	High	In Progress	Added duties to a firefighter who could do it part time - with growth he has become too busy to put as much time is needed into the position - need to fund a full-time safety officer
15	Town of Liberty	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	High	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.
16	Town of Liberty	Educate and inform local government and elected officials (decision makers) of the need to consider hazard mitigation policy in budgetary planning and decision-making processes.	Public Education and Awareness	All	Liberty Town Manager with assistance from PTRC	Local	Moderate	Medium	Deferred	Town has minimal additional funds outside of operational funds and no progress has been made yet.
13	Town of Liberty	Include and review in existing land development plans, adopt as town policy: wherever preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Liberty Town Manager	Local	High	Medium	Deleted	This has been included in the Town's ordinances and is reviewed annually.

8.17. Trinity

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
1	City of Trinity	Develop and review a Stormwater Management Plan as part of NPDES Phase II program requirements.	Prevention	Flood	Trinity City Manager	Local	High	Medium	To Be Continued	The City developed a stormwater management plan in 2009 and reviews it annually.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
2	City of Trinity	Review existing capital improvement plan to ensure capital improvements support mitigating activities and are not counter to hazard mitigation.	Prevention	All	Trinity City Manager	Local	Moderate	Medium	To Be Continued	The City will again review its existing CIP in 2025.
3	City of Trinity	Update existing zoning ordinance to include considerations for hazard mitigation.	Prevention	All	Trinity City Manager	Local	High	Medium	In Progress	The City is currently working on updating its zoning ordinance and it will hope to have that completed by 2025.
4	City of Trinity	Update subdivision ordinance to include considerations for hazard mitigation.	Prevention	All	Trinity City Manager	Local	High	Medium	In Progress	The City is currently working on updating its subdivision ordinance and it will hope to have that completed by 2025.
5	City of Trinity	Develop a section of existing Capital Improvement Plan devoted solely to hazard mitigation projects to allow for effective financial management of capital projects which have hazard mitigation ramifications.	Prevention	All	Trinity City Manager	Local	Moderate	Medium	In Progress	The City is in the process of developing a section of its CIP that will be solely dedicated to hazard mitigation.
6	City of Trinity	Partner with county to utilize GIS resources for hazard mitigation planning.	Prevention	All	Trinity City Manager	Local	High	Medium	In Progress	The City has partnering arrangements in place with the county for GIS.
7	City of Trinity	Develop procedure for recording damage assessment information such as type of hazard, location of hazard occurrence, when it occurred, death or injury, property damaged for local use in hazard mitigation and land use planning.	Prevention	All	Randolph County Emergency Management and Planning	Local	High	Medium	In Progress	Randolph County EM takes responsibility to record damage and perform damage assessments after a hazard has occurred with the cooperation of the City.
8	City of Trinity	Strengthen mobile home anchoring requirements.	Prevention	Severe Weather, Tornado, Hurricane/Tropical Storm	Trinity Planning	Local	High	Medium	Deferred	City of Trinity has adopted the State Building Code.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
9	City of Trinity	Develop program to clear debris from culverts and storm drains in priority floodplains.	Prevention	Flood	Trinity Water Resources and Public Works	Local	High	Medium	In Progress	No measurable progress has been made due to lack of funding.
10	City of Trinity	Include in land use plans to consider street connectivity in all new subdivisions to allow for multiple access points.	Prevention	All	Trinity City Manager and Planning	Local	Low	Medium	In Progress	Street connectivity has been included in the Subdivision Ordinance as a requirement for new subdivisions.
11	City of Trinity	Adopt and review flood prevention ordinance.	Prevention	Flood	Trinity City Manager	Local	High	Medium	To Be Continued	The City continues to adopt and review flood prevention ordinances.
12	City of Trinity	Through existing subdivision regulations, encourage that power, cable, and telephone lines be buried.	Prevention	All	Trinity City Manager and Planning	Local	High	Medium	To Be Continued	The City Council approved an amendment to the subdivision ordinance that required the placement of underground utilities. Continue to monitor and enforce.
13	City of Trinity	Enforce subdivision ordinance to allow clustering to maximize density while preserving high hazard areas.	Prevention	All	Trinity City Manager and Planning	Local	High	Medium	To Be Continued	The Development Ordinance now allows for clustering of development to preserve sensitive areas. Continue to monitor and enforce.
14	City of Trinity	For any interested homeowners located in floodplain areas, the county will consider applying for mitigation grant funding to acquire or elevate the homes on a strictly voluntary basis for the homeowner.	Property Protection	Flood	Randolph County Emergency Management; City of Trinity	FEMA	Moderate	Medium	Deferred	This action is not complete due to lack of funding.
15	City of Trinity	Procure and maintain generators and fuel for alternative sources of power for critical facilities.	Property Protection	All	Trinity City Manager	Local	Low	High	To Be Continued	All critical facilities have generators, but these will be maintained annually.
16	City of Trinity	Include and review in land use plan as citywide policy, wherever possible preserve natural wetlands, designate conservation corridors, especially along streams through acquisition or conservation easements.	Natural Resource Protection	All	Trinity City Manager and Planning	Local	High	Medium	In Progress	The Land Development Plan now encourages preservation of sensitive areas for open space and greenways and is reviewed annually. The plan was adopted in September 2023.

Action Number	Jurisdiction	Description	Category	Hazards Addressed	Lead Agency or Department	Potential Funding Sources	Relative Priority	Cost Estimate	Status 2024	Implementation Details 2024
17	City of Trinity	Put in place a countywide 9-1-1 reverse call system for location specific warning to public of impending disaster. Will be implemented as part of Emergency Management ongoing program to improve efficiency and effectiveness of department.	Emergency Services	All	Randolph County Emergency Management	FEMA	High	Medium	Completed	Randolph County utilizes Everbridge for mass notification. REACT (Randolph Emergency Alert Communications Technology) was enacted allowing the public to voluntarily sign up for additional emergency alerts.

SECTION 9: PLAN MAINTENANCE

This section discusses how the Region *Mitigation Strategy* and *Mitigation Action Plan* will be implemented and how the Plan will be evaluated and enhanced over time. This section also discusses how the public will continue to be involved in a sustained hazard mitigation planning process. It consists of the following four subsections:

- ◆ 9.1 Monitoring and Evaluating the Previous Plan;
- ◆ 9.2 Implementation and Integration;
- ◆ 9.3 Monitoring, Evaluation, Updating and Enhancement; and
- ◆ 9.4 Continued Public Involvement.

44 CFR Requirement

44 CFR Part 201.6(c)(4)(i): The plan shall include a plan maintenance process that includes a section describing the method and schedule of monitoring, evaluating and updating the mitigation plan within a five-year cycle.

44 CFR Part 201.6(c)(4)(ii): The plan maintenance process shall include a process by which local governments incorporate the requirements of the mitigation plan into other planning mechanisms such as comprehensive or capital improvement plans, when appropriate.

9.1 Monitoring and Evaluating the Previous Plan

Since the previous plans were adopted, each jurisdiction has worked to ensure that mitigation was integrated into local activities and that the mitigation plan was appropriately implemented. The participants jointly outlined a process in the previous mitigation plan for monitoring and evaluating the *Plan* throughout the interim period between plan updates.

All participants were ultimately successful in implementing the monitoring and evaluation processes that were outlined in the previous plan as all sixteen jurisdictions participated in annual meetings to discuss the mitigation plans and the priorities that were outlined in it. The specific process is outlined below with an explanation of how the monitoring and evaluating process was carried out as well as how it will continue.

The *Plan* included a review process and progress report on the *Plan*. This review process was carried out by a representative of each jurisdiction to evaluate progress on the *Plan*. During this review process, the Hazard Mitigation Planning Committee, which was composed of the representative from each jurisdiction, used an evaluation form to assess whether their jurisdiction achieved certain benchmarks and what problems were encountered in terms of implementing the Plan.

Once the progress and issues were documented, the Task Force/Planning Team made recommendations for changes to the *Plan* and the overall evaluation process. Although there were some minor updates made to the *Plan* during the interim update period, there were few major updates identified during this time and the Task Force/Planning Team generally agreed

that the *Plan* was on course and that the monitoring and evaluating process itself was sufficient to ensure implementation of the *Plan*.

The planning team noted that reporting was done on the progress of the *Plan* through the interim review period as the planning team held annual meetings wherein the entire Task Force met to discuss progress on the plan. Going forward, the planning team focus on evaluating the plan's mitigation actions and determining what has been achieved regarding those actions and what still needs to be accomplished. This meeting will include monitoring, evaluating, and updating the *Plan*.

9.2 Implementation and Integration

Each agency, department, or other partner participating under the *Plan* is responsible for implementing specific mitigation actions as prescribed in the *Mitigation Action Plan*. Every proposed action listed in the *Mitigation Action Plan* is assigned to a specific "lead" agency or department to assign responsibility and accountability and increase the likelihood of subsequent implementation.

In addition to the assignment of a local lead department or agency, an implementation time period or a specific implementation date has been assigned in order to assess whether actions are being implemented in a timely fashion. When applicable, potential funding sources have been identified for proposed actions listed in the *Mitigation Action Plan*.

All the participating jurisdictions will integrate this *Plan* into relevant city and county government decision-making processes or mechanisms, where feasible. This includes integrating the requirements of the *Plan* into other local planning documents, processes, or mechanisms, such as comprehensive or capital improvement plans, when appropriate. The members of the Planning Team will remain charged with ensuring that the goals and mitigation actions of new and updated local planning documents for their agencies or departments are consistent with, or do not conflict with, the goals and actions of the *Plan* and will not contribute to increased hazard vulnerability in the Region.

Since the previous plans were adopted, each jurisdiction has worked to integrate the *Plan* into other planning mechanisms where applicable/feasible. Examples of how this integration has occurred have been documented in the Implementation Status discussion provided for each of the mitigation actions found in Section 9. Specific examples of how integration has occurred include:

- Integrating the mitigation plan into reviews and updates of floodplain management ordinances;
- Integrating the mitigation plan into reviews and updates of emergency operations plans;
- Integrating information in the mitigation plan into jurisdictional Geographic Information Systems; and
- Integrating the mitigation plan into the local reserve fund through identification of mitigation actions that require local funding.

Opportunities to further integrate the requirements of this *Plan* into other local planning mechanisms shall continue to be identified through future meetings of the Hazard Mitigation

Planning Team and the review process described herein. Although it is recognized that there are many possible benefits to integrating components of this Plan into other local planning mechanisms, the development and maintenance of this stand-alone *Plan* is deemed by the Planning Team to be the most effective and appropriate method to implement local hazard mitigation actions currently.

9.3 Monitoring, Evaluation, Updating and Enhancement

Periodic monitoring, evaluation and update of the Plan are required to ensure that the goals of the Plan are kept current, considering potential changes in hazard vulnerability and mitigation priorities. In addition, updates may be necessary to ensure that the Plan is in full compliance with applicable federal and state regulations. Periodic monitoring, evaluation and updating of the Plan will also ensure that specific mitigation actions are being reviewed and carried out according to the Mitigation Action Plan.

The Planning Team shall meet once every year to track and monitor the progress of the plan over time and to update, where needed, the activities/actions set forth in the *Plan*. This meeting shall be held in the month upon which final plan approval is attained; however, it may be necessary to schedule in the month prior or after in any given year, depending on the schedules of local officials. The findings and recommendations of the Planning Team will be documented in the form of a report that can be shared with interested municipalities, the County, and other stakeholders. The Planning Team will also meet following any disaster events warranting a reexamination of the mitigation actions being implemented or proposed for future implementation. This will ensure that the *Plan* is continuously updated to reflect changing conditions and needs within the Region and serve to evaluate the effectiveness of the *Plan* at achieving its stated purpose and goals. The Emergency Management Coordinators in the Region (Davidson County and Randolph County Emergency Services) will be responsible for reconvening the Planning Team for these reviews.

Five Year Plan Review and Update

The *Plan* will be thoroughly reviewed and updated by the Planning Team every five years to determine whether there have been any significant changes in the Region that may, in turn, necessitate changes in the types of mitigation actions proposed. New development in identified hazard areas, an increased exposure to hazards, an increase or decrease in capability to address hazards, and changes to federal or state legislation are examples of factors that may affect the necessary content of the *Plan*.

The *Plan* review provides Regional/municipal officials with an opportunity to evaluate those actions that have been successful and to explore the possibility of documenting potential losses avoided due to the implementation of specific mitigation measures. The *Plan* review also provides the opportunity to address mitigation actions that may not have been successfully implemented as assigned. The Davidson and Randolph County Emergency Services Emergency Management Coordinators in the Region will be responsible for reconvening the Planning Team and conducting the five-year review.

During the five-year plan review and update process, the following questions will be considered as criteria for assessing the effectiveness and appropriateness of the *Plan*.

- Do the goals address current and expected conditions?
- Has the nature or magnitude of risks changed?
- Are the current resources appropriate for implementing the *Plan*?
- Are there implementation problems, such as technical, political, legal or coordination issues with other agencies?
- Have the outcomes occurred as expected?
- Did county departments participate in the *Plan* implementation process as assigned?

Following the five-year review, any updates deemed necessary will be summarized and implemented according to the reporting procedures and plan amendment process outlined herein. Upon completion of the review and update/amendment process, the *Plan* will be submitted to the State Hazard Mitigation Officer at the North Carolina Division of Emergency Management (NCDEM) for final review and approval in coordination with the Federal Emergency Management Agency (FEMA).

Because the *Plan* update process can take several months to complete, and because Federal funding may be needed to update the *Plan*, it is recommended that the five-year review process begin at the beginning of the third year after the *Plan* was last approved. This will allow the participants in the *Regional Hazard Mitigation Plan* to organize to seek Federal funding if necessary and complete required plan update documentation before the *Plan* expires at the end of the fifth year.

Disaster Declaration

Following a disaster declaration, the *Regional Hazard Mitigation Plan* will be updated as necessary to reflect lessons learned or to address specific issues and circumstances arising from the event. It will be the responsibility of the Emergency Management Coordinators in the Region to reconvene the Planning Team and ensure the appropriate stakeholders are invited to participate in the *Plan* revision and update process following declared disaster events.

Reporting Procedures

The results of the five-year review will be summarized by the Planning Team in a report that will include an evaluation of the effectiveness of the *Plan* and any required or recommended changes or amendments. The report will also include an evaluation of implementation progress for each of the proposed mitigation actions, identifying reasons for delays or obstacles to their completion along with recommended strategies to overcome them.

Plan Amendment Process

Upon the initiation of the amendment process, representatives from the Region and the participating municipalities will forward information on the proposed change(s) to all interested parties including, but not limited to, all directly affected county/municipal departments, residents, and businesses. Information will also be forwarded to the North Carolina Division of Emergency Management. This information will be disseminated to seek input on the proposed amendment(s) for no less than a 45-day review and comment period.

At the end of the 45-day review and comment period, the proposed amendment(s) and all comments will be forwarded to the Planning Team for final consideration. The Planning Team

will review the proposed amendment along with the comments received from other parties, and, if acceptable, the committee will submit a recommendation for the approval and adoption of changes to the *Plan*.

In determining whether to recommend approval or denial of a Plan amendment request, the following factors will be considered by the Planning Team:

- There are errors, inaccuracies, or omissions made in the identification of issues or needs in the *Plan*.
- New issues or needs have been identified which are not adequately addressed in the *Plan*.
- There has been a change in information, data, or assumptions from those on which the *Plan* is based.

Upon receiving the recommendation from the Planning Team, and prior to adoption of the *Plan*, the participating jurisdictions will hold a public hearing. The governing bodies of each participating jurisdiction will review the recommendation from the Planning Team (including the factors listed above) and any oral or written comments received at the public hearing. Following that review, the governing bodies will take one of the following actions:

- Adopt the proposed amendments as presented;
- Adopt the proposed amendments with modifications;
- Refer the amendments request back to the Planning Team for further revision; and
- Defer the amendment request back to the Planning Team for further consideration and/or additional hearings.

Incorporation into Existing Planning Documents

The Planning Team intends to make available to all the Region and its municipalities a process by which the requirements of this *Hazard Mitigation Plan* will be incorporated into other plans. During the planning process for new and updated local planning documents, such as a comprehensive plan, capital improvements plan, or emergency management plan to name a few examples, the Emergency Services Department will provide a copy of the *Plan* to the advisory committee of each relevant planning document. The Emergency Services Department will advise the advisory committee members to ensure that all goals and strategies of new and updated local planning documents are consistent with the *Plan* and will not increase hazard vulnerability in the jurisdictions.

This process will be carried out for each of the planning documents described in *Section 7: Capability Assessment* of this document. It should also be noted that most jurisdictions within the Region are participants in the Region-level version of each type of plan and do not have stand-alone municipal plans of their own. Therefore, when the Emergency Services Department shares and advises on the *Plan*, they are acting on behalf of the municipalities. It should be further noted that due to the smaller size of many municipalities, municipal representatives of the Planning Team are often the same person who participates in the update of comprehensive plans, zoning ordinances, and other planning documents. As such, much of the engrained knowledge these officials have gained from participating in the hazard mitigation planning process is transferred to these processes.

Therefore, each municipality's process for integrating the *Plan* into other planning mechanisms is the same as the county-level process because these planning mechanisms are carried out as region-wide plans or ordinances and each community's stake in each process is intricately linked.

9.4 Continued Public Involvement

44 CFR Requirement

44 CFR Part 201.6(c)(4)(iii): The plan maintenance process shall include a discussion on how the community will continue public participation in the plan maintenance process.

Public participation is an integral component to the mitigation planning process and will continue to be essential as this Plan evolves over time. As described above, significant changes or amendments to the *Plan* shall require a public hearing prior to any adoption procedures, to engage the public and offer opportunities to provide feedback.

Other efforts to involve the public in the maintenance, evaluation, and update process will also be made. These efforts include:

- Advertising meetings of the Planning Team in local newspapers, public bulletin boards and/or county and municipal office buildings;
- Designating willing and voluntary citizens and private sector representatives as official members of the Planning Team;
- Utilizing local media to update the public on any maintenance and/or periodic review activities taking place;
- Utilizing the websites and social media sites of participating jurisdictions to advertise any maintenance and/or periodic review activities taking place; posting interactive surveys and
- Keeping copies of the *Plan* in public locations.

Annex B. Local Mitigation Plan Review Tool

Cover Page

The Local Mitigation Plan Review Tool (PRT) demonstrates how the local mitigation plan meets the regulation in 44 CFR § 201.6 and offers states and FEMA Mitigation Planners an opportunity to provide feedback to the local governments, including special districts.

1. The Multi-Jurisdictional Summary Sheet is a worksheet that is used to document how each jurisdiction met the requirements of the plan elements (Planning Process; Risk Assessment; Mitigation Strategy; Plan Maintenance; Plan Update; and Plan Adoption).
2. The Plan Review Checklist summarizes FEMA's evaluation of whether the plan has addressed all requirements.

For greater clarification of the elements in the Plan Review Checklist, please see Section 4 of the 2022 Local Mitigation Planning Policy Guide. Definitions of the terms and phrases used in the PRT can be found in Appendix E of the guide.

Plan Information	
Jurisdiction(s)	
Title of Plan	
New Plan or Update	
Single- or Multi-Jurisdiction	
Date of Plan	
Local Point of Contact	
Title	
Agency	
Address	
Phone Number	
Email	

Additional Point of Contact	
Title	
Agency	
Address	
Phone Number	
Email	

Review Information	
State Review	
State Reviewer(s) and Title	
State Review Date	
FEMA Review	
FEMA Reviewer(s) and Title	
Date Received in FEMA Region	
Plan Not Approved	
Plan Approvable Pending Adoption	
Plan Approved	

Multi-Jurisdictional Summary Sheet

In the boxes for each element, mark if the element is met (Y) or not met (N).

#	Jurisdiction Name								
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									

Plan Review Checklist

The Plan Review Checklist is completed by FEMA. States and local governments are encouraged, but not required, to use the PRT as a checklist to ensure all requirements have been met prior to submitting the plan for review and approval. The purpose of the checklist is to identify the location of relevant or applicable content in the plan by element/sub-element and to determine if each requirement has been “met” or “not met.” FEMA completes the “required revisions” summary at the bottom of each element to clearly explain the revisions that are required for plan approval. Required revisions must be explained for each plan sub-element that is “not met.” Sub-elements in each summary should be referenced using the appropriate numbers (A1, B3, etc.), where applicable. Requirements for each element and sub-element are described in detail in Section 4: Local Plan Requirements of this guide.

Plan updates must include information from the current planning process.

If some elements of the plan do not require an update, due to minimal or no changes between updates, the plan must document the reasons for that.

Multi-jurisdictional elements must cover information unique to all participating jurisdictions.

Element A: Planning Process

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A1. Does the plan document the planning process, including how it was prepared and who was involved in the process for each jurisdiction? (Requirement 44 CFR § 201.6(c)(1))		
A1-a. Does the plan document how the plan was prepared, including the schedule or time frame and activities that made up the plan’s development, as well as who was involved?		
A1-b. Does the plan list the jurisdiction(s) participating in the plan that seek approval, and describe how they participated in the planning process?		
A2. Does the plan document an opportunity for neighboring communities, local and regional agencies involved in hazard mitigation activities, and agencies that have the authority to regulate development as well as businesses, academia, and other private and non-profit interests to be involved in the planning process? (Requirement 44 CFR § 201.6(b)(2))		
A2-a. Does the plan identify all stakeholders involved or given an opportunity to be involved in the planning process, and how each stakeholder was presented with this opportunity?		

Element A Requirements	Location in Plan (section and/or page number)	Met / Not Met
A3. Does the plan document how the public was involved in the planning process during the drafting stage and prior to plan approval? (Requirement 44 CFR § 201.6(b)(1))		
A3-a. Does the plan document how the public was given the opportunity to be involved in the planning process and how their feedback was included in the plan?		
A4. Does the plan describe the review and incorporation of existing plans, studies, reports, and technical information? (Requirement 44 CFR § 201.6(b)(3))		
A4-a. Does the plan document what existing plans, studies, reports and technical information were reviewed for the development of the plan, as well as how they were incorporated into the document?		
ELEMENT A REQUIRED REVISIONS		
Required Revision:		

Element B: Risk Assessment

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B1. Does the plan include a description of the type, location, and extent of all natural hazards that can affect the jurisdiction? Does the plan also include information on previous occurrences of hazard events and on the probability of future hazard events? (Requirement 44 CFR § 201.6(c)(2)(i))		
B1-a. Does the plan describe all natural hazards that can affect the jurisdiction(s) in the planning area, and does it provide the rationale if omitting any natural hazards that are commonly recognized to affect the jurisdiction(s) in the planning area?		—
B1-b. Does the plan include information on the location of each identified hazard?		—
B1-c. Does the plan describe the extent for each identified hazard?		—
B1-d. Does the plan include the history of previous hazard events for each identified hazard?		

Element B Requirements	Location in Plan (section and/or page number)	Met / Not Met
B1-e. Does the plan include the probability of future events for each identified hazard? Does the plan describe the effects of future conditions, including climate change (e.g., long-term weather patterns, average temperature and sea levels), on the type, location and range of anticipated intensities of identified hazards?		---
B1-f. For participating jurisdictions in a multi-jurisdictional plan, does the plan describe any hazards that are unique to and/or vary from those affecting the overall planning area?		---
B2. Does the plan include a summary of the jurisdiction's vulnerability and the impacts on the community from the identified hazards? Does this summary also address NFIP-insured structures that have been repetitively damaged by floods? (Requirement 44 CFR § 201.6(c)(2)(ii))		
B2-a. Does the plan provide an overall summary of each jurisdiction's vulnerability to the identified hazards?		---
B2-b. For each participating jurisdiction, does the plan describe the potential impacts of each of the identified hazards on each participating jurisdiction?		---
B2-c. Does the plan address NFIP-insured structures within each jurisdiction that have been repetitively damaged by floods?		---
ELEMENT B REQUIRED REVISIONS		
Required Revision:		

Element C: Mitigation Strategy

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
C1. Does the plan document each participant's existing authorities, policies, programs and resources and its ability to expand on and improve these existing policies and programs? (Requirement 44 CFR § 201.6(c)(3))		
C1-a. Does the plan describe how the existing capabilities of each participant are available to support the mitigation strategy? Does this include a discussion of the existing building codes and land use and development ordinances or regulations?		—
C1-b. Does the plan describe each participant's ability to expand and improve the identified capabilities to achieve mitigation?		
C2. Does the plan address each jurisdiction's participation in the NFIP and continued compliance with NFIP requirements, as appropriate? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C2-a. Does the plan contain a narrative description or a table/list of their participation activities?		
C3. Does the plan include goals to reduce/avoid long-term vulnerabilities to the identified hazards? (Requirement 44 CFR § 201.6(c)(3)(i))		
C3-a. Does the plan include goals to reduce the risk from the hazards identified in the plan?		
C4. Does the plan identify and analyze a comprehensive range of specific mitigation actions and projects for each jurisdiction being considered to reduce the effects of hazards, with emphasis on new and existing buildings and infrastructure? (Requirement 44 CFR § 201.6(c)(3)(ii))		
C4-a. Does the plan include an analysis of a comprehensive range of actions/projects that each jurisdiction considered to reduce the impacts of hazards identified in the risk assessment?		—
C4-b. Does the plan include one or more action(s) per jurisdiction for each of the hazards as identified within the plan's risk assessment?		

Element C Requirements	Location in Plan (section and/or page number)	Met / Not Met
C5. Does the plan contain an action plan that describes how the actions identified will be prioritized (including a cost-benefit review), implemented, and administered by each jurisdiction? (Requirement 44 CFR § 201.6(c)(3)(iv)); (Requirement §201.6(c)(3)(iii))		
C5-a. Does the plan describe the criteria used for prioritizing actions?		—
C5-b. Does the plan provide the position, office, department or agency responsible for implementing/administrating the identified mitigation actions, as well as potential funding sources and expected time frame?		
ELEMENT C REQUIRED REVISIONS		
Required Revision:		

Element D: Plan Maintenance

Element D Requirements	Location in Plan (section and/or page number)	Met / Not Met
D1. Is there discussion of how each community will continue public participation in the plan maintenance process? (Requirement 44 CFR § 201.6(c)(4)(iii))		
D1-a. Does the plan describe how communities will continue to seek future public participation after the plan has been approved?		
D2. Is there a description of the method and schedule for keeping the plan current (monitoring, evaluating and updating the mitigation plan within a five-year cycle)? (Requirement 44 CFR § 201.6(c)(4)(i))		
D2-a. Does the plan describe the process that will be followed to track the progress/status of the mitigation actions identified within the Mitigation Strategy, along with when this process will occur and who will be responsible for the process?		—
D2-b. Does the plan describe the process that will be followed to evaluate the plan for effectiveness? This process must identify the criteria that will be used to evaluate the information in the plan, along with when this process will occur and who will be responsible.		

Element D Requirements	Location in Plan (section and/or page number)	Met / Not Met
D2-c. Does the plan describe the process that will be followed to update the plan, along with when this process will occur and who will be responsible for the process?		
D3. Does the plan describe a process by which each community will integrate the requirements of the mitigation plan into other planning mechanisms, such as comprehensive or capital improvement plans, when appropriate? (Requirement 44 CFR § 201.6(c)(4)(ii))		
D3-a. Does the plan describe the process the community will follow to integrate the ideas, information and strategy of the mitigation plan into other planning mechanisms?		—
D3-b. Does the plan identify the planning mechanisms for each plan participant into which the ideas, information and strategy from the mitigation plan may be integrated?		—
D3-c. For multi-jurisdictional plans, does the plan describe each participant's individual process for integrating information from the mitigation strategy into their identified planning mechanisms?		
ELEMENT D REQUIRED REVISIONS		
Required Revision:		

Element E: Plan Update

Element E Requirements	Location in Plan (section and/or page number)	Met / Not Met
E1. Was the plan revised to reflect changes in development? (Requirement 44 CFR § 201.6(d)(3))		
E1-a. Does the plan describe the changes in development that have occurred in hazard-prone areas that have increased or decreased each community's vulnerability since the previous plan was approved?		
E2. Was the plan revised to reflect changes in priorities and progress in local mitigation efforts? (Requirement 44 CFR § 201.6(d)(3))		
E2-a. Does the plan describe how it was revised due to changes in community priorities?		

Element E Requirements	Location in Plan (section and/or page number)	Met / Not Met
E2-b. Does the plan include a status update for all mitigation actions identified in the previous mitigation plan?		—
E2-c. Does the plan describe how jurisdictions integrated the mitigation plan, when appropriate, into other planning mechanisms?		
ELEMENT E REQUIRED REVISIONS		
Required Revision:		

Element F: Plan Adoption

Element F Requirements	Location in Plan (section and/or page number)	Met / Not Met
F1. For single-jurisdictional plans, has the governing body of the jurisdiction formally adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F1-a. Does the participant include documentation of adoption?		
F2. For multi-jurisdictional plans, has the governing body of each jurisdiction officially adopted the plan to be eligible for certain FEMA assistance? (Requirement 44 CFR § 201.6(c)(5))		
F2-a. Did each participant adopt the plan and provide documentation of that adoption?		
ELEMENT F REQUIRED REVISIONS		
Required Revision:		

Element G: High Hazard Potential Dams (Optional)

HHPD Requirements	Location in Plan (section and/or page number)	Met / Not Met
HHPD1. Did the plan describe the incorporation of existing plans, studies, reports and technical information for HHPDs?		
HHPD1-a. Does the plan describe how the local government worked with local dam owners and/or the state dam safety agency?		---
HHPD1-b. Does the plan incorporate information shared by the state and/or local dam owners?		---
HHPD2. Did the plan address HHPDs in the risk assessment?		
HHPD2-a. Does the plan describe the risks and vulnerabilities to and from HHPDs?		---
HHPD2-b. Does the plan document the limitations and describe how to address deficiencies?		---
HHPD3. Did the plan include mitigation goals to reduce long-term vulnerabilities from HHPDs?		
HHPD3-a. Does the plan address how to reduce vulnerabilities to and from HHPDs as part of its own goals or with other long-term strategies?		---
HHPD3-b. Does the plan link proposed actions to reducing long-term vulnerabilities that are consistent with its goals?		---
HHPD4. Did the plan include actions that address HHPDs and prioritize mitigation actions to reduce vulnerabilities from HHPDs?		
HHPD4-a. Does the plan describe specific actions to address HHPDs?		---
HHPD4-b. Does the plan describe the criteria used to prioritize actions related to HHPDs?		---
HHPD4-c. Does the plan identify the position, office, department or agency responsible for implementing and administering the action to mitigate hazards to or from HHPDs?		---
HHPD Required Revisions		
Required Revision:		

Element H: Additional State Requirements (Optional)

Element H Requirements	Location in Plan (section and/or page number)	Met / Not Met
This space is for the State to include additional requirements.		

Jurisdiction	Has your jurisdiction met the requirement to adopt the NFIP minimum floodplain management criteria via local regulation? Please provide details	How has your jurisdiction implemented and enforced local floodplain management regulations to regulate and permit development in SFHAs? Please provide details.	Does your jurisdiction have a designee or agency to implement the addressed commitments and requirements of the NFIP? Please provide details	Please describe of how your jurisdiction has implemented the substantial improvement/substantial damage provisions in the floodplain management regulations that apply to your jurisdiction after an event
Davidson County	Yes, Davidson County has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

Jurisdiction	Has your jurisdiction met the requirement to adopt the NFIP minimum floodplain management criteria via local regulation? Please provide details	How has your jurisdiction implemented and enforced local floodplain management regulations to regulate and permit development in SFHAs? Please provide details.	Does your jurisdiction have a designee or agency to implement the addressed commitments and requirements of the NFIP? Please provide details	Please describe of how your jurisdiction has implemented the substantial improvement/substantial damage provisions in the floodplain management regulations that apply to your jurisdiction after an event
Denton	Yes, Denton has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Lexington	Yes, Lexington has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Midway	Yes, Midway has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Thomasville	Yes, Thomasville has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Wallburg	Yes, Wallburg has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Randolph County	Yes, Randolph County has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Archdale	Yes, Archdale has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Asheboro	Yes, Asheboro has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Franklinville	Yes, Franklinville has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Liberty	Yes, Liberty has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Ramseur	Yes, Ramseur has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

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Randleman	Yes, Randleman has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.
Seagrove	Not an NFIP Community			

Jurisdiction	Has your jurisdiction met the requirement to adopt the NFIP minimum floodplain management criteria via local regulation? Please provide details	How has your jurisdiction implemented and enforced local floodplain management regulations to regulate and permit development in SFHAs? Please provide details.	Does your jurisdiction have a designee or agency to implement the addressed commitments and requirements of the NFIP? Please provide details	Please describe of how your jurisdiction has implemented the substantial improvement/substantial damage provisions in the floodplain management regulations that apply to your jurisdiction after an event
Staley				
Trinity	Yes, Trinity has adopted the minimum floodplain management criteria in local regulation.	Any development in the Special Flood Hazard Areas must obtain a floodplain development permit before any construction or substantial improvement in the SFHAs to ensure that proposed development is reviewed for flood risks and comply with floodplain management regulations. Each application is reviewed by the floodplain administrator to ensure that construction is compliant with elevation requirements, flood damage prevention standards, and all new structures are elevated above the Base flood elevation. This includes ensuring development adheres to all applicable flood damage prevention regulations. Floodplain managers conduct inspections during construction and after construction is complete to ensure that SFHAs meet floodplain management regulations, focusing on elevation, floodproofing, and other minimum flood damage reduction requirements, including all substantial damage or substantial improvement regulations where applicable. Floodplain management issues fines, issue letters for non-compliant structures in the SFHAs, and monitors compliance to take corrective actions when necessary.	All development in the SFHAs are required to obtain floodplain development permits which are reviewed by the designated floodplain manager. The floodplain manager also conducts education and outreach, reviews development plans, inspects construction for compliance with floodplain management standards, enforce substantial damage and improvement provisions in the floodplain management standards, and issue penalties for violations including fines or other penalties.	If a property in the SFHA is damaged for any reason and the cost to repair it is more than 50% of the overall market value of the property before the damage, the property is considered substantially damaged. If a property undergoes renovations or repairs over a period of ten years that costs more than 50% of the overall market value of the property, it is considered a substantial improvement. Substantial improvement and substantial damage properties in SFHAs must adhere to current floodplain management standards addressed in the floodplain regulations.

Table D- 1: HMP Kickoff Meeting on 9/25/2024

Name	Organization	Title	Role
McKenzie M Houston	AECOM	Resilience Planner	Organizer
Richard (Clifton) Franks	AECOM	Resilience Planner	Organizer
Seth Holbrook	AECOM	GIS Specialist	Organizer
Peyton Campbell	AECOM	Resilience Planner	Organizer
Kelly Keefe	AECOM	Resilience Planner	Organizer
Amanda W Dawkins	Randolph County	GIS	Attendee
Carl Baker	NCEM	Hazard Mitigation Planner	Attendee
Jonathan R. Moody	Randolph County	Director of Animal Services	Attendee
Aaron L Saunders	Randolph County	CME	Attendee
Mark Hensley	Randolph Senior Adults Association	Executive Director	Attendee
Justin William Welborn	Piedmont Healthcare Preparedness Coalition	Logistics Coordinator	Attendee
Jared K. Byrd	Randolph County Emergency Services	Deputy Chief	Attendee
Jerome Monaco	Energy/United	Safety Manager	Attendee
DJ Señeres	City of Archdale	Senior Registered Professional Engineer	Attendee
Blake W. Lanning	Davidson County Emergency Services	Emergency Management Coordinator	Attendee
Sam Olshinski-Thomasville	City of Thomasville	Emergency Manager	Attendee
Yesenia Rincon	Randolph County DSS	Admin Supervisor and Shelter Coordinator	Attendee
Sonya Dunn	Randolph County	Director of Nursing	Attendee
Laura Ryggs	City of Lexington	Fire Marshal	Attendee
Matthew Needham	Randolph Community College	Director of Risk Management and Safety	Attendee
Michael Rhoney	City of Asheboro	Water Resources Director	Attendee
Eddie Bowling	City of Thomasville	Deputy City Manager	Attendee
Chris Crew	NCEM	Mitigation Plans Manager	Attendee
Eric Johannesen	Thomasville City Schools	Executive Director of Operations	Attendee
Tiffany M. Jones	Davidson County Health Department	Preparedness Coordinator	Attendee
David Rickard			Attendee
Debra P. Hill	Randolph County	Tax Administrator	Attendee
Evan I. Grady	Randolph Emergency Services	Emergency Management Planner	Attendee
Darby L Vereyken	Randolph Health	Director of Operations & Analytics at Randolph Health	Attendee
Dale Brinkley	Randolph County School System	Executive Director of Operations	Attendee
Larry Chilton	Randolph County School System	Executive Director of Facilities, Maintenance, and Transportation	
Mickey Glenn Boyles	Atrium Health Wake Forest Baptist	Regional Operations Coordinator	Attendee
Aundrea M. Azelton	Randolph County Sheriff's Office	Chief Deputy	Attendee

Name	Organization	Title	Role
Dr. Quincy Williams	Chapel Hill Carrboro City Schools	New Superintendent	Attendee
Trevor Nuttal	City of Asheboro	Assistant City Manager	Attendee

Table D- 2: Meeting sign in sheet from 10/9/2024

Name	Organization	Title	Role
McKenzie Houston	AECOM	Resilience Planner	Organizer
Peyton Campbell	AECOM	Resilience Planner	Organizer
Kelly Keefe	AECOM	Resilience Planner	Organizer
David Rickard	Davidson County	Tax Administrator	Attendee
Jason Joines	NC Zoo	NC Zoo Safety	Attendee
Debra P. Hill	Randolph County	Tax	Attendee
Jerome Monaco	Energy United	Safety Manager	Attendee
David T. Rickard	Davidson County		Attendee
Kelsey Peterson	AECOM	Environmental Planner	Attendee
Chris Crew	NCEM	Mitigation Plans Manager	Attendee
Sonya Dunn	Randolph County Public Health	Director of Nursing	Attendee
Mark Hensley	Randolph Senior Adults	Executive Director	Attendee
Jason Clodfelter	Davidson County	GIS Manager	Attendee
Thomas(Guest)	Davidson County	Parks and Rec Director	Attendee
Sam Olshinski	City of Thomasville	Emergency Manager	Attendee
LeAllen Hill	Randolph County	Risk Manager	Attendee
Yesenia Rincon	Randolph County		Attendee
Jason Myers	City of Thomasville	Fire Chief	Attendee
Laura Ryggs	City of Lexington		Attendee
Seth Holbrook	AECOM	GIS Specialist	Attendee
Tiffany M. Jones	Davidson County Health Department	Preparedness Coordinator	Attendee
William J. Johnson	Randolph County	Assistant County Manager	Attendee
Zeb Holden	Randolph County	Manager	Attendee
J.C. Parrish	Town of Ramseur	Randleman Police Department/Ramseur Commissioner	Attendee
Jared K. Byrd	Randolph County	Deputy Chief of Emergency Services	Attendee
City of Asheboro	City of Asheboro		Attendee
Johnnie F. Taylor	Lexington		Attendee
Eric Johannesen			Attendee
DJ Señeres	City of Archdale		Attendee

Table D- 3: Meeting sign-in sheet from 11/6/2024

Name	Title	Organization	Role
Mckenzie Houston	Resilience Planner	AECOM	Organizer
Peyton Campbell	Resilience Planner	AECOM	Organizer
Kelsey Peterson	Resilience Planner	AECOM	Organizer
Kelly Keefe	Lead Planner	AECOM	Organizer
Seth Holbrook	GIS Specialist	AECOM	Organizer
Chris Crew	Hazard Mitigation Planner	NCDPS	Attendee
Debra P. Hill	Tax Administrator	Randolph County	Attendee
Jerome Monaco	Safety Manager	Energy United	Attendee
Aaron L. Saunders	County Maintenance Engineer	North Carolina Department of Transportation	Attendee
Christie D. McCorquodale	Major	Randolph County	Attendee
Laura Ryggs	Fire Marshal	City of Lexington	Attendee
DJ Señeres	Stormwater Manager	City of Archdale	Attendee
Kayla M. Brown	Addressing Coordinator	Randolph County	Attendee
Ashley A. Honeycutt	Income Maintenance Caseworker	Randolph County	Attendee
Jason Myers	Fire Chief	City of Thomasville	Attendee
Carl Baker	Hazard Mitigation Planner	NCDPS	Attendee
Sam Olshinski	Chief of Emergency Management	City of Thomasville	Attendee
Scott Kidd	Parks and Recreation Director	Town of Liberty	Attendee
Robin Brown	Area 10 Coordinator	NCDPS	Attendee
Blake Lanning	Emergency Management Coordinator	Davidson County	Attendee
Mark Hensley			Attendee
Tiffany M. Jones	Public Health and Preparedness Coordinator	Davidson County Health Department	Attendee
Trevor Nuttal	Community Development Director	City of Asheboro	Attendee
Darby L Vereyken	Director of Operations and Analytics at Randolph Health		Attendee
William J. Johnson	Assistant County Manager	Randolph County	Attendee
Angel Jenkins	Town Clerk	Town of Denton	Attendee
Timothy V. Mangum	GIS Planner	Randolph County	Attendee
Kimberly J. Heinzer	Planning Systems Coordinator	Randolph County	Attendee
Yesenia Rincon	Administrative Support Unit Supervisor	Randolph County	Attendee

Table D- 4: Online meeting sign-in sheet from 12/11/24

Name	Organization	Role	Role
Mckenzie Houston	AECOM	Resilience Planner	Organizer
Kelly Keefe	AECOM	Resilience Planner	Organizer

Name	Organization	Role	Role
Peyton Campbell	AECOM	Resilience Planner	Organizer
Seth Holbrook	AECOM	GIS Specialist	Organizer
John Mello	NCEM	Hazard Mitigation Planner	Attendee
Donovan L. Davis	Randolph County	Emergency Services Chief	Attendee
Chris Crew	NCEM	Mitigation Plans Manager	Attendee
Christie D. McCorquodale	Randolph County	Emergency Management Coordinator	Attendee
Blake Lanning	Davidson County	Emergency Management Coordinator	Attendee
Kayla M. Brown	Randolph County	Addressing Coordinator	Attendee
Robin Brown	NCEM	Area 10 Coordinator	Attendee
Mark Hensley	Randolph County Senior Adults Association	Executive Director	Attendee
Tonya M. Caddle	Randolph County	Planning and Zoning Director	Attendee
Laura Ryggs	Lexington	Fire Marshal	Attendee
Sam Olishinski	Thomasville	Emergency Manager	Attendee
Matt Clodfelter	Denton	Police Captain	Attendee
Dale Brinkley			Attendee
Timothy V. Mangum	Randolph County	Planner	Attendee
Evan I. Grady	Randolph County	Emergency Manager	Attendee
Scott Kidd	Liberty	Town Manager	Attendee
Rebekah Gainey	Lexington	Risk Management	Attendee
Sonya S. Dunn	Randolph County		Attendee
Sonya Dunn	Randolph County Public Health	Nursing Director	Attendee
Jerome Monaco	Energy United	Safety Manager	Attendee
David Joseph Señeres	Archdale	Senior Registered Professional Engineer	Attendee
Yesenia Rincon	Randolph County	DSS	Attendee
David T. Rickard	Davidson County	Register of Deeds	Attendee
Jason Myers	Thomasville	Fire & Rescue	Attendee
Carl Baker	NCEM	Hazard Mitigation Planner	Attendee

Table D- 5: Meeting sign in sheet from 1/31/2025

Name	Organization	Role	Role
Houston, McKenzie M	AECOM	Resilience Planner	Organizer
Peyton Campbell	AECOM	Resilience Planner	Organizer
Kelly Keefe	AECOM	Resilience Planner	Organizer
Rebekah Gainey	Lexington	Risk Safety Manager	Attendee
Chris Crew	NCEM	Hazard Mitigation Planner	Attendee
Kelsey Peterson	AECOM	Environmental Planner	Attendee
Seth Holbrook	AECOM	GIS Specialist	Attendee

Name	Organization	Role	Role
Blake Lanning	Davidson	Emergency Manager	Attendee
Scott Kidd	Liberty	Town Manager	Attendee
Kymberly Kudla	FEMA Region 4	Community Planner	Attendee
Richard (Clifton) Franks	AECOM	Planner	Organizer
Jerome Monaco	Energy United	Safety Manager	Attendee
Donovan L. Davis	Randolph	Emergency Services Chief	Attendee
Mandy Shields	Red Cross	Community Disaster Program Manager	Attendee
Jared K. Byrd	Randolph	Deputy Chief	Attendee
Christie D. McCorquodale	Randolph	Emergency Management Coordinator	Attendee
John Mello	NCEM	Hazard Mitigation Planner	Attendee
Johnnie Taylor	Lexington	City Manager	Attendee

Announcement

Davidson-Randolph Regional Hazard Mitigation Plan Public Meeting

What: Public meeting to obtain and incorporate communities' thoughts and concerns about the Davidson-Randolph Regional Hazard Mitigation Plan

When: Thursday, February 27th
"Come and go" anytime starting from 2:00pm-3:00pm ET

Where: Davidson County Emergency Services Administration Building
935 N. Main St. Lexington, NC 27292






Floods, Wildfires, Tornadoes, Winter Storms, Hurricanes...What Concerns You?

Do you have ideas for helping our community become better prepared for future natural disasters?

You are invited to come share your thoughts and concerns about your community's resiliency against natural disasters and leave your comments for the final decision-making process.

About the Davidson-Randolph Regional Hazard Mitigation Plan

The counties of the Davidson-Randolph Region in coordination with their participating municipal jurisdictions, are finalizing a regional hazard mitigation plan that covers the multi-county area. The Davidson-Randolph Regional Hazard Mitigation Plan identifies local policies and actions for reducing risk and future losses from natural hazards such as floods, severe storms, wildfires, and winter weather.

For More Information

If you would like to learn more, please contact one of the following county coordinators for this project:

Christie McCorquodale, Randolph County Emergency Management
336-318-6944/christie.mccorquodale@randolphcountync.gov

Blake Lanning, Davidson County Emergency Management
blake.lanning@davidsoncountync.gov

We hope to see you February 27th, 2025!

Figure D- 1: Davidson Randolph Hazard Mitigation Planning Public Meeting Flyer for the 2/27/2025 in-person meeting.



Fact Sheet

Davidson-Randolph Regional Hazard Mitigation Plan

Natural hazards have the potential to cause property damage, loss of life, economic hardship, and threats to public health and safety. Hazard mitigation measures are the things we do today to be more protected in the future. They are actions taken before a disaster happens to reduce the impact of future hazard events on people and property in the community. Mitigation reduces the risk of loss and creates a more resilient and sustainable community.

Project Overview

The counties of Davidson and Randolph, in coordination with their participating municipal jurisdictions, are preparing a **regional hazard mitigation plan** that will cover the county-county area. The Davidson-Randolph Regional Hazard Mitigation Plan will identify local policies and actions for reducing risk and future losses from natural hazards such as floods, severe storms, wildfires, and winter weather.

The plan will also serve to meet key federal planning regulations which require local governments to develop a hazard mitigation plan as a condition for receiving certain types of non-emergency disaster assistance, including funding for hazard mitigation projects.

These requirements stem from the Disaster Mitigation Act of 2000 which was passed by the President in October of 2000. This Act mandates that all states and local governments must have hazard mitigation plans in place to be eligible to apply for funding under such programs as the Hazard Mitigation Grant Program (HMGP) and the Pre-Disaster Mitigation (PDM) program.

The Planning Process

The planning process for the Davidson-Randolph Regional Hazard Mitigation Plan will consist of six main phases described in detail in the following sections: **public outreach, risk assessment, capability assessment, mitigation strategy development, plan maintenance, and plan adoption.**



Public Outreach

The goals of the public outreach strategy for this planning effort are to generate public interest, solicit citizen input, and engage additional partners in the planning process.

Public outreach will include two open public meetings, a project information website (the Bladen-Columbus-Robeson Hazard Mitigation Planning website located at <https://gis.aecomonline.net/IRISK2/NCHMP.aspx?region=17>), a web-based public participation survey (<https://www.surveymonkey.com/r/JL9R3FW>), and updates and information shared through social media, such as on Facebook: <https://www.facebook.com/blasdencountyemergencyservices>

Risk Assessment

The desired outcomes of a risk assessment are an evaluation of each identified hazard's potential impacts on the people, economy, and built and natural environments in the planning area plus an understanding of each participating jurisdiction's overall vulnerability and most significant risks. These potential impacts and a thorough understanding of the overall vulnerability can be used to create problem statements and identify mitigation actions to reduce risk.

Capability Assessment

Each participating jurisdiction has a unique set of capabilities, including authorities, policies, programs, staff, funding, and other resources available to accomplish mitigation and reduce long-term vulnerability. By reviewing the existing capabilities in each jurisdiction, the planning team can identify capabilities that currently reduce disaster losses or could be used to reduce losses in the future.

Mitigation Strategy Development

The primary purpose of mitigation planning is to systematically identify policies, actions, and activities to reduce the impact that future natural hazard occurrences will have on people and property in the planning area. Mitigation strategy development includes long-range mitigation goals common to the planning area and short-term mitigation actions specific to each participating jurisdiction.

Plan Maintenance

Plan maintenance is the process established to track the plan's implementation and to aid in updating the plan every five years. These procedures help to ensure that the mitigation strategy is implemented according to the plan. They also provide the foundation for an ongoing mitigation program, standardize long-term monitoring of hazard-related activities, integrate mitigation principles into local officials' daily job responsibilities, and maintain momentum through continued engagement and accountability in the plan's progress.

Plan Adoption

Each participating jurisdiction seeking plan approval must adopt the plan. Adoption by the local governing body demonstrates the community's commitment to implementing the mitigation strategy and authorizes responsible agencies to execute their actions. The final plan is not approved until the community adopts the plan and FEMA receives documentation of formal adoption by the governing body of the jurisdictions requesting approval.

Project Leadership

This regional planning effort is being led by the **County Emergency Management**, with technical assistance from AECOM. A local Hazard Mitigation Planning Committee made up of local officials, representatives, and stakeholders has been established to guide this process. In addition, local points of contact have been established for each of the four counties as well as all of the participating municipal jurisdictions. Planning committee meetings and open public meetings will be scheduled to occur at key points throughout the project timeline.

Schedule

The planning process began September 2024 and a fully updated plan is expected to be ready for review by the North Carolina Division of Emergency Management and the Federal Emergency Management Agency by **TBD**. Draft documents will be available on the project information website at various stages in the planning process.

For More Information

To learn more about this project, or to find out how you can be involved, please contact Blake Lanning, Davidson County Emergency Management Coordinator at (336) 626-1300 ext 2105 or Blake.Lanning@davidsoncountync.gov or Christie McCorquodale, Randolph County Major at (336) 318-6944 or ChristieMcCorquodale@randolphcountync.gov. Additional information and regular updates throughout the duration of this project can be found on the Davidson-Randolph Regional Hazard Mitigation Planning website located at <https://gis.aecomonline.net/IRISK2/NCHMP.aspx?region=17>.

Figure D- 2: Davidson County Regional Hazard Mitigation Plan Fact Sheet

Announcement

Davidson-Randolph Regional Hazard Mitigation Plan Public Meeting

What: Public meeting to obtain and incorporate communities' thoughts and concerns about the Davidson-Randolph Regional Hazard Mitigation Plan

When: Friday, January 31st, 2025
"Come and go" anytime starting from 12:30pm to 1:30pm ET

Where: Randolph County Services Headquarters
760 New Century Drive, ~~Ashboro~~ Ashboro, NC 27205






Floods, Wildfires, Tornadoes, Winter Storms, Hurricanes...What Concerns You?

Do you have ideas for helping our community become better prepared for future natural disasters?

You are invited to come share your thoughts and concerns about your community's resiliency against natural disasters and leave your comments for the final decision-making process.

About the Davidson-Randolph Regional Hazard Mitigation Plan

The counties of the Davidson-Randolph Region in coordination with their participating municipal jurisdictions, are finalizing a regional hazard mitigation plan that covers the multi-county area. The Davidson-Randolph Regional Hazard Mitigation Plan identifies local policies and actions for reducing risk and future losses from natural hazards such as floods, severe storms, wildfires, and winter weather.

For More Information

If you would like to learn more, please contact one of the following county coordinators for this project:

Christie McCorquodale, Randolph County Emergency Management
336-318-6944/christie.mccorquodale@randolphcountync.gov

Blake Lanning, Davidson County Emergency Management
blake.lanning@davidsoncountync.gov

We hope to see you January 31st, 2025!

Figure D- 3: Davidson Randolph Regional Hazard Mitigation Plan Public Meeting Flyer for the meeting on January 31, 2025

Davidson Randolph Hazard Mitigation Draft Plan Links	
Plan Feedback Submission	Draft Plan PDF
	
https://forms.office.com/r/bYNwsx2KYp	https://acrobat.adobe.com/id/urn:aaid:sc:va6c2:85f95bc5-4c50-46e1-8c83-fb4c2524f736

Figure D- 4: Davidson Randolph Hazard Mitigation Plan Draft QR codes and links for plan feedback submission and the draft plan PDF

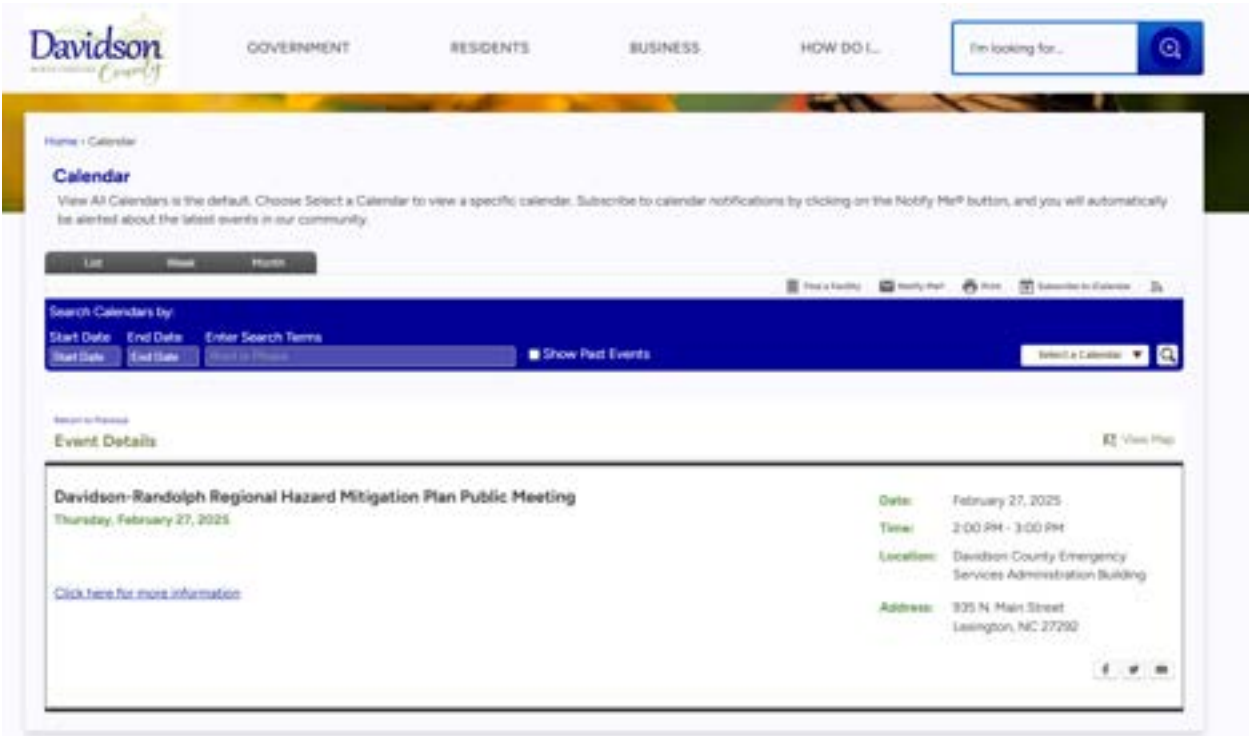


Figure D- 5: Davidson County Regional Hazard Mitigation Plan Meeting Invitation from the Davidson County Website on February 27, 2025

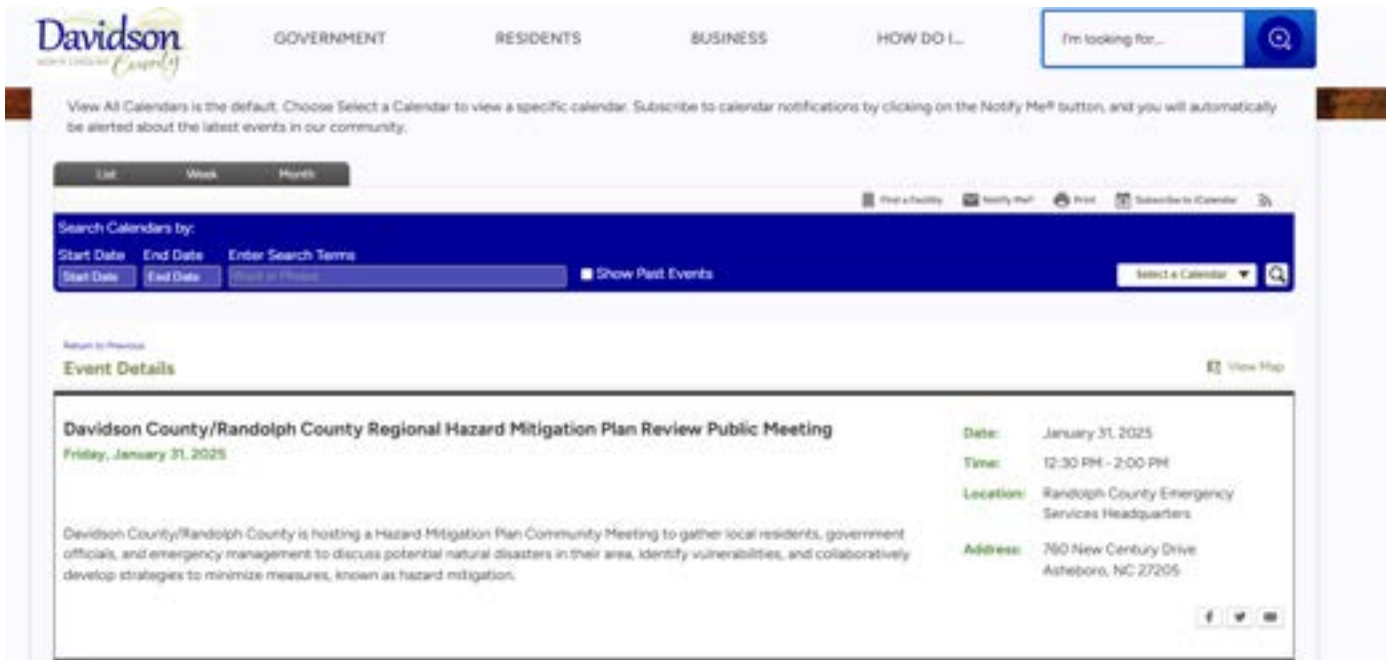


Figure D- 7: Davidson County Invitation for the Davidson Randolph Public Meeting Regional Hazard Mitigation Plan Review on January 31, 2025



Figure D- 6: Invitation from Randolph County for the Davidson Randolph Regional Hazard Mitigation Public Meeting

Abbreviation	Definition
AAA	American Automobile Association
AIA	Asset Inventory and Assessment Grant
ATSDR	Agency for Toxic Substances and Disease Registry
BCEGS	Building Code Effectiveness Grading Schedule
BRIC	Building Resilient Infrastructure and Communities
CAD	Cold Air Damming
CDBG	Community Development Block Grants
CDC	Center for Disease Control and Prevention
CFR	Code of Federal Regulations
CG	Cloud-to-Ground
CIKR	Critical Infrastructure and Key Resources
CMEs	Coronal Mass Ejections
COOP	Continuity of Operations Plan
CPHC	Central Pacific Hurricane Center
CPR	Cardio-Pulmonary Resuscitation
CRREL	Cold Regions Research and Engineering Laboratory
CRS	Community Rating System
DHS	Department of Homeland Security
DMA	Disaster Mitigation Act
DMA 2000	Disaster Mitigation Act of 2000
DSS	Department of Social Services
E. coli	Escherichia coli
EAL	Expected Annual Loss
EAP	Emergency Action Plan
EF scale	Enhanced Fujita Scale
EM	Emergency Management
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
ES	Emergency Services
F scale	Fujita Scale
FEMA	Federal Emergency Management Agency
FERC	Federal Energy Regulatory Commission
FIRM	Flood Insurance Rate Map
FIS	Fire Intensity Scale
FMA	Flood Mitigation Assistance
GIS	Geographic Information System
GOES XRS	Geostationary Operational Environmental Satellites X-Ray Sensor
GPS	Global Positioning System

Abbreviation	Definition
HF radio	High Frequency radio
HHPD	High Hazard Potential Dam
HMGP	Hazard Mitigation Grant Program
HMP	Hazard Mitigation Plan
HMPC	Hazard Mitigation Planning Committee
HMPT	Hazard Mitigation Planning Team?
HVRI	Hazards and Vulnerability Research Institute
HVRI BRIC	Hazards and Vulnerability Research Institute Baseline Resilience Indicators for Communities
IAEA	International Atomic Energy Agency
IC	In-cloud
IEM	Iowa Environment Mesonet
INES	International Nuclear and Radiological Event Scale
ISO	Insurance Services Office, Inc
ISU	Iowa State University
LDO	Land Development Ordinance
LRB	Loss/Exposure
MAP	Mitigation Action Plan
Mb	Magnitude Duration
MMI Scale	Modified Mercalli Intensity Scale
Mw	Moment Magnitude
NASCAR	National Association for Stock Car Auto Racing
NC	North Carolina
NCCSR	North Carolina Climate Science Report
NCDC	National Climatic Data Center
NCDEM	North Carolina Division of Emergency Management
NCDEQ	North Carolina Department of Environmental Quality
NCDOT	North Carolina Department of Transportation
NCEI	National Centers for Environmental Information
NCGS	North Carolina General Assembly
NCICS	North Carolina Institute for Climate Studies
NCLWF	North Carolina Land and Water Fund
NFIP	National Flood Insurance Program
NGDC/WDS	National Geophysical Data Center/World Data Service
NGOs	Non-governmental Organizations
NHC	National Hurricane Center
NIMS	National Incident Management System
NLDN	National Lightning Detection Network
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System

Abbreviation	Definition
NRC	Nuclear Regulatory Commission
NRI	National Risk Index
NW	Northwest
NWS	National Weather Service
PART	Piedmont Authority for Regional Transportation
PDM	Pre-Disaster Mitigation
PDSI	Palmer Drought Severity Index
PGA	Peak Ground Acceleration
PH	Public Health
PHMSA	Pipeline and Hazardous Materials Safety Administration
PRI	Priority Risk Index
PTCOG	Piedmont Triad Council of Governments
PTRC	Piedmont Triad Regional Council
RCATS	Regional Coordinated Area Transportation System
REACT	Randolph Emergency Alert Communications Technology
RFC	Repetitive Loss Claim
RL	Repetitive Loss
SARS	Severe Acute Respiratory Syndrome
SBA	Small Business Administration
SPC	Storm Prediction Center
SRL	Severe Repetitive Loss
Stormwater SMART	Stormwater Management and Resource Training
SVI	Social Vulnerability Index
SWRA	Southern Wildfire Risk Assessment
SWRAP	Southern Wildfire Risk Assessment
TB	Tuberculosis
TORRO	Tornado and Storm Research Organization
U.S.C.	United States Code
UDO	Unified Development Ordinance
UPS	Uninterruptible Power Supply
USACE	United States Army Corps of Engineers
USD	U.S. Dollars
USDA	United States Department of Agriculture
USDOT	United States Department of Transportation
USGS	United States Geological Survey

Table F- 1: Non-Public Schools in the Planning Area reported by NC One Map¹

County	School Name	Address	City	Zip Code
Davidson	ABC of NC Child Development Center	905 Friedberg Church Road	Winston-Salem	27127
Randolph	Asheboro Hybrid Academy	4751 Dunbar Bridge Road	Asheboro	27205
Randolph	Bailey's Grove Baptist School	624 Pleasant Cross Road	Asheboro	27203
Davidson	Bethany Christian School	584 Tower Road	Thomasville	27360
Davidson	Carolina Christian Academy	367 Academy Drive	Thomasville	27360
Randolph	Faith Christian School	5449 Brookhaven Road	Ramseur	27316
Randolph	Fayetteville Street Christian School	151 West Pritchard Street	Asheboro	27203
Davidson	Galilee Christian Academy	101 East Park Avenue	Lexington	27292
Randolph	Grace Point Christian Academy	5934 Surrett Drive	Archdale	27263
Randolph	Level Cross Christian School	10169 US Highway 220 Bus. N	Randleman	27317
Randolph	Mercy Mountain Academy	5046 Old NC Highway 13	Asheboro	27205
Randolph	Mount Calvary Christian School	6551 Weant Road	Archdale	27263
Davidson	New Hope Christian Academy	105 Pineywood Street	Thomasville	27360
Davidson	Sheets Memorial Christian School	307 Holt Street	Lexington	27292
Davidson	The Hope School For Autism	234 Cedar Lodge Road	Thomasville	27360-6143
Randolph	Trinity Christian School	5017 Plainfield Road	Sophia	27350
Davidson	Union Grove Christian School	2295 Union Grove Road	Lexington	27295
Davidson	Westchester Country Day School	2045 North Old Greensboro Road	High Point	27265

Table F- 2: Public Schools in the Planning Area Reported by NC One Map²

School Name	Address	City	Zip Code	County	School Type
Lexington Middle School	100 West Hemstead Street	Lexington	27292	Davidson	Regular School
Northwest Elementary	400 Northwest Elementary Road	Lexington	27295	Davidson	Regular School
Central Davidson Middle	2591 NC Highway 47	Lexington	27292	Davidson	Regular School
Central Davidson High	2747 NC Highway 47	Lexington	27292	Davidson	Regular School
Churchland Elementary	7571 South NC Highway 150	Lexington	27295	Davidson	Regular School
West Davidson High	200 Dragon Drive	Lexington	27295	Davidson	Regular School
Reeds Elementary	791 South NC Highway 150	Lexington	27295	Davidson	Regular School

¹ North Carolina Department of Administration, & Brown, J. (2024). NC Non-Public Schools (Latest Version) [Dataset]. In NC One Map. NC One Map.

https://www.nconemap.gov/datasets/91c068363523484fa2221d0e27998f7c_0/explore

² NC One Map & State of North Carolina. (2023). Public Schools [Dataset]. In NC One Map. NC One Map. https://www.nconemap.gov/datasets/dea6ff0e8b4743a0ba361e13a85a4c70_3/explore

Appendix F: Critical Facilities

School Name	Address	City	Zip Code	County	School Type
Silver Valley Elementary	11161 East Old Highway 64	Lexington	27292	Davidson	Regular School
South Davidson High	14956 South NC Highway 109	Denton	27239	Davidson	Regular School
Ledford Middle	3954 North NC Highway 109	Thomasville	27360	Davidson	Regular School
Welcome Elementary	5701 Old Highway 52	Lexington	27295	Davidson	Regular School
Southwood Elementary	5850 NC Highway 8	Lexington	27292	Davidson	Regular School
Liberty Elementary	206 North Fayetteville Street	Liberty	27298	Randolph	Regular School
Grays Chapel Elementary	5322 NC Highway 22 North	Franklinville	27248	Randolph	Regular School
Eastern Randolph High	390 East Randolph Road	Ramseur	27316	Randolph	Regular School
Franklinville Elementary	162 Pine Street	Franklinville	27248	Randolph	Regular School
Coleridge Elementary	4528 NC Highway 22 South	Coleridge	27316	Randolph	Regular School
Braxton Craven Middle	7037 NC Highway 62	Trinity	27370	Randolph	Regular School
Trinity High	5746 Trinity High School Road	Trinity	27370	Randolph	Regular School
Archdale Trinity Middle	5105 Archdale Road	Trinity	27370	Randolph	Regular School
New Market Elementary	6096 Highway 311	Sophia	27350	Randolph	Regular School
Randleman Middle	800 High Point Street	Randleman	27317	Randolph	Regular School
Seagrove Elementary	528 Old Plank Road	Seagrove	27341	Randolph	Regular School
North Davidson High	7227 Old US Highway 52	Lexington	27295	Davidson	Regular School
Pickett Elementary School	200 Biesecker Road	Lexington	27292	Davidson	Regular School
Stoner Thomas School	215 County School Road	Lexington	27292	Davidson	Exceptional Children
Davidson County High School	2065 East Holly Grove Road	Lexington	27292	Davidson	Alternative Education
Davis Townsend Elementary	975 Heath Church Road	Lexington	27292	Davidson	Regular School
Denton Elementary	305 West Salisbury Street	Denton	27239	Davidson	Regular School
E Lawson Brown Middle	1140 Kendall Mill Road	Thomasville	27360	Davidson	Regular School
East Davidson High	1408 Lake Road	Thomasville	27360	Davidson	Regular School
Fair Grove Elementary	217 Cedar Lodge Road	Thomasville	27360	Davidson	Regular School
Hasty Elementary	325 Hasty School Road	Thomasville	27360	Davidson	Regular School
Ledford Senior High	140 Jesse Green Road	Thomasville	27360	Davidson	Regular School
Midway Elementary	318 Midway School Road	Lexington	27295	Davidson	Regular School
North Davidson Middle	333 Critcher Drive	Lexington	27295	Davidson	Regular School
Pilot Elementary	145 Pilot School Road	Thomasville	27360	Davidson	Regular School
Tyro Middle	2946 Michael Road	Lexington	27295	Davidson	Regular School
Charles England Elementary School	111 Cornelia Drive	Lexington	27292	Davidson	Regular School
Lexington Senior High	26 Penry Street	Lexington	27292	Davidson	Regular School

Appendix F: Critical Facilities

School Name	Address	City	Zip Code	County	School Type
South Lexington School	1000 Cotton Grove Road	Lexington	27292	Davidson	Regular School
Southwest Elementary School	434 Central Avenue	Lexington	27292	Davidson	Regular School
Liberty Drive Elementary	401 Liberty Drive	Thomasville	27360	Davidson	Regular School
Thomasville Primary	915 East Sunrise Avenue	Thomasville	27360	Davidson	Regular School
Thomasville Middle	400 Unity Street	Thomasville	27360	Davidson	Regular School
Thomasville High	410 Unity Street	Thomasville	27360	Davidson	Regular School
Archdale Elementary	207 Trindale Road	Archdale	27263	Randolph	Regular School
Farmer Elementary	3557 Grange Hall Road	Asheboro	27205	Randolph	Regular School
John R Lawrence Elementary	6068 Suits Road	Archdale	27263	Randolph	Regular School
Level Cross Elementary	5417 Old Greensboro Road	Randleman	27317	Randolph	Regular School
Ramseur Elementary	6755 Jordan Road	Ramseur	27316	Randolph	Regular School
Randleman Elementary	100 Swaim Street	Randleman	27317	Randolph	Regular School
Randleman High	4396 Tigers Den Road	Randleman	27317	Randolph	Regular School
Southeastern Randolph Middle	5302 Foushee Road	Ramseur	27316	Randolph	Regular School
Southwestern Randolph High	1641 Hopewell Friends Road	Asheboro	27205	Randolph	Regular School
Southwestern Randolph Middle	1509 Hopewell Friends Road	Asheboro	27205	Randolph	Regular School
Tabernacle Elementary	4901 Tabernacle School Road	Asheboro	27205	Randolph	Regular School
Trindale Elementary	400 Balfour Drive	Archdale	27263	Randolph	Regular School
Trinity Elementary	5457 Braxton Craven Road	Trinity	27370	Randolph	Regular School
Asheboro High	1221 South Park Street	Asheboro	27203	Randolph	Regular School
South Asheboro Middle	523 West Walker Avenue	Asheboro	27203	Randolph	Regular School
Charles W McCrary Elementary	400 Ross Street	Asheboro	27203	Randolph	Regular School
Donna L Loflin Elementary	405 South Park Street	Asheboro	27203	Randolph	Regular School
Guy B Teachey Elementary	294 Newbern Avenue	Asheboro	27205	Randolph	Regular School
Lindley Park Elementary	312 Cliff Road	Asheboro	27203	Randolph	Regular School
North Asheboro Middle	1861 North Asheboro School Road	Asheboro	27203	Randolph	Regular School
Elm City Middle	215 East Church Street	Elm City	27822	Wilson	Regular School
Balfour Elementary	2097 North Asheboro School Road	Asheboro	27203	Randolph	Regular School
South Davidson Middle	14954 NC Highway 109 South	Denton	27239	Davidson	Regular School
Northeastern Randolph Middle	3493 Ramseur Julian Road	Liberty	27298	Randolph	Regular School
Hopewell Elementary	6294 Welborn Road	Trinity	27370	Randolph	Regular School
Friedberg Elementary	1131 Friedberg Church Road	Winston-Salem	27127	Davidson	Regular School

School Name	Address	City	Zip Code	County	School Type
Southmont Elementary	2497 Southmont Drive	Asheboro	27205	Randolph	Regular School
South Lexington Development Center	1006 Cotton Grove Road	Lexington	27292	Davidson	Exceptional Children
Uwharrie Middle	1463 Pleasant Union Road	Trinity	27370	Randolph	Regular School
Brier Creek Elementary	175 Watford Road	Thomasville	27360	Davidson	Regular School
Friendship Elementary	1490 Friendship Ledford Road	Winston-Salem	27107	Davidson	Regular School
Randolph Early College High	629 Industrial Park Avenue	Asheboro	27205	Randolph	Regular School
Davidson Early College	297 DCCC Road	Lexington	27295	Davidson	Regular School
Tyro Elementary	450 Cow Palace Road	Lexington	27295	Davidson	Regular School
Southmont Elementary	398 Owen Road	Lexington	27292	Davidson	Regular School
Wheatmore High	3678 Finch Farm Road	Trinity	27370	Randolph	Regular School
Providence Grove High	5555 Mack Lineberry Road	Climax	27233	Randolph	Regular School
Oak Grove Middle School	1771 Hoy Long Road	Winston-Salem	27107	Davidson	Regular School
Yadkin Valley Regional Career Academy	2065 East Holly Grove Road	Lexington	27292	Davidson	Regular School

Table F- 3: County Emergency Operations Centers according to NC One Map³

COUNTY	NAME	ADDRESS	CITY
Davidson	Davidson County Emergency Management	301 East Center Street	Lexington, NC 27292
Randolph	Randolph County Emergency Management	760 New Century Dr.	Asheboro, NC 27205

Table F- 4: Hospitals in the planning area according to NC One Map⁴

Facility	Alternate Facility Name	County	City	Zip Code	Facility Address	Facility License Number
Wake Forest Baptist Health - Lexington Medical Center	Lexington Memorial Hospital	Davidson	Lexington	272931817	250 Hospital Dr	H0027
Randolph Hospital	Randolph Hospital	Randolph	Asheboro	272041048	364 White Oak St	H0013
Novant Health-Thomasville Medical Center	Thomasville Medical Center	Davidson	Thomasville	27360	207 Old Lexington Rd	H0112

³ NC Emergency Management [NCEM]. (2020). County ECOs [Dataset]. In NC One Map, NC One Map. https://www.nconemap.gov/datasets/41382a5c439e4ed384ba4ecf6ac170ad_0/explore?location=35.215968%2C-79.861272%2C7.39

⁴ NC One Map & State of North Carolina. (2023a). Hospitals [Dataset]. In NC OneMap. NC One Map. <https://www.nconemap.gov/datasets/nconemap::hospitals/about>

Table F- 5: Emergency Medical Services According to NC One Map⁵

Facility Name	Address	City	Zip	County	Services Description
Davidson County Emergency Medical Services Base 4	324 West Peacock Avenue	Denton	27239	Davidson	Ambulance Services, Air or Ground
Healing Springs Fire Department Station 48	18694 State Highway 8	Denton	27239	Davidson	Ambulance And Fire Service Combined
Davidson County Emergency Medical Services Base 5	356 Tyro School Road	Lexington	27295	Davidson	Ambulance Services, Air or Ground
Davidson County Emergency Medical Services Base 3	228-B Midway School Road	Lexington	27295	Davidson	Ambulance Services, Air or Ground
Holly Grove Fire Department	2211 East Holly Grove Road	Lexington	27292	Davidson	Ambulance And Fire Service Combined
Southmont Volunteer Fire Department Station 56	11030 State Highway 8	Lexington	27292	Davidson	Ambulance And Fire Service Combined
Reeds Fire Department Station 51	186 South State Highway 150	Lexington	27295	Davidson	Ambulance And Fire Service Combined
Lexington Fire Department Station 3	70 Biesecker Road	Lexington	27295	Davidson	Ambulance And Fire Service Combined
Davidson County Emergency Medical Services Base 1	937 Main Street	Lexington	27292	Davidson	Ambulance Services, Air Or Ground
Lexington Fire Department Station 2	285 Hargrave Road	Lexington	27292	Davidson	Ambulance and Fire Service Combined
Lexington Fire Department Station 4	201 Cotton Grove Road	Lexington	27292	Davidson	Ambulance And Fire Service Combined
Midway Fire And Rescue Department Station 86	228 Midway School Road	Lexington	27295	Davidson	Fire And Rescue Service
Lexington Fire Department Station 1	200 E Center Street	Lexington	27292	Davidson	Ambulance And Fire Service Combined
Welcome Fire And Rescue Station 73	287 North Leonard Road	Lexington	27295	Davidson	Fire And Rescue Service
South Lexington Fire Department	2000 Cotton Grove Road	Lexington	27292	Davidson	Ambulance And Fire Service Combined
Davidson County Emergency Medical Services Base 2	115 West Main Street	Thomasville	27360	Davidson	Ambulance Services, Air Or Ground
Fair Grove Fire Department Main Station 43	211 Cedar Lodge Road	Thomasville	27360	Davidson	Ambulance And Fire Service Combined
Pilot Fire Department Station 54	4205 Old Highway 29	Thomasville	27360	Davidson	Ambulance And Fire Service Combined
Hasty Fire And Rescue	1306 Joe Moore Road	Thomasville	27360	Davidson	Fire And Rescue Service
Thomasville Rescue Squad	212 Pine Street	Thomasville	27360	Davidson	Rescue Services, Medical
Gumtree Fire And Rescue	2466 Gumtree Road	Winston Salem	27107	Davidson	Fire And Rescue Service
Guil - Rand Fire Department Station 41	7616 Harlow Road	Archdale	27263	Randolph	Ambulance And Fire Service Combined
Guil - Rand Fire Department Station 40	5711 Surret Drive	Archdale	27263	Randolph	Ambulance And Fire Service Combined

⁵ Emergency medical services (By State of North Carolina). (2023, March 22). NC OneMap. https://www.nconemap.gov/datasets/e43a159e4f584a3b8d5ffb797abc48a9_0/explore

Appendix F: Critical Facilities

Facility Name	Address	City	Zip	County	Services Description
Guil - Rand Fire Protective Association	10506 South Main Street	Archdale	27263	Randolph	Ambulance And Fire Service Combined
Asheboro Fire Department Station 2	2105 North Fayetteville Street	Asheboro	27203	Randolph	Ambulance And Fire Service Combined
Tabernacle Volunteer Fire Department Station 28	4444 Slick Rock Mountain Road	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Eastside Volunteer Fire Protection Association Station 1	614 Daniel Road	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Ulah Volunteer Fire Protection Station 12	1914 Hopewell Friends Road	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Eastside Volunteer Fire Protection Association Station 3	2444 Buffalo Ford Road	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Ulah Volunteer Fire Protection Station 11	2067 Pisgah Covered Bridge Road	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Eastside Volunteer Fire Protection Association Station 2	3033 Old State Highway 13	Asheboro	27205	Randolph	Ambulance And Fire Service Combined
Westside Volunteer Fire and Rescue Department Station 23	3668 Old State Highway 49	Asheboro	27205	Randolph	Fire And Rescue Service
Asheboro Fire Department Station 1	401 South Church Street	Asheboro	27203	Randolph	Ambulance And Fire Service Combined
Ash-Rand Rescue Squad	805 South Cox Street	Asheboro	27203	Randolph	Rescue Services, Medical
Westside Volunteer Fire and Rescue Department Station 13	225 Westside Circle	Asheboro	27205	Randolph	Fire And Rescue Service
Climax Fire Department	5316 Mack Lineberry Road	Climax	27233	Randolph	Ambulance And Fire Service Combined
New Hope Volunteer Fire Department Station 17	6397 Volunteer Rescue Road	Denton	27239	Randolph	Ambulance And Fire Service Combined
Farmer Volunteer Fire Department	6881 Old State Highway 49	Denton	27239	Randolph	Ambulance And Fire Service Combined
Franklinville Fire Department Station 8	146 West Main Street	Franklinville	27248	Randolph	Ambulance And Fire Service Combined
Franklinville Fire Department Station 22	2452 Ramseur Julian Road	Liberty	27298	Randolph	Ambulance And Fire Service Combined
Liberty Fire Department	515 West Swannanoa Avenue	Liberty	27298	Randolph	Ambulance And Fire Service Combined
Randolph County Emergency Medical Services-Liberty	215 West Swannanoa Avenue	Liberty	27298	Randolph	Ambulance Services, Air Or Ground
Ramseur Volunteer Fire Department	471 Coleridge Road	Ramseur	27316	Randolph	Ambulance And Fire Service Combined
Staley Volunteer Fire Department Incorporated Station 27	455 Kildee Church Road	Ramseur	27316	Randolph	Ambulance And Fire Service Combined
Randleman Fire Department	105 Hilliary Street	Randleman	27317	Randolph	Ambulance And Fire Service Combined
Level Cross Voluntary Fire Department	137 Branson Mill Road	Randleman	27317	Randolph	Ambulance And Fire Service Combined
Seagrove Volunteer Fire Department	281 East Main Street	Seagrove	27341	Randolph	Ambulance And Fire Service Combined

Facility Name	Address	City	Zip	County	Services Description
Sophia Fire Department Station 29	6740 United States Highway 311	Sophia	27350	Randolph	Ambulance And Fire Service Combined
Guil - Rand Fire Department Station 21	8401 Hillsville Road	Sophia	27350	Randolph	Ambulance And Fire Service Combined
Westside Volunteer Fire and Rescue Department Station 16	3141 Plainfield Road	Sophia	27350	Randolph	Fire And Rescue Service
Staley Volunteer Fire Department Station 7	410 West Railroad Street	Staley	27355	Randolph	Ambulance And Fire Service Combined
Guil - Rand Fire Department Station 39	6258 Welborn Road	Trinity	27370	Randolph	Ambulance And Fire Service Combined
Fair Grove Fire Department - Substation 45	7261 Welborn Road	Trinity	27370	Randolph	Ambulance And Fire Service Combined
Tabernacle Fire Department	8136 United States Highway 64 West	Trinity	27370	Randolph	Ambulance And Fire Service Combined

Table F- 6: Medical Facilities According to NC One Map⁶

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Mental Health Homes	Southmont	P.O. Box 1356	Aberdeen	28315	Davidson	633 Charlotte Drive	MHL-029-068
Home Care	At Home Total Care	4530 Park Road, Suite 420 A	Charlotte	28209	Davidson	143 North Main Street, Suite 6	HC1390
Nursing Home Facility	Mountain Vista Health Park	P.O. Box 1547	Denton	0	Davidson	106 Mtn. Vista Road	NH0259
Mental Health Homes	Holly Grove	PO Box 44105	Fayetteville	28309	Davidson	168 Roy Lopp Road	MHL-029-044
Mental Health Homes	Woodhaven Group Home	PO Box 44105	Fayetteville	28309	Davidson	106 Woodhaven Drive	MHL-029-033
Home Care	Easter Seals North Carolina - High Point	1004 N. Main St., #103	High Point	27262	Davidson	1004 North Main Street, #103	HC1667
Home Care	Allheart Homecare, Inc.	103 S. Salisbury Street	Lexington	27292	Davidson	103 South Salisbury Street	HC1612
Home Care	CareSouth	P. O. Box 786	Lexington	27293	Davidson	957 South Salisbury Street	HC1104
Home Care	Davidson County DSS	P O Box 788	Lexington	0	Davidson	913 Greensboro Street	HC0652
Home Care	Davidson County Home Health Agency	P O Box 439	Lexington	0	Davidson	915 Greensboro Street	HC0495
Home Care	Home Sweet Home Inc.	505 Linwood Road	Lexington	27292	Davidson	505 Linwood Road	HC2195
Home Care	Piedmont Home Care	P. O. Box 1624	Lexington	0	Davidson	100 East 9th Avenue	HC0521
Home For the Aged	Brookstone Rest Home and Retirement Center	2968 Old Salisbury Road	Lexington	27295	Davidson	2968 Old Salisbury Road	HAL-029-001
Home For the Aged	Carolina House of Lexington	161 Young Drive	Lexington	27292	Davidson	161 Young Drive	HAL-029-006

⁶ State of North Carolina & NC OneMap. (2023). Medical Facilities [Dataset]. In NC One Map. NC One Map. <https://www.nconemap.gov/datasets/nconemap::medical-facilities/about>

Appendix F: Critical Facilities

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Hospice	Hospice of Davidson County, Inc.	P O Box 1941	Lexington	27293	Davidson	524 South State Street	HOS0372
Hospital	Lexington Memorial Hospital	P O Box 1817	Lexington	0	Davidson	250 Hospital Drive	H0027
Mental Health Homes	Augusta House	670-C Radio Drive	Lexington	27292	Davidson	604 Summit Drive	MHL-029-080
Mental Health Homes	Connie and Garland Davis Home	303 Stephanie Drive	Lexington	27295	Davidson	303 Stephanie Drive	MHL-029-038
Mental Health Homes	Davidson #1	6 Vance Circle	Lexington	27292	Davidson	108 Fairview Drive	MHL-029-026
Mental Health Homes	Davidson #2	6 Vance Circle	Lexington	27292	Davidson	434 Shannon Drive	MHL-029-027
Mental Health Homes	Davidson #3	6 Vance Circle	Lexington	27292	Davidson	700 Hunters Way	MHL-029-028
Mental Health Homes	Davidson #4	6 Vance Circle	Lexington	27295	Davidson	125 Delta Street	MHL-029-029
Mental Health Homes	Davidson Alcoholic Care-Men's Division	P.O. Box 1824	Lexington	0	Davidson	1675 East Center Street Extension	MHL-029-006
Mental Health Homes	Davidson Alcoholic Care-Women's Facility	P.O. Box 1824	Lexington	27293	Davidson	1675 East Center Street Ext.	MHL-029-007
Mental Health Homes	Davidson Assessment & Counseling Services	110-C Cotton Grove Road	Lexington	27292	Davidson	110-C Cotton Grove Road	MHL-029-021
Mental Health Homes	Davidson Co. Area Program for MH/DD/SAS-Lexington C	220 East First Avenue Extension	Lexington	27292	Davidson	220 East First Avenue Extension	MHL-029-032
Mental Health Homes	Davidson's Day Reporting Center	1404 Piedmont Drive, Box 9	Lexington	27295	Davidson	1404 Piedmont Drive, Box 9	MHL-029-049
Mental Health Homes	McLaurin Home	1219 Thomason Street	Lexington	27292	Davidson	1219 Thomason Street	MHL-029-091
Mental Health Homes	North Point Home	208 Oakhill Drive	Lexington	27295	Davidson	208 Oakhill Drive	MHL-029-094
Mental Health Homes	Steve Moore Counseling Center	27 East Center Street	Lexington	27292	Davidson	27 East Center Street	MHL-029-084
Mental Health Homes	The Green Center of Growth and Development	202-B North Main Street	Lexington	27292	Davidson	202-B North Main Street	MHL-029-090
Mental Health Homes	The Workshop of Davidson-Group Home #1-Women	PO Box 906	Lexington	27293	Davidson	509 Shoaf Street	MHL-029-024
Nursing Home Facility	Centerclair	185 Yountz Road	Lexington	27292	Davidson	185 Yountz Road	NH0252
Nursing Home Facility	Golden Age, Inc.	Cow Palace Road	Lexington	27295	Davidson	Cow Palace Road	NH0094
Nursing Home Facility	Lexington Health Care Center	17 Cornelia Drive	Lexington	0	Davidson	17 Cornelia Drive	NH0527
Nursing Home Facility	SunBridge Care & Rehabilitation for Lexington	877 Hill Everhart Rd.	Lexington	27295	Davidson	877 Hill Everhart Rd.	NH0099

Appendix F: Critical Facilities

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Family Care	Kateland Family Care Home	2959 Sowers Road	Linwood	27299	Davidson	294 Old Highway 109	FCL-029-003
Family Care	Westanna Family Care Home	2959 Sowers Road	Linwood	27299	Davidson	716 West 5th Avenue	FCL-029-001
Home For the Aged	Hilltop Living Center	592 Hilltop Drive	Linwood	27299	Davidson	592 Hilltop Drive	HAL-029-002
Home For the Aged	Landmark Estates	2959 Sowers Road	Linwood	27299	Davidson	255 Thomas School Road	HAL-029-003
Mental Health Homes	Donlin Counseling Services	P.O. Box 2265	North Wilkesboro	28659	Davidson	1404 Piedmont Drive	MHL-029-088
Mental Health Homes	Converse IRT	P.O. Box 37399	Raleigh	27627	Davidson	113 Converse Drive	MHL-029-076
Mental Health Homes	Davidson House	P.O. Box 37399	Raleigh	27627	Davidson	918 Greensboro Street	MHL-029-011
Mental Health Homes	Hasty House	PO Box 37399	Raleigh	27627	Davidson	304 Fairway Drive	MHL-029-047
Mental Health Homes	Lexington House	P.O. Box 37399	Raleigh	27627	Davidson	8531 NC Highway 8	MHL-029-070
Mental Health Homes	Oak IRT	PO Box 37399	Raleigh	27627	Davidson	209 Pine Oak Drive	MHL-029-092
Mental Health Homes	Thomasville House	P.O. Box 814	Randleman	27317	Davidson	10 School Street	MHL-029-042
Mental Health Homes	Arlington House	One Industrial Drive	Snow Hill	28580	Davidson	216 Agner Lane	MHL-029-062
Mental Health Homes	Fairview House	One Industrial Drive	Snow Hill	28580	Davidson	316 Fairview Drive	MHL-029-054
Cardiac Rehabilitation	Piedmont Cardiac Rehabilitation Program	1010 Mendenhall Road	Thomasville	27360	Davidson	1010 Mendenhall Road	CRP0008
Home Care	Arcadia Health Care Services	1120 Randolph Street	Thomasville	27360	Davidson	1120 Randolph Street, Suite 34	HC2042
Home Care	Continuum Home Care of Davidson	706 Piney Wood Road	Thomasville	27360	Davidson	706 Piney Wood Road	HC1204
Home Care	Liberty Home Care	1007 Lexington Avenue	Thomasville	27360	Davidson	1007 Lexington Avenue	HC0124
Home For the Aged	The Oaks of Thomasville	915 Salem Street	Thomasville	27360	Davidson	915 Salem Street	HAL-029-004
Hospital	Thomasville Medical Center	P O Box 789	Thomasville	27360	Davidson	207 Old Lexington Road	H0112
Mental Health Homes	Davidson Co. Area Program for MH/DD/SAS-Thomasville	205 Old Lexington Road	Thomasville	27360	Davidson	205 Old Lexington Road	MHL-029-004
Mental Health Homes	Eppley Care Facility	104 Midway Lane	Thomasville	27360	Davidson	104 Midway Lane	MHL-029-093
Mental Health Homes	Incentive's, Inc.	2 Salem Street	Thomasville	27360	Davidson	2 Salem Street	MHL-029-089
Mental Health Homes	Soul Salvation Counseling Ministry	10 Forsyth Street	Thomasville	27360	Davidson	10 Forsyth Street	MHL-029-064
Mental Health Homes	The Green Center of Growth and Development	25 West Guilford Street, Ste. 11	Thomasville	27360	Davidson	25 West Guilford Street, Ste. 11	MHL-029-048

Appendix F: Critical Facilities

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Mental Health Homes	Thomasville IRT	1430 Hasty School Road	Thomasville	27361	Davidson	1430 Hasty School Road	MHL-029-087
Nursing Home Facility	Britthaven of Davidson	706 Pineywood Road	Thomasville	0	Davidson	706 Pineywood Road	NH0187
Nursing Home Facility	LibertyWood Nursing Center	1028 Blair Street	Thomasville	0	Davidson	1028 Blair Street	NH0292
Nursing Home Facility	Piedmont Center	100 Hedrick Drive	Thomasville	0	Davidson	100 Hedrick Drive	NH0390
Home Care	FirstHealth Home Medical Equipment and Supplies	181-C Westgate Drive	West End	27376	Davidson	110 J Cotton Grove Road	HC1141
Home Care	Total Care, Inc.	8411 North Carolina Hwy 109	Winston Salem	27107	Davidson	8411 North Carolina Hwy 109	HC0230
Mental Health Homes	Hargrave Home	2200 Silas Creek Parkway, Ste. 8B	Winston Salem	27103	Davidson	803 W. Fifth Avenue	MHL-029-022
Mental Health Homes	Yost Home	2200 Silas Creek Pkwy-Ste. 8B	Winston Salem	27103	Davidson	7 Hawthorne Lane	MHL-029-035
Mental Health Homes	Community Assisted Residential Environment 1	2661 Nantucket Drive	Winston-Salem	27107	Davidson	11191 Old US Highway 52	MHL-029-095
Home For the Aged	Tru-Care of Archdale	303 Aldridge Road	Archdale	27263	Randolph		HAL-076-006
Mental Health Homes	Adult Substance Abuse Program, Inc.	11519 North Main Street	Archdale	27263	Randolph		MHL-076-044
Mental Health Homes	Archdale-Trinity Center	205 Balfour Drive	Archdale	27263	Randolph		MHL-076-017
Nursing Home Facility	Westwood Health and Rehabilitation Center	625 Ashland Drive	Archdale	0	Randolph		NH0556
Ambulatory Surgery	Asheboro Endoscopy Center	P O Box 4830	Asheboro	27204	Randolph		AS0054
Cardiac Rehabilitation	Randolph Hospital Cardiopulmonary Rehabilitation	364 White Oak Street	Asheboro	0	Randolph		CRP0073
Family Care	Cedar Ridge Family Care, Inc.	2324 Fairview Farm Road	Asheboro	27203	Randolph		FCL-076-009
Family Care	Hudson's Family Care #2	695 Moore Road	Asheboro	27205	Randolph		FCL-076-019
Family Care	Hudson's Family Care Home	695 Moore Road	Asheboro	27203	Randolph		FCL-076-002
Home Care	Advanced Health Resources	956 South Park Street	Asheboro	27203	Randolph		HC2056
Home Care	American HomePatient	5200 Maryland Way, Suite 400	Asheboro	27203	Randolph		HC2284
Home Care	CareSouth	535 South Cox Street	Asheboro	27203	Randolph		HC0929
Home Care	Center of Living Home Health and Hospice, Inc.	P O Box 9	Asheboro	0	Randolph		HC0397
Home Care	Home Health of Randolph Hospital	P. O. Box 1048	Asheboro	0	Randolph		HC0522

Appendix F: Critical Facilities

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Home Care	Regional Consolidated Services	P O Box 1883	Asheboro	0	Randolph		HC0130
Home For the Aged	Carillon Assisted Living of Asheboro	2925 Zoo Parkway	Asheboro	27203	Randolph		HAL-076-005
Home For the Aged	Carolina House of Asheboro	514 Vision Drive	Asheboro	27203	Randolph		HAL-076-007
Home For the Aged	Cross Road Retirement Community	1302 Old Cox Road	Asheboro	27205	Randolph		HAL-076-003
Home For the Aged	North Pointe	PO Box 640	Asheboro	27204	Randolph		HAL-076-027
Hospital	Randolph Hospital, Inc.	P O Box 1048	Asheboro	0	Randolph		H0013
Mental Health Homes	Academy Street Outpatient Services	110 West Walker Avenue	Asheboro	27203	Randolph		MHL-076-004
Mental Health Homes	Alpha House - Randolph County	1006 Sunset Avenue	Asheboro	27203	Randolph		MHL-076-001
Mental Health Homes	Behavioral Associates of Asheboro	547 North Fayetteville Street	Asheboro	27203	Randolph		MHL-076-053
Mental Health Homes	DWI/Court Program	110 West Walker Avenue	Asheboro	27203	Randolph		MHL-076-015
Mental Health Homes	Goldston Substance Abuse Program, Inc.	PO Box 402	Asheboro	0	Randolph		MHL-076-028
Mental Health Homes	Heath House	1342 Hwy 42 South	Asheboro	27203	Randolph		MHL-076-050
Mental Health Homes	Mainstream	933 East Salisbury Street	Asheboro	27203	Randolph		MHL-076-033
Mental Health Homes	Mangum House	1006 Sunset Avenue	Asheboro	27203	Randolph		MHL-076-007
Mental Health Homes	Mountainside	1691 Old Buffalo Ford Road	Asheboro	27203	Randolph		MHL-076-056
Mental Health Homes	North House	PO Box 547	Asheboro	27203	Randolph		MHL-076-008
Mental Health Homes	Pineview Group Home	218 Pineview Road	Asheboro	27203	Randolph		MHL-076-026
Mental Health Homes	Randolph County Day Reporting Center	1520 North Fayetteville Street	Asheboro	27317	Randolph		MHL-076-030
Mental Health Homes	Randolph County Jail SAS Program	110 West Walker Avenue	Asheboro	27203	Randolph		MHL-076-041
Mental Health Homes	Randolph County MH Center-Youth Services	110 West Walker Avenue	Asheboro	27203	Randolph		MHL-076-016
Mental Health Homes	Randolph Psychosocial Rehabilitation	110 West Walker Avenue	Asheboro	27203	Randolph		MHL-076-051
Mental Health Homes	Vocational Opportunities in the Community	214 North Elm Street	Asheboro	27203	Randolph		MHL-076-005
Mental Health Homes	Walker Center Programs	842 E Pritchard Street	Asheboro	27203	Randolph		MHL-076-009

Appendix F: Critical Facilities

Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Nursing Home Facility	Asheboro Health and Rehabilitation Center	230 East Presnell Street	Asheboro	0	Randolph		NH0335
Nursing Home Facility	Clapp's Convalescent Nursing Home, Inc.	1383 Martin Luther King Jr., Drive	Asheboro	0	Randolph		NH0020
Nursing Home Facility	SunBridge Care & Rehabilitation for Asheboro	400 Vision Drive	Asheboro	27203	Randolph		NH0448
Mental Health Homes	Timberlea Group Home	5691 Mack Lineberry Road	Climax	27233	Randolph		MHL-076-023
Mental Health Homes	Southview	PO Box 1669	Garner	27529	Randolph		MHL-076-054
Mental Health Homes	The Overlook	PO Box 1763	Garner	27529	Randolph		MHL-076-055
Home Care	Shipman Family Care, Inc.	2031 Suite E	Greensboro	27406	Randolph		HC2254
Mental Health Homes	The Anderson Home	400 West Market Street Ste. 310	Greensboro	27420	Randolph		MHL-076-067
Mental Health Homes	Brookwood	609 B Industrial Ave.	Greensboro	27406	Randolph		MHL-076-022
Mental Health Homes	The Miller Home	400 West Market Street Ste. 310	Greensboro	27420	Randolph		MHL-076-066
Nursing Pool	Uniphil Health Staffing Services, Inc.	3592 Hancock Drive	Greensboro	27410	Randolph		NP1908
Home Care	Elite Companion Care	P.O. Box 263	High Point	27261	Randolph		HC2243
Mental Health Homes	Youth Unlimited - Millis Home	PO Box 485	High Point	27261	Randolph		MHL-076-065
Mental Health Homes	Youth Unlimited Boys Home #1	PO Box 485	High Point	27261	Randolph		MHL-076-063
Mental Health Homes	Ashe House	1107-A East Mountain Street	Kernersville	27284	Randolph		MHL-076-049
Mental Health Homes	Hope House	1107-A East Mountain Street	Kernersville	27284	Randolph		MHL-076-046
Family Care	Caregivers of Liberty I	121 East Raleigh Street	Liberty	27298	Randolph		FCL-076-028
Family Care	Caregivers of Liberty II	125 East Raleigh Street	Liberty	27298	Randolph		FCL-076-029
Family Care	Carol Lee Family Care Home	319 East Raleigh Avenue	Liberty	27298	Randolph		FCL-076-021
Home Care	Gentiva Health Services	12900 Foster Road	Overland Park	66213	Randolph		HC0128
Home Care	Gentiva Health Services	12900 Foster Road	Overland Park	66213	Randolph		HC0953
Nursing Pool	Gentiva Health Services	Attn: Home Care Administration	Overland Park	66213	Randolph		NP1395
Mental Health Homes	Southwest IRT	PO Box 37399	Raleigh	27627	Randolph		MHL-076-039
Family Care	Isley Family Care	P O Box 376	Ramseur	27316	Randolph		FCL-076-024
Mental Health Homes	A Touch from The Heart	P O Box 1165	Ramseur	27316	Randolph		MHL-076-062
Mental Health Homes	Caviness Care Group Home	5192 Goldstons Road	Ramseur	27316	Randolph		MHL-076-060

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Facility type	Facility Name	Listed Address	City	Zip Code	County	Alternate address	License Number
Mental Health Homes	Hopes Care Home	PO Box 1030	Ramseur	27316	Randolph		MHL-076-064
Nursing Home Facility	Universal Health Care/Ramseur	7166 Jordon Road	Ramseur	27316	Randolph		NH0609
Home Care	Therapeutic Alternatives, Incorporated	P O Box 814	Randleman	27317	Randolph		HC0877
Home For the Aged	Country Manor	P.O. Box 281	Randleman	27317	Randolph		HAL-076-002
Home For the Aged	Brookstone Haven	P. O. Box 814	Randleman	27317	Randolph		HAL-076-001
Home For the Aged	Triad Telcare Inc. dba Country Club	1324 Coltrane Mill Road	Randleman	27317	Randolph		HAL-076-008
Mental Health Homes	Archdale House	PO Box 814	Randleman	27317	Randolph		MHL-076-059
Mental Health Homes	Providence Group Home	P.O. Box 814	Randleman	27317	Randolph		MHL-076-047
Mental Health Homes	Victoria House	PO Box 814	Randleman	27317	Randolph		MHL-076-025
Mental Health Homes	AVB Care Center	PO Box 814	Randleman	27317	Randolph		MHL-076-012
Mental Health Homes	Forest Park House	P.O. Box 814	Randleman	27317	Randolph		MHL-076-011
Mental Health Homes	Hartsell Home	5952 Gilbert Davis Drive	Randleman	27317	Randolph		MHL-076-061
Family Care	Rainbow's Inn Family Care	4011 Old Courthouse Road	Sophia	27350	Randolph		FCL-076-004
Home Care	Carolina Care, LLC	5896 Highway 311	Sophia	27350	Randolph		HC1736
Nursing Home Facility	The Graybrier Nursing and Retirement Center	116 Lane Drive	Trinity	0	Randolph		NH0489

Table F- 7: Fire Stations in the Planning Area according to NC One Map⁷

Fire Department ID	Department Name	Station Address	City	County	Zip Code
02904	Denton Fire Department	101 West Newsome Street	Denton	Davidson	27239
02906	Healing Springs Fire Department, Inc.	18694 NC Highway 8	Denton	Davidson	27239
02924	South Davidson Fire Department, Inc.	22320 NC 109	Denton	Davidson	27239

⁷ Adam Blythe. (2024). NC Fire Stations [Dataset]. In NC One Map, NC OneMap. NC One Map. https://www.nconemap.gov/datasets/6f4fe0c55b0d4cbb92877e461d698c29_0/explore?location=34.621175%2C-80.017373%2C6.48

Appendix F: Critical Facilities

Fire Department ID	Department Name	Station Address	City	County	Zip Code
02901	Arcadia-Reedy Creek-Hampton Volunteer Fire and Rescue Department, Inc.	1374 Ruff Leonard Road	Lexington	Davidson	27295
02902	Central Fire Department of Davidson County, Inc.	572 Becks Church Road	Lexington	Davidson	27292
02903	Churchland Rural Fire Department, Incorporated	7171 South Highway 150	Lexington	Davidson	27295
02907	Holly Grove Fire Department, Inc.	2211 East Holly Grove Road	Lexington	Davidson	27292
02908	Lexington Fire Department	200 East Center Street	Lexington	Davidson	27292
02908	Lexington Fire Department	285 Hargrave Road	Lexington	Davidson	27295
02908	Lexington Fire Department	70 Biesecker Road	Lexington	Davidson	27292
02908	Lexington Fire Department	201 Cotton Grove Road	Lexington	Davidson	27292
02909	Linwood Rural Fire Department, Inc.	4297 Old Linwood Road	Lexington	Davidson	27292
02910	Midway Fire & Rescue Department, Inc.	228 Midway School Road	Lexington	Davidson	27295
02927	North Lexington Triangle Fire Department, Inc.	2976 Greensboro Street Extension	Lexington	Davidson	27295
02912	Reeds Fire Department, Inc.	186 Highway 150 South	Lexington	Davidson	27295
02913	Silver Valley Fire Department, Inc.	11450 South NC 109	Lexington	Davidson	27292
02913	Silver Valley Fire Department, Inc.	1685 Regan Road	Lexington	Davidson	27292
02914	South Lexington Volunteer Fire Department, Inc.	1877 NC Highway 47	Lexington	Davidson	27292
02914	South Lexington Volunteer Fire Department, Inc.	2000 Cotton Grove Road	Lexington	Davidson	27292
02915	Southmont Fire Department, Incorporated	11030 NC Highway 8	Lexington	Davidson	27292
02920	Tyro Rural Fire Department, Incorporated	4645 South NC Highway 150	Lexington	Davidson	27295
02922	Welcome Fire Department, Inc.	287 North Leonard Road	Lexington	Davidson	27295
02923	West Lexington Volunteer Fire and Rescue Department, Inc	1600 West Center Street Extension	Lexington	Davidson	27295
02903	Churchland Rural Fire Department, Incorporated	9752 South Highway 150	Linwood	Davidson	27299
02915	Southmont Fire Department, Incorporated	2989 Rockercrusher Road	Southmont	Davidson	27351
02905	Fair Grove Fire Department, Inc.	211 Cedar Lodge Road	Thomasville	Davidson	27360
02905	Fair Grove Fire Department, Inc.	760 Lee Road	Thomasville	Davidson	27360
02916	Hasty Fire & Rescue, Inc	1306 Joe Moore Road	Thomasville	Davidson	27360

Appendix F: Critical Facilities

Fire Department ID	Department Name	Station Address	City	County	Zip Code
02911	Pilot Fire Department and Community Center of Davidson County, Inc.	4205 Old Lexington Road	Thomasville	Davidson	27360
02917	Thomasville Fire Department	712 East Main Street	Thomasville	Davidson	27360
02917	Thomasville Fire Department	815 South Highway 109	Thomasville	Davidson	27360
02917	Thomasville Fire Department	1107 Lexington Avenue	Thomasville	Davidson	27360
02917	Thomasville Fire Department	7000 Ball Park Road	Thomasville	Davidson	27360
02905	Fair Grove Fire Department, Inc.	7261 Welborne	Trinity	Davidson	27370
02925	Gumtree Fire & Rescue, Inc.	2466 Gumtree Road	Winston Salem	Davidson	27107
02921	Wallburg Fire and Rescue, Inc.	121 Georgetown Road	Winston Salem	Davidson	27107
04103	Climax Volunteer Fire Department, Inc.	5316 Mack Lineberry Road	Climax	Guilford	27233
07606	Guil-Rand Fire Protective Association, Inc.	10506 South Main Street	Archdale	Randolph	27263
07606	Guil-Rand Fire Protective Association, Inc.	7616 Harlow Road	Archdale	Randolph	27263
07601	Asheboro Fire Department	401 South Church Street	Asheboro	Randolph	27203
07601	Asheboro Fire Department	2105 North Fayetteville Street	Asheboro	Randolph	27203
07603	East Side Volunteer Fire Protection Association, Inc.	614 Daniel Road	Asheboro	Randolph	27205
07603	East Side Volunteer Fire Protection Association, Inc.	3033 Old Highway 13	Asheboro	Randolph	27205
07603	East Side Volunteer Fire Protection Association, Inc.	2444 Buffalo Ford Road	Asheboro	Randolph	27205
07621	Tabernacle Volunteer Fire Department	4444 Slick Rock Road	Asheboro	Randolph	27205
07614	Ulah Volunteer Fire Protective Association, Inc.	2067 Pisgah Covered Bridge Road	Asheboro	Randolph	27205
07614	Ulah Volunteer Fire Protective Association, Inc.	1914 Hopewell Friends Road	Asheboro	Randolph	27205
07614	Ulah Volunteer Fire Protective Association, Inc.	5647 Lanier Road	Asheboro	Randolph	27205
07615	Westside Volunteer Fire and Rescue Department, Inc.	225 Westside Circle	Asheboro	Randolph	27203
07615	Westside Volunteer Fire and Rescue Department, Inc.	3668 Old NC 49 Highway	Asheboro	Randolph	27205
07604	Farmer Volunteer Fire Department, Inc.	6881 South Old NC 49 Highway	Denton	Randolph	27239
07607	New Hope Volunteer Fire Department of Randolph County, Inc.	6397 Volunteer Rescue Road	Denton	Randolph	27239
07605	Franklinville Fire Protection Assn. Inc.	146 West Main Street	Franklinville	Randolph	27248

Fire Department ID	Department Name	Station Address	City	County	Zip Code
07605	Franklinville Fire Protection Assn. Inc.	2426 Whites Memorial Road	Franklinville	Randolph	27248
07605	Franklinville Fire Protection Assn. Inc.	2452 Ramseur Julian Road	Liberty	Randolph	27298
07609	Liberty Fire Department	515 West Swannanoa Avenue	Liberty	Randolph	27298
07602	Coleridge Volunteer Fire Department, Inc.	4495 NC Highway 22 South	Ramseur	Randolph	27316
07605	Franklinville Fire Protection Assn. Inc.	1288 NC Highway 22 South	Ramseur	Randolph	27316
07610	Ramseur Volunteer Fire Department	471 Coleridge Road	Ramseur	Randolph	27316
07613	Staley Volunteer Fire Department, Inc.	455 Kildee Church Road	Ramsuer	Randolph	27316
07608	Level Cross Voluntary Fire Department, Inc.	125 Branson Mill Road	Randleman	Randolph	27317
07611	Randleman Fire Department	105 Hillary Street	Randleman	Randolph	27317
07602	Coleridge Volunteer Fire Department, Inc.	7718 Erect Road	Seagrove	Randolph	27341
07612	Seagrove Rural Volunteer Fire Department, Inc.	281 East Main Street	Seagrove	Randolph	27341
07606	Guil-Rand Fire Protective Association, Inc.	8401 Hillsville Road	Sophia	Randolph	27350
07611	Randleman Fire Department	6740 US Highway 311	Sophia	Randolph	27350
07615	Westside Volunteer Fire and Rescue Department, Inc.	3141 Plainfield Road	Sophia	Randolph	27350
07613	Staley Volunteer Fire Department, Inc.	410 West Railroad Street	Staley	Randolph	27355
07606	Guil-Rand Fire Protective Association, Inc.	5711 Surret Drive	Trinity	Randolph	27370
07606	Guil-Rand Fire Protective Association, Inc.	6258 Welborn	Trinity	Randolph	27370
07621	Tabernacle Volunteer Fire Department	8136 US Highway 64 West	Trinity	Randolph	27370

Table F- 8: Law Enforcement Locations in the Planning Area According to NC One Map⁸

Name	Address	City	Zip	County	Description
Davidson County Sheriffs Department / Detention Center	110 West Center Street	Lexington	27292	Davidson	Sheriffs' Offices (Except Court Functions Only)
Randolph County Sheriffs Department Substation	402 Balfour Drive	Archdale	27263	Randolph	Sheriffs' Offices (Except Court Functions Only)

⁸ State of North Carolina. (2023b). Law Enforcement Locations [Dataset]. In NC OneMap. <https://www.nconemap.gov/search?groupIds=2b0fd568b5234936a139f67a7ccdb014>

Appendix F: Critical Facilities

Name	Address	City	Zip	County	Description
City Of Liberty Police Department	451 West Swannanoa Avenue	Liberty	27298	Randolph	Police Departments
Town Of Ramseur Police Department	741 Liberty Street	Ramseur	27316	Randolph	Police Departments
Asheboro Police Department	205 East Academy Street	Asheboro	27203	Randolph	Police Departments
City Of Randleman Police Department	100 Hilliary Street	Randleman	27317	Randolph	Police Departments)
Lexington Police Department	106 North Main Street	Lexington	27292	Davidson	Police Departments
Randolph Community College Police Department	629 Industrial Park Avenue	Asheboro	27205	Randolph	Police Departments
Davidson County Community College Security	297 Davidson County Community College Road	Thomasville	27360	Davidson	Police Departments
Randolph County Sheriffs Department	727 Mcdowell Road	Asheboro	27205	Randolph	Sheriffs' Offices (Except Court Functions Only)
City Of Thomasville Police Department	7 West Guilford Street	Thomasville	27360	Davidson	Police Departments
City Of Archdale Police Department	305 Balfour Drive	Archdale	27263	Randolph	Police Departments
Seagrove Police Department - Headquarters	122 East Main Street	Seagrove	27341	Randolph	Police Departments
North Carolina State Highway Patrol Troop D District Vi	2754 United States Highway 220 Business Road South	Asheboro	27205	Randolph	Highway Patrols, Police
North Carolina State Highway Patrol Troop E District I	2314 South Main Street	Lexington	27292	Davidson	Highway Patrols, Police
City Of Denton Police Department	101 West Newsom Avenue	Denton	27239	Davidson	Police Departments

Table G- 1: Local Historic Districts that overlap flood hazard areas in the planning area¹ * LHD = local historic district

Property Name	Jurisdiction	Description	NCHP Status	Year Designated	District Boundary ID	County	Flood Hazard Zone
Park Place Local Historic District	Lexington West	1854-1957 residential	LHD	2013	DV1783	Davidson	AE
Salem Street Local Historic District	High Point West		LHD		DV0701	Davidson	X
Colonial Drive School Local Historic District	High Point West	c. 1900-c.1950 residential, school, club, park	LHD	2005	DV1057	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD

Table G- 2: Listed or determined eligible properties with the NC Historic Preservation Office in Davidson and Randolph County² *NR = Individual National Register List, SL= Individual Study List Entry (places that the National Register Advisory Committee has identified as potentially eligible for the Register, DOEHD= center point of determine eligible historic districts, SLHD= Center point for the study list historic district, NRHD= National Register historic district center point, LHD = center point of a local historic district, DOE = boundary of a determined eligible historic district, SLHD= center point for study list historic district, SLDOE = on study list and determined eligible, and NRD = National Register District (destroyed or moved).

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0001	NR	Old Davidson County Courthouse	1856-58 Greek Revival stuccoed temple form courthouse	Davidson	Lexington	NW corner S. Main and W. Center Streets Lexington	X
DV0003	NR	Brummel's Inn	1814 and later log and frame 2-story house	Davidson	Thomasville	SW side SR 1755, 0.5 mi SE of jct. w/SR 1756 Thomasvill*	X
DV0004	NR	Philip Sowers House	c. 1860 Y-shaped 2-story brick house; double pen log barn	Davidson	Boone	NE side SR 1162, 0.2 mi E of jct. w/SR 1167 Churchland *	X
DV0005	NR	Spurgeon House	1845 Federal/Greek Revival 2-story frame house	Davidson	Abbotts Creek	E side SR 1743, 0.3 mi S of jct. w/SR 1741 High Point v*	X
DV0006	NR	Thomasville Railroad Passenger Depot	1871 depot Victorian sawnwork	Davidson	Thomasville	Junction of West Main & Trade Sts. 44 W. Main Street Thomas*	X

¹ North Carolina Historic Preservation Office & North Carolina Department of Natural and Cultural Resources. (2019). HPOWEB 2.0 (2.0) [Dataset]. NC Historic Preservation Office. <https://nc.maps.arcgis.com/home/item.html?id=d2d04d8d7e03403f889419526e682529>

² North Carolina Historic Preservation Office & North Carolina Department of Natural and Cultural Resources. (2019). HPOWEB 2.0 (2.0) [Dataset]. NC Historic Preservation Office. <https://nc.maps.arcgis.com/home/item.html?id=d2d04d8d7e03403f889419526e682529>

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0009	NR	Jersey Settlement Meeting House	1843 Greek Revival brick church	Davidson	Cotton Grove	N side SR 1272, 0.2 mi E of jct.w/SR 1104 Linwood vicin*	X
DV0011	NR	Captain John Koontz Jr. Farm	1880 Italianate 2-story hexagonal frame house with wings	Davidson	Tyro	W side SR 1186 just N of jct. w/SR 1189 Tyro vicinity	X
DV0015	NR	Tyro Tavern	1840 Greek Revival 2-story brick house	Davidson	Tyro	W side NC 150, 0.2 mi N of jct. w/SR 1215 Tyro	X
DV0021	SL	T. S. Eanes House		Davidson	Lexington	308 E Center Street Lexington	X
DV0024	NR	Grimes Brothers Mill	1885 4-story brick Italianate roller mill	Davidson	Lexington	2 N State St, Lexington	X
DV0025	SL	Craven House (Jesse Hargrave House)		Davidson	Lexington	Original site W Third Ave near Main St Lexington	X
DV0029	DOEH D	Wennonah Cotton Mill and Mill Village Historic District	1886-1963	Davidson	Lexington	E. Ninth Ave. & S. Salisbury St.	X
DV0041	NR	Shadrach Lambeth House	1838 Quaker plan 2-story brick house	Davidson	Thomasville	E side SR 2062, 0.5 mi E of jct. w/ SR 2061 Thomasville*	X
DV0042	SL	Ragan Knitting Company Mill	textile mill	Davidson	Thomasville	Cox and E. Main Sts. Thomasville	X
DV0046	SL	Thomasville Furniture Industries Plant C		Davidson	Thomasville	401 E. Main Street Thomasville	X
DV0049	SL	Thomasville Filtration Plant		Davidson	Thomasville	Jct SR 2044 & US 29 200 Old Lexington Avenue Thomasville	X
DV0076	NR	Abbotts Creek Primitive Baptist Church Cemetery	1756 and later; German design pierced gravestones	Davidson	Abbotts Creek	E side SR 1743, 0.1 mi NE of jct. w/SR 1733 Thomasville*	X
DV0080	NR	George W. Wall House	1896 Queen Anne 2-story frame house	Davidson	Abbotts Creek	SE corner of jct. of NC 109 and SR 1723 (Motsinger Rd) *	X
DV0100	SL	Andrew Motsinger Homeplace		Davidson	Abbotts Creek	E side of Motsinger Rd, 0.25 mi S of NC 109 Wallburg vi*	X
DV0125	NR	Eli Moore House	Early 19th C. 2-room log house	Davidson	Abbotts Creek	E side SR 1741 at end of dirt lane across from SR 1756 *	X
DV0146	NR	Bethany Reformed and Lutheran Church Cemetery	1789 and later; German decorative pierced gravestones	Davidson	Midway	E side SR 1716, 0.2 mi S of jct. w/SR 1800 Midway vicin*	X
DV0158	SL	James P. Thomas Farm		Davidson	Midway	W side of SR 1815, 1.2 mi S of NC 52 Midway vicinity	X
DV0169	NR	Waggoner Graveyard (Approximate site)	1820 and later family graveyard	Davidson	Midway	S side SR 1814, on dirt lane 1.0 mi from rd., on hill M*	X
DV0188	SL	Andrew Berrier Farm (Berringer Farm)		Davidson	Arcadia	E side SR 1503, 0.75 mi S of SR 1499 Arcadia vicinity	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0189	SL	Henry Lindsay Craver Farm		Davidson	Arcadia	E side of SR 1503, 0.25 mi S of jct. w/ SR 1472 Arcadia*	X
DV0211	NR	Adam Spach House Site	18th C. German stone house site	Davidson	Arcadia	One mile off Friedberg Road (SR 1516), N side Friedberg*	X
DV0221	NR	Hampton House	1879 Greek Revival 2-story frame house	Davidson	Hampton	W side of SR 1485, 1.5 mi N. of Muddy Creek Arcadia vic*	X
DV0235	SL	David Huffman House		Davidson	Reedy Creek	S side of SR 3289 E of NC 150 Reedy Creek vicinity	X
DV0263	SL	Henry Walser House		Davidson	Yadkin College	End of SR 1494 Yadkin College vicinity	X
DV0270	SL	Benjamin Myers House		Davidson	Tyro	N side of Old US 64, just W of Reeds Crossroads Reeds v*	X
DV0294	NR	St. Luke's Lutheran Church Cemetery	1790; 300 gravestones, German designs	Davidson	Tyro	E side SR 1183, 0.5 mi S of jct. w/SR 1176 Tyro vicinity	X
DV0330	SL	A. N. Sink Farm		Davidson	Lexington	S end of Glenwood Drive within Lexington Lexing ton	X
DV0343	NR	Beulah Church of Christ Cemetery	1788 and later; 400 gravestones; pierced designs	Davidson	Lexington	E side SR 1457, 0.1 mi N of jct. SR 1460 Welcome vicini*	X
DV0346	NR	Riley Everhardt Farm and General Store	1885 Italianate 2-story brick house, outbuildings, store	Davidson	Lexington	S side SR 1468 just E. of Arnold Crossroads Arnold vici*	X
DV0348	SL	D. T. Fritts Farm		Davidson	Lexington	E side of US 52 just S of SR 1941 Lexington vicinity	X
DV0349	SL	John Franklin Sink Farm		Davidson	Lexington	N side of SR 1841, 0.25 mi W of SR 1835 Lexington vicin*	X
DV0351	NR	Pilgrim Reformed Church Cemetery	1757 and later; German decorative pierced gravestones	Davidson	Lexington	N side SR 1843, 0.25 mi SW. jct. w/SR 1841 Lexington vi*	X
DV0361	SLHD	Welcome Historic District		Davidson	Lexington	Both sds of US 52, 5 mi N of Lexington Welcome	X
DV0377	SL	Saintsing House		Davidson	Thomasville	W side of SR 1798 just N of jct w/ SR 1900 Thomasville *	X
DV0389	SL	Alexander Caldeleugh House	1797 2-story side gable frame Federal house w/ hip roof front porch w/ gable over entrance	Davidson	Thomasville	1212 Caldcleugh Rd, Thomasville	X
DV0412	SL	Peter Imbler Homeplace		Davidson	Conrad Hill	N side of SR 2016, 1 mi N of SR 2015 Lexington vicinity	X
DV0422	SL	Smith Fritts Farm		Davidson	Conrad Hill	End of SR 2009 Lexington vicinity	X
DV0441	NR	Mount Ebal Methodist Protestant Church	1883 gable front frame church	Davidson	Emmons	End of SR 2518 Denton vicinity	X
DV0466	NR	Chapel Hill Church Tabernacle	1870, 1920s gable-on-hipped roof with log supports	Davidson	Alleghany	1457 Chapel Hill Church Road Denton vicinity	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0479	SL	Snider House		Davidson	Healing Spring	N side of SR 1002, 0.2 mi W of jct w/NC 8 Welcome	X
DV0500	SL	Colonel Phillip Hedrick House		Davidson	Silver Hill	E side of SR 2254, 0.4 mi E of SR 2248 Lexington vicini*	X
DV0502	NR	Beck's Reformed Church Cemetery	1787 and later; 500 gravestones, many pierced designs	Davidson	Silver Hill	E side SR 2250, 0.6 mi S of jct. w/SR 2251 Silver Hill *	X
DV0504	NR	Hedrick's Grove Reformed Church	1922 Romanesque Revival brick church	Davidson	Silver Hill	S side of SR 2205 at inter of SR 2229 3840 Allred Road Lex*	X
DV0506	NR	Junior Order United American Mechanics National Orphans Home	1925-32 Colonial Revival brick campus	Davidson	Cotton Grove	W side NC 8, 1.0 mi N of jct. w/SR 1272 Lexington vicin*	X
DV0514	SL	Miller-Everhart Farm		Davidson	Cotton Grove	W side of NC 8 just N of SR 1272 Lexington vicinity	X
DV0530	NR	Grace Episcopal Church	1902 Gothic Revival brick church	Davidson	Lexington	SE corner of S. Main St & E Fifth Ave 419 S. Main Street Le*	X
DV0532	NR	Dr. William Rainey Holt House	1834 Federal/Greek Revival 2-story frame house	Davidson	Lexington	408 South Main Street Lexington	X
DV0542	SL	First Presbyterian Church		Davidson	Lexington	15 West Third Avenue Lexington	X
DV0546	SL	Hillside	c. 1854, 1920 2-story hip roof frame Greek Revival/Italianate building	Davidson	Lexington	139 West First Avenue Lexington	X
DV0566	SL	Old Davidson County Jail		Davidson	Lexington	21 West Third Street Lexington	X
DV0577	NR	St. Stephen United Methodist Church (St. Stephen Methodist Episcopal Church	1921 1-story front gable brick African American church w/ pyramidal roofed tower & arched windows	Davidson	Lexington	102 E First St, Lexington	X
DV0606	SL	Memorial United Methodist Church		Davidson	Thomasville	101 Randolph Street 101 Randolph Street Thomasville	X
DV0626	NR	Good Hope Methodist Church Cemetery	1836 and late; decorative gravestones	Davidson	Reedy Creek	NW corner jct of NC 150 and SR 1445 Welcome vicinity	X
DV0627	NR	Fair Grove Methodist Church Cemetery	1828 and later, pierced stone designs	Davidson	Thomasville	Jct. of SR 2072 and 2070 and old NC 109 Thomasville vic*	X
DV0628	NR	Emanuel United Church of Christ Cemetery	1814; 500 gravestones	Davidson	Thomasville	W side SR 2060, 0.2 mi N of jct. w/SR 2031 Thomasville *	X
DV0629	NR	Spring Hill Methodist Protestant Church Cemetery	Established 1830; 300 gravestones	Davidson	Abbotts Creek	NW side SR 1755, 0.2 mi S of jct. w/SR 1741 High Point *	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0630	NRHD	YADKIN COLLEGE HISTORIC DISTRICT	19th C. community; academy site	Davidson	Yadkin College	N. & S sides SR 1194, W of jct. w/SR 1436 Yadkin Colleg*	X
DV0635	NR	Grimes School	1935 Colonial Revival 2-story brick school	Davidson	Lexington	Hege Drive Lexington	X
DV0636	NR	Church Street School	1935-37 Colonial Revival 2-story brick school	Davidson	Thomasville	Jasper Street, 750' west of int. of Church St. Thomasvi*	X
DV0637	NR	Smith Clinic	1939 Art Deco 1-story brick medical office	Davidson	Thomasville	17 Randolph Street Thomasville	X
DV0638	NR	Jersey Baptist Church Cemetery	1755 and later cemetery; 225 gravestones	Davidson	Cotton Grove	N side SR 1272, 0.25 mi E of jct w/SR 1104 Linwood vici*	X
DV0639	NRHD	Uptown Lexington Historic District	Late 19th-early 20th C. commercial area	Davidson	Lexington	Main St. between Third Ave & Second St Lexington	X
DV0689	SL	Dempsey B. Clinard House		Davidson	Abbotts Creek	NC 109 N. & Wallburg-High Point Rd Wallburg	X
DV0690	SLDOE	Tyro School	1929 1-story Colonial Revival corridor plan brick building	Davidson	Tyro	244 Tyro School Rd. Lexington	X
DV0691	NR	Mitchell House	1885 1-story brick house, first building of Mills Home campus	Davidson	Thomasville	411 Biggs Ave./Mills Home Campus Thomasville	X
DV0693	NR	First Reformed Church	1928 Gothic Revival brick church	Davidson	Lexington	corner of E. Center & S. Salisbury St. 22 E. Center Street *	X
DV0694	SL	Thomasville Woman's Club		Davidson	Thomasville	15 Elliot Drive Thomasville	X
DV0695	SL	Hill Farm		Davidson	Lexington	1200 Center Church Rd. Welcome vicinity	X
DV0696	NRHD	THOMASVILLE DOWNTOWN HISTORIC DISTRICT	Late 19th - early 20th C. commercial district	Davidson	Thomasville	Roughly bound by Main, Trade, Guilford and Commerce Sts. *	X
DV0697	SL	Farabee-Parnell House		Davidson	Tyro	W side of NC 150, 0.5 mi S of SR 1212 3376 NC 150 S. Tyro*	X
DV0699	NR	Mor-Val Hosiery Mill	1936 1-story brick textile mill	Davidson	Emmons	SE corner of N. Main and E. First Streets Denton	X
DV0700	SL	Kern Street School		Davidson	Thomasville	200 Kern Street Thomasville	X
DV0701	LHD	Salem Street Local Historic District		Davidson	Thomasville	100-200 blks Salem & Forsyth Sts Thomasville	X
DV0702	SL	Parkview Apartments	c. 1927 and c. 1930 3-story brick apartments w/ flat rooves	Davidson	Lexington	215, 217 W. Third Avenue Lexington	X
DV0706	SL	City Memorial Hospital and Nurses' Home	1930/1941/19513-st brick Classical Rev/Art Deco hospital, 1934 2-st brick Colonial Revival nurses' home	Davidson	Thomasville	11 and 15 Pine Street Thomasville	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV0713	SL	Collett Farm		Davidson	Thomasville	1108 Trinity St Thomasville	X
DV0716	SL	Amazon Mill Super's House	textile mill house	Davidson	Thomasville	300 Skiles Heights Street Thomasville	X
DV0749	SL	Thomasville Bottling Co, City Ice & Fuel		Davidson	Thomasville	403 Lexington Avenue Thomasville	X
DV0766	SL	Memorial Park		Davidson	Thomasville	Stadium Drive Thomasville	X
DV0816	SL	Carolina Apartments		Davidson	Thomasville	106 Winston Street Thomasville	X
DV0833	SLHD	Lexington Avenue Historic District		Davidson	Thomasville	400 and 500 blks Lexington Ave Thomasville	X
DV0834	SLHD	Colonial Drive School Historic District		Davidson	Thomasville	Bounded by W. Main, Loftin, Foster & Finch Thomasville	X
DV0835	NR	T. Austin & Ernestine L. Finch House	1921, 1938 2-story hip roof stucco Renaissance Revival house w/ classical portico, hip roof wings & 1921, 1938 garage	Davidson	Thomasville	17 E Main St, Thomasville	X
DV0840	SL	St. John Methodist Episcopal Church		Davidson	Thomasville	8 Church St Thomasville	X
DV0841	NRHD	Salem Street Historic District	1861-mid 20th C. residential area	Davidson	Thomasville	100 and 200 blocks of Salem Street Thomasville	X
DV0842	NRHD	Randolph Street Historic District	residential, depot, and church	Davidson	Thomasville	100 and 200 blks Randolph St Thomasville	X
DV0843	SL	Thomlinson Farm		Davidson	Thomasville	1307 Trinity St Thomasville	X
DV0844	SL	Charles F. & Mary Lambeth House		Davidson	Thomasville	306 Skiles Heights St Thomasville	X
DV0845	SL	Colonial Drive School		Davidson	Thomasville	211 W. Colonial Dr Thomasville	X
DV0854	NR	Lexington Memorial Hospital	1946, 1957, and 1958 3 and 4-story brick Art Deco and Moderne T-shaped hospital	Davidson	Lexington	111 N. Carolina Avenue Lexington	X
DV0865	NRHD	ERLANGER MILL VILLAGE HISTORIC DISTRICT	1913-1950 textile mill & village with bungalow mill housing	Davidson	Lexington	W 7th, Winston, 2nd Rainbow St, Park Circle, Olympia St, Sh*	X
DV0992	NRHD	LEXINGTON RESIDENTIAL HISTORIC DISTRICT	Late 19th-early 20th C. residential area	Davidson	Lexington	W 5th, State, W 7th, Martin, Southbound, Westside Sts L*	X
DV1050	SL	Junior Order of UAM Lodge Hall (Davidson County Library)		Davidson	Lexington	103 E Center St, Lexington	X
DV1054	SL	Elk Furniture Company-United Furniture Company	c. 1923 3-story flat roof brick factory building	Davidson	Lexington	East 3rd Avenue at Elk Street Lexington	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
DV1055	SL	Dunbar Junior Senior High School (Charles Englund Intermediate School)	1951- 1973 1-story flat roof brick-veneered steel Miscellaneous Modernist school	Davidson	Lexington	301 Smith Avenue Lexington	X
DV1057	LHD	Colonial Drive School Local Historic District		Davidson	Thomasville	Colonial Drive, Main, Loftin, Foster & Finch Streets Th*	X
DV1058	SL	Trading Ford Road and Monument Park		Davidson	Boone	SE side SR 1138 at SR 1139 (Sowers Rd.) 9710 Old Salisbury*	X
DV1059	SLHD	DENTON HISTORIC DISTRICT	1901-1957 residential neighborhood	Davidson	Emmons	1st, 2nd, 3rd, Bingham, Salisbury, Hulin Streets Denton	X
DV1783	LHD	Park Place Local Historic District	1854-1957 residential	Davidson	Lexington		X
DV1788	NRHD	Lexington Industrial Historic District	c. 1906-1963	Davidson	Lexington	Bound by E 1st Ave, E 7th Ave, S Salisbury St, and RR, Lexin	X
DV1815	DOEH D	Uptown Lexington Historic District Expansion		Davidson	Lexington	201-215 S Main St, Lexington	X
DV1919	SLHD	Lincoln Park		Davidson	Lexington	Bound by Arthur Dr, Carver Dr, Booker Ave & Talbert Ave	X
DV1921	DOEH D	Westover Heights	1942-1977 residential neighborhood of Minimal Traditional houses & Ranches	Davidson	Lexington	Westover Dr, Greenway Dr, N Payne St, WCenter St, Lexington	X
DV2035	NR	Beallmont (Moore-Beall House) (Current site)	Early 19th C. farmhouse	Davidson	Boone	1567 Belmont Rd, Linwood	X
RD0002	NR	Harper House (Jeduthan Harper House)	1815 2-story frame Federal house	Randolph	Trinity	4033 Red Fox Rd, Trinity	X
RD0003	NR	Pisgah Community Covered Bridge	c. 1910 covered bridge	Randolph	Union	S side SR 1109, 0.5 mi. S of jct. w/SR 1112 Pisgah	AE
RD0004	NR	Historic Randolph County Courthouse	1909 2-story hip roof brick Classical Revival building	Randolph	Asheboro	145 Worth St, Asheboro	X
RD0006	SL	Cassady Barn	1844 frame barn	Randolph	Richland	N side SR 2862, 0.5 mi. W of jct. w/SR 2863 Whynot vici*	X
RD0007	NRHD	Coleridge Historic District	1882/1920s Victorian mill vill	Randolph	Coleridge	45 acres around jct. of NC 22, NC 902, and SR 1005 Cole*	X
RD0008	SL	Enterprise Manufacturing Company		Randolph	Coleridge	Jct of NC 42 and NC 22 Coleridge	X
RD0019	NRHD	FRANKLINVILLE HISTORIC DISTRICT	Mid 19th-early 20th C. textile town district	Randolph	Franklinville	Walnut, Craven, Park, etc. Franklinville	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
RD0020	NR	Moses Hammond House	c. 1880 Victorian 2-story frame	Randolph	Trinity	118 Trindale Road Archdale	X
RD0021	NR	Marley House	1850 2-story frame house and outbuildings	Randolph	Columbia	N side US 64, 0.1 mi. W of jct. w/SR 2475 Staley vicini*	X
RD0022	NR	Wilson Kindley Farm and Mine	c. 1873 brick house & gold mine	Randolph	Tabernacle	E side SR 1408, 1 mi N of US 64 Hoover Hill Road Ashebor*	X
RD0024	NR	Central School (Randolph County Training School)	1926 1-story brick Rosenwald school	Randolph	Asheboro	414 Watkins Street Asheboro	X
RD0025	NRHD	Liberty Historic District	c. 1880-1950 collection of brick commercial buildings, rail-related resources & stylish residences	Randolph	Liberty	Asheboro & Fayetteville Sts, Swannanoa Ave, & Brower Ave * SR 1107 at SR 1170 Asheboro vicinity	X
RD0027	NR	Lewis-Thornburg Farm	1855 and later house and outbuildings	Randolph	Concord	Between SRs 1921 & 1924 Cedar Square vicinity	X
RD0033	DOEH D	Coletrane Mill Historic District	c. 1840-1920 grist mill complex	Randolph	New Market		AE
RD0200	SL	Orlando R. Cox House	c. 1880 2-story gabled ell Victorian house w/ truncated hip roof, decorative brick interior chimneys, and wrap-around porch	Randolph	Franklinville	1237 Loflin Pond Road, Cedar Falls	X
RD0201	SL	Farmer School	c. 1923	Randolph	Concord	SR 1193 (Old NC 49) at SR 1170 Farmer	X
RD0332	SL	Shiloh Academy	1850s, 1880s 2story frame school	Randolph	Coleridge	S side of NC 42, 0.1 mi E of SR 2655 Coleridge vicinity	X
RD0510	NR	Acme-McCrary Hosiery Mill	1909-1986 2-story flat roof brick industrial building	Randolph	Asheboro	159 North St, Asheboro	X
RD0535	SL	Old Asheboro Female Academy	1839 1-story side gable frame school	Randolph	Asheboro	1126 S Park St, Asheboro	X
RD0560	NR	Sunset Theater	1930, 2013 2-story parapet roof brick Spanish Mission building	Randolph	Asheboro	232-236 Sunset Ave, Asheboro	X
RD0613	SL	Cedar Falls Manufacturing Company	1837	Randolph	Franklinville	1120 Cedar Falls Road, Cedar Falls	X
RD0681	SL	Franklinville Manufacturing Company	1838	Randolph	Franklinville	1306 Andrew Hunter Rd. Franklinville	X
RD0712	SL	Sandy Creek Baptist Church	1820s log church; founded 1755	Randolph	Liberty	N side SR 2459 150 yds E of jct w/ SR 2442 Liberty	X

Site ID	NCHP Status	Property Name	Description	County	Jurisdiction	Location Description	Flood Hazard Zone
RD0749	NR	Randleman Graded School	1906 2-story brick school	Randolph	Randleman	130 W. Academy Street Randleman	X
RD0752	SL	Union Manufacturing Company Houses	c. 1850s	Randolph	Randleman	W side Commonwealth Street Randleman	X
RD0762	NR	St. Pauls Methodist Episcopal Church South	c. 1878 brick Greek Revival/Romanesque Revival/Gothic Revival church with trompe l'oeil interior by Jules Korner	Randolph	Randleman	401 High Point Street Randleman	X
RD0781	SL	Hayes-Lineberry House	c. 1860s	Randolph	Randleman	313 Main Street Randleman	X
RD0831	SL	Trinity Memorial United Methodist Church		Randolph	Trinity	7140 NC 62 Trinity	X
RD0834	SL	Cedar Falls Chapel (aka Cedar Falls Baptist Church)	c. 1844 front gable Greek Revival church w/ c. 1920 2-story rear ell	Randolph	Franklinville	3833 Old Cedar Falls Road Franklinville vicinity	X
RD0835	SL	(former) Cedar Falls Post Office (aka Cedar Falls Manufacturing Company)	c. 1836 1-story side gable building w/ false parapet roof and raised basement	Randolph	Franklinville	2305 Cedar Falls Rd, Cedar Falls	AE
RD0841	SL	Braxton Craven Grave		Randolph	Trinity	W side NC 62 at RR Trinity	X
RD0842	SL	Richardson Furniture Complex		Randolph	Trinity	7524 HWY 62 Trinity	X
RD0847	SL	Randolph High School	1951 1-story brick Modernist school and gymnasium	Randolph	Liberty	S. Kirkman Street Liberty	X
RD0849	NR	Asheboro Hosiery Mill and Cranford Furniture Co. Complex	1917 2-story brick hosiery mill with later additions; 1925 2-story brick factory	Randolph	Asheboro	133, 139 S. Church and 230 W. Academy Avenue Asheboro	X
RD0937	NRHD	Asheboro Downtown Historic District	1903-1972 commercial, institutional, ecclesiastical & residential district of Italianate, Colonial Revival, Art Deco & Modern	Randolph	Asheboro	Asheboro	X
RD0992	SL	Strieby United Congregational Church of Christ (Promised Land Congregational		Randolph	Union	5480 Strieby Church Rd, Asheboro	X
z-524CR	SL	Blacksmith Shop		Davidson	Lexington	6100 Old US Hwy 52, Welcome	X

Table G- 3: NCHPO Properties³ *NR = Individual National Register List, SL= Individual Study List Entry (places that the National Register Advisory Committee has identified as potentially eligible for the Register, DOEHD= center point of determine eligible historic districts, SLHD= Center point for the study list historic district, NRHD= National Register historic district center point, LHD = center point of a local historic district, DOE = boundary of a determined eligible historic district, SLHD= center point for study list historic district, SLDOE = on study list and determined eligible, and NRD = National Register District (destroyed or moved).

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
Hill Farm	Welcome	195.*		SL			Davidson	AE
Thomasville Furniture Industries Plant C	High Point West	23.6*		SL			Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Memorial Park	High Point West	12.8*		SL			Davidson	X
Colonial Drive School Historic District	High Point West	133.*		SL			Davidson	X
Coletrane Mill Historic District	Pleasant Garden	147.*		DOE		1998	Randolph	AE
Mill Supervisor's House #1 (York House)	Randleman	1.68*		DOE			Randolph	X
Mill Supervisor's House #2 (Peeler House)	Randleman	4.65*		DOE			Randolph	X
Cox-Brown House	Asheboro	48.4*		DOE			Randolph	X
Andrew Berrier Farm	Welcome	7.60*		SL			Davidson	AE
James P. Thomas Farm	Midway	17.8*		SL			Davidson	X
DENTON RESIDENTIAL HISTORIC DISTRICT	Denton	48.1*	1901-1957 residential neighborhood	SL			Davidson	X
D. T. Fritts Farm	Lexington East	29.4*		SL			Davidson	X
Lexington Avenue Historic District	High Point West	13.4*		SL			Davidson	X
Welcome Historic District	Welcome	4.06*		SL	Eligibility in question		Davidson	X
Trading Ford Road and Monument Park	Salisbury	1.27*		SL			Davidson	X
Westover Heights	Lexington West		1942-1977 residential	DOE	Crit A and Crit C; ER		Davidson	AE

³ North Carolina Historic Preservation Office & North Carolina Department of Natural and Cultural Resources. (2019). HPOWEB 2.0 (2.0) [Dataset]. NC Historic Preservation Office. <https://nc.maps.arcgis.com/home/item.html?id=d2d04d8d7e03403f889419526e682529>

Appendix G – Community Vulnerability

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
			neighborhood of Minimal Traditional ho		23-1747; DV C			
Dr. Charles Phillips House	Fair Grove	2.18*	c. 1890s 2-story T-plan cross gable Queen Anne house w/ outb	DOE	Crit C; ER 96-7720; RD Co Rpt #531;		Randolph	X
Trading Ford District	Salisbury/Southmont	5984*	1770-1953 district significant in areas of Transportation an	SL			Rowan/Davidson	AE
Mitchell House	High Point West		1885 1-story brick house, first building of Mills Home campu	NR	Crit Con A	2000	Davidson	X
Jesse Robbins House	Farmer		c. 1832, 1910, 1950 2-story side gable frame I-house w/ weat	DOE	Crit A; ER 24-0598; Multi Co Rpt #1		Randolph	AE
William P. Kearns House and Farm	Farmer		c. 1845 2-story side gable center passage frame I-house w/ w	DOE	Crit A; ER 24-0598; Multi Co Rpt #1		Randolph	AE
Adam Spach House Site	Welcome	5.04*	18th c. German stone house site	NR		2002	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Hedrick's Grove Reformed Church	Lexington East	4.84*	1922 Romanesque Revival brick church	NR		2008	Davidson	X
LEXINGTON RESIDENTIAL HISTORIC DISTRICT	Lexington West	449.*	Late 19th-early 20th c. residential area	NR		2007	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Abbotts Creek Primitive Baptist Church Cemetery	Kernersville	3.27*	1756 and later; German design pierced gravestones	NR	Boundary estimate	1984	Davidson	X
Adderton-Badgett House	High Rock	278.*	1850 2-story frame farmhouse	NRD		1984	Davidson	X
Reid Farm (Buildings moved to Denton FarmPark)	High Rock	406.*	Mid 19th Greek Revival frame house; outbuildings	NRD	Moved to Denton FarmPark	1979	Davidson	AE

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Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
St. Luke's Lutheran Church Cemetery	Churchland	3.06*	1790; 300 gravestones, German designs	NR		1984	Davidson	X
SALEM STREET HISTORIC DISTRICT	High Point West	24.7*	1861-mid 20th c. residential area	NR		2006	Davidson	X
Smith Clinic	High Point West	0.32*	1939 Art Deco 1-story brick medical office	NR		1991	Davidson	X
Philip Sowers House	Churchland	593.*	c. 1860 Y-shaped 2-story brick house; double pen log barn	NR		1980	Davidson	AE
Spring Hill Methodist Protestant Church Cemetery	High Point West	4.07*	Established 1830; 300 gravestones	NR		1984	Davidson	X
Spurgeon House	High Point West	17.8*	1845 Federal/Greek Revival 2-story frame house	NR		1983	Davidson	X
Tyro Tavern	Churchland	1.40*	1840 Greek Revival 2-story brick house	NR		1984	Davidson	X
UPTOWN LEXINGTON HISTORIC DISTRICT	Lexington West	20.8*	Late 19th-early 20th c. commercial area	NR	Eligibility under Crit A and Crit C	1996	Davidson	X
George W. Wall House	Winston-Salem East	1.45*	1896 Queen Anne 2-story frame house	NR		1984	Davidson	X
YADKIN COLLEGE HISTORIC DISTRICT	Advance	197.*	19th century community; academy site	NR		1988	Davidson	X
THOMASVILLE DOWNTOWN HISTORIC DISTRICT	High Point West	40.7*	Late 19th - early 20th c. commercial district	NR		2005	Davidson	X
Beallmont	Southmont	10.2*	Early 19th c. farmhouse	NRD	Moved 0.3 mi ENE in 2018	1984	Davidson	X
Beck's Reformed Church Cemetery	Lexington East	5.20*	1787 and later; 500 gravestones, many pierced designs	NR		1984	Davidson	X
Bethany Reformed and Lutheran Church Cemetery	Midway	2.82*	1789 and later; German decorative pierced gravestones	NR		1984	Davidson	X

Appendix G – Community Vulnerability

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
Brummel's Inn	High Point West	41.8*	1814 and later log and frame 2-story house	NR		1980	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Church Street School	High Point West	8.33*	1935-37 Colonial Revival 2-story brick school	NR		1990	Davidson	X
Emanuel United Church of Christ Cemetery	Fair Grove	3.89*	1814; 500 gravestones	NR		1984	Davidson	X
Hamilton Everhart Farm (Gone)	Midway	171.*	c. 1860 2-story weatherboarded log house and log outbuildi*	NRD	No old buildings seen in aerials	1984	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Riley Everhardt Farm and General Store	Welcome	145.*	1885 Italianate 2-story brick house, outbuildings, store	NR		1984	Davidson	AE
Fair Grove Methodist Church Cemetery	Fair Grove	3.08*	1828 and later, pierced stone designs	NR		1984	Davidson	X
First Reformed Church	Lexington West	0.54*	1928 Gothic Revival brick church	NR		2000	Davidson	X
Grace Episcopal Church	Lexington West	1.00*	1902 Gothic Revival brick church	NR	Eligibility under Crit A and Crit C	2006	Davidson	X
Grimes Brothers Mill	Lexington West	0.13*	1885 Italianate 4-story brick roller mill	NR		2002	Davidson	X
Grimes School	Lexington West	4.53*	1935 Colonial Revival 2-story brick school	NR		1988	Davidson	X
Haden Place	Lexington West	230.*	1800-1820 Federal 2-story frame house	NR		1984	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Hampton House	Welcome	84.7*	1879 Greek Revival 2-story frame house	NR		1984	Davidson	AE
Dr. William Rainey Holt House	Lexington West	1.76*	1834 Federal/Greek Revival 2-story frame house	NR		1983	Davidson	X
Jersey Settlement Meeting House and Baptist Church Cemetery	Southmont	14.2*	1843 Greek Revival brick church	NR		1984	Davidson	X

Appendix G – Community Vulnerability

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
Junior Order United American Mechanics National Orphans Home	Lexington West	399.*	1925-32 Colonial Revival brick campus	NR		1984	Davidson	X
Captain John Koontz Jr. Farm	Churchland	287.*	1880 Italianate 2-story hexagonal frame house with wings	NR		1984	Davidson	AE
Shadrach Lambeth House	Fair Grove	12.7*	1838 Quaker plan 2-story brick house	NR		1984	Davidson	X
Mor-Val Hosiery Mill	Denton	0.61*	1936 1-story brick textile mill	NR		2001	Davidson	X
Mount Ebal Methodist Protestant Church	Denton	4.06*	1883 gable front frame church	NR		1984	Davidson	X
Pilgrim Reformed Church Cemetery	Lexington East	6.39*	1757 and later; German decorative pierced gravestones	NR		1984	Davidson	X
Chapel Hill Church Tabernacle	Handy	0.65*	1870, 1920s gable-on-hip roof with log supports	NR		2012	Davidson	X
Lexington Memorial Hospital	Lexington East	4.64*	1946, 1957, and 1958 3 & 4-story brick Art Deco and Moderne	NR		2012	Davidson	X
Randolph Street Historic District	High Point West	19.4*	residential, depot, and a church	NR		2012	Davidson	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Elk Furniture Company-United Furniture Company	Lexington West	4.51*		SL	Ineligible 2013; ER 12-0759; DV Co*		Davidson	X
Sunset Theater	Asheboro	0.16*	1930, 2013 2-story parapet roof brick Spanish Mission build*	NR		2011	Randolph	X
Uptown Lexington Historic District Expansion	Lexington West	1.53*		DOE	Crit A and Crit C; ER 12-0759; DV C		Davidson	X
Central School	Asheboro	2.91*	1926 1-story brick Rosenwald school	NR		1993	Randolph	X
Harper House (Jeduthan Harper House)	Fair Grove	4.65*	1815 2-story frame Federal house	NR		1979	Randolph	X

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Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
Wilson Kindley Farm and Mine	Farmer	58.0*	c. 1873 brick house & gold mine	NR		1992	Randolph	X
Lewis-Thornburg Farm	Eleazer	247.*	1855 and later house and outbuildings	NR		2005	Randolph	AE
Liberty Historic District	Liberty	95.9*	Late 19th-early 20th c. railroad town	NR		2000	Randolph	X
Marley House	Coleridge	19.4*	1850 2-story frame house and outbuildings	NR		1990	Randolph	AE
Randleman Graded School	Randleman	3.27*	1906 2-story brick school	NR		2005	Randolph	X
Coleridge Historic District	Coleridge	55.1*	1882/1920s Victorian mill vill	NR		1976	Randolph	AE
FRANKLINVILLE HISTORIC DISTRICT	Ramseur	315.*	Mid-19th-early 20th c. textile town district	NR		1984	Randolph	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Deep River-Columbia Manufacturing Company (Gone)	Ramseur	6.19*	1850-1880s 2- and 3-story brick textile mill	NRD	Demolished 2004	1978	Randolph	0.2 PCT ANNUAL CHANCE FLOOD HAZARD
Henry Shoaf Farm (Gone)	Lexington West	16.7*	Early 19th c. 2-story log house, expanded 1860, 2-pen log b*	NRD	House demolished by 2008	1984	Davidson	X
Grimes-Crotts Mill (Gone)	Welcome	23.7*	1880 2-story frame water powered grist mill	NRD	Reported collapsed in 2003	1984	Davidson	AE
Eli Moore House	High Point West	46.1*	Early 19th c. 2-room log house	NR		1984	Davidson	X
Good Hope Methodist Church Cemetery	Welcome	3.05*	1836 and late; decorative gravestones	NR		1984	Davidson	X
Beulah Church of Christ Cemetery	Welcome	5.89*	1788 and later; 400 gravestones; pierced designs	NR		1984	Davidson	X
Robert L. Darr House	Midway		c. 1920 2-story hip roof center passage double pile frame Co	DOE	Crit C; ER 22-2694; DV Co Rpt #1219		Davidson	X
St. Stephen United Methodist Church (St. Stephen Methodist E	Lexington West		1921 1-story front gable brick African	NR		2021	Davidson	X

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
Asheboro Hosiery Mills & Cranford Furniture Co. Complex	Asheboro	5.91*	American church w/ py 1917 2-story brick hosiery mill with later additions; 1925 2	NR		2011	Randolph	X
Acme-McCrary Hosiery Mill	Asheboro	14.2*	1909-1986 2-story flat roof brick industrial building	NR	see also RD532, RD401, RD850	2014	Randolph	X
Asheboro Downtown Historic District	Asheboro		1903-1972 commercial, institutional, ecclesiastical & reside	NR		2022	Randolph	X
Bouldin House	High Point East		c. 1915 2-story hip roof frame Colonial Revival farmhouse w/	DOE	Crit C; CH 17-2461; RD Co Rpt #989;		Randolph	X
Lafayette and Fallie Scott House	Welcome		c. 1910 2-story cross gable frame 19th-20th c. traditional/v	DOE	Crit A and Crit C; ER 18-3639; DV C		Davidson	X
Frank and Maude Sowers House	Welcome		1922 1-story side gable frame Craftsman/Bungalo w	DOE	Crit A and Crit C; ER 18-3639; DV C		Davidson	X
Lexington Industrial Historic District	Lexington West			DOE			Davidson	X
Lexington Industrial Historic District	Lexington West		c. 1906-1963	NR		2019	Davidson	X
Underwood Farm	Fair Grove		c. 1880 2-story side gable frame farmhouse w/ 19 outbuilding	DOE	Crit A; ER 17-2013; RD Co Rpt #867;		Randolph	AE
Shiloh Methodist Church	Lexington West		c. 1960 front gable brick Colonial Revival church	DOE	Crit C and Crit A; ER 18-3639; DV C		Davidson	X
T. Austin & Ernestine L. Finch House	High Point West		1921, 1938 2-story hip roof stucco Renaissance Revival house	NR		2019	Davidson	X

Site Name	Jurisdiction Name	Acres	Description	NCHPO Status	Notes	Year Listed	County	Flood Hazard Zone
ERLANGER MILL VILLAGE HISTORIC DISTRICT	Lexington West	167.*	1913-1950 textile mill & village with bungalow mill housing	NR		2008	Davidson	AE
St. Paul's Methodist Episcopal Church South	Randleman		c. 1878 brick church with trompe l'oeil interior	NR		2015	Randolph	X
John William Hiatt Farm	High Point West		1918 2-story hip roof frame Foursquare house w/ 1-story wrap	DOE	Crit C; ER 97-9686; FY/DV Co Rpt #3		Davidson	X
Wennonah Cotton Mill and Mill Village Historic District	Lexington West		1886-1963	DOE	Crit A and Crit C 2013; ER 12-0759;		Davidson	X
Dimmette-Lanning House	Winston-Salem East			DOE	Crit C; ER 25-0217; DV Co Rpt #1341		Davidson	X

Table G- 4: EMS locations in the planning area⁴

Station Name	Address	City	County	EMS Description	Flood Hazard Zone
Staley Volunteer Fire Department Station 7	410 West Railroad Street	Staley	Randolph	Ambulance And Fire Service Combined	X
Asheboro Fire Department Station 2	2105 North Fayetteville Street	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Franklinville Fire Department Station 8	146 West Main Street	Franklinville	Randolph	Ambulance And Fire Service Combined	X
Franklinville Fire Department Station 22	2452 Ramseur Julian Road	Liberty	Randolph	Ambulance And Fire Service Combined	X

Station Name	Address	City	County	EMS Description	Flood Hazard Zone
Davidson County Emergency Medical Services Base 5	356 Tyro School Road	Lexington	Davidson	Ambulance Services, Air Or Ground	X
Davidson County Emergency Medical Services Base 3	228-B Midway School Road	Lexington	Davidson	Ambulance Services, Air Or Ground	X
Davidson County Emergency Medical Services Base 4	324 West Peacock Avenue	Denton	Davidson	Ambulance Services, Air Or Ground	X
Sophia Fire Department Station 29	6740 United States Highway 311	Sophia	Randolph	Ambulance And Fire Service Combined	X
Davidson County Emergency Medical Services Base 2	115 West Main Street	Thomasville	Davidson	Ambulance Services, Air Or Ground	X
Fair Grove Fire Department Main Station 43	211 Cedar Lodge Road	Thomasville	Davidson	Ambulance And Fire Service Combined	X
New Hope Volunteer Fire Department Station 17	6397 Volunteer Rescue Road	Denton	Randolph	Ambulance And Fire Service Combined	X
Holly Grove Fire Department	2211 East Holly Grove Road	Lexington	Davidson	Ambulance And Fire Service Combined	X
Southmont Volunteer Fire Department Station 56	11030 State Highway 8	Lexington	Davidson	Ambulance And Fire Service Combined	X
Reeds Fire Department Station 51	186 South State Highway 150	Lexington	Davidson	Ambulance And Fire Service Combined	X
Pilot Fire Department Station 54	4205 Old Highway 29	Thomasville	Davidson	Ambulance And Fire Service Combined	X
Guil - Rand Fire Department Station 41	7616 Harlow Road	Archdale	Randolph	Ambulance And Fire Service Combined	X
Guil - Rand Fire Department Station 40	5711 Surrett Drive	Archdale	Randolph	Ambulance And Fire Service Combined	X
Guil - Rand Fire Department Station 21	8401 Hillsville Road	Sophia	Randolph	Ambulance And Fire Service Combined	X
Guil - Rand Fire Department Station 39	6258 Welborn Road	Trinity	Randolph	Ambulance And Fire Service Combined	X
Tabernacle Volunteer Fire Department Station 28	4444 Slick Rock Mountain Road	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Eastside Volunteer Fire Protection Association Station 1	614 Daniel Road	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Randleman Fire Department	105 Hilliary Street	Randleman	Randolph	Ambulance And Fire Service Combined	X
Level Cross Voluntary Fire Department	137 Branson Mill Road	Randleman	Randolph	Ambulance And Fire Service Combined	X
Ramseur Volunteer Fire Department	471 Coleridge Road	Ramseur	Randolph	Ambulance And Fire Service Combined	X

Station Name	Address	City	County	EMS Description	Flood Hazard Zone
Ulah Volunteer Fire Protection Station 12	1914 Hopewell Friends Road	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Eastside Volunteer Fire Protection Association Station 3	2444 Buffalo Ford Road	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Seagrove Volunteer Fire Department	281 East Main Street	Seagrove	Randolph	Ambulance And Fire Service Combined	X
Westside Volunteer Fire And Rescue Department Station 16	3141 Plainfield Road	Sophia	Randolph	Fire And Rescue Service	X
Farmer Volunteer Fire Department	6881 Old State Highway 49	Denton	Randolph	Ambulance And Fire Service Combined	X
Ulah Volunteer Fire Protection Station 11	2067 Pisgah Covered Bridge Road	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Eastside Volunteer Fire Protection Association Station 2	3033 Old State Highway 13	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Westside Volunteer Fire And Rescue Department Station 23	3668 Old State Highway 49	Asheboro	Randolph	Fire And Rescue Service	X
Fair Grove Fire Department - Substation 45	7261 Welborn Road	Trinity	Randolph	Ambulance And Fire Service Combined	X
Lexington Fire Department Station 3	70 Biesecker Road	Lexington	Davidson	Ambulance And Fire Service Combined	X
Davidson County Emergency Medical Services Base 1	937 Main Street	Lexington	Davidson	Ambulance Services, Air Or Ground	X
Lexington Fire Department Station 2	201 Cotton Grove Road	Lexington	Davidson	Ambulance And Fire Service Combined	X
Midway Fire And Rescue Department Station 86	228 Midway School Road	Lexington	Davidson	Fire And Rescue Service	X
Lexington Fire Department Station 1	200 E Center Street	Lexington	Davidson	Ambulance And Fire Service Combined	X
Healing Springs Fire Department Station 48	18694 State Highway 8	Denton	Davidson	Ambulance And Fire Service Combined	X
Gumtree Fire And Rescue	2466 Gumtree Road	Winston Salem	Davidson	Fire And Rescue Service	X
Tabernacle Fire Department	8136 United States Highway 64 West	Trinity	Randolph	Ambulance And Fire Service Combined	X
Asheboro Fire Department Station 1	401 South Church Street	Asheboro	Randolph	Ambulance And Fire Service Combined	X
Hasty Fire And Rescue	1306 Joe Moore Road	Thomasville	Davidson	Fire And Rescue Service	X
Thomasville Rescue Squad	212 Pine Street	Thomasville	Davidson	Rescue Services, Medical	X
Liberty Fire Department	515 West Swannanoa Avenue	Liberty	Randolph	Ambulance And Fire Service Combined	X
Ash-Rand Rescue Squad	805 South Cox Street	Asheboro	Randolph	Rescue Services, Medical	X

Station Name	Address	City	County	EMS Description	Flood Hazard Zone
Guil - Rand Fire Protective Association	10506 South Main Street	Archdale	Randolph	Ambulance And Fire Service Combined	X
Westside Volunteer Fire And Rescue Department Station 13	225 Westside Circle	Asheboro	Randolph	Fire And Rescue Service	X
Staley Volunteer Fire Department Incorporated Station 27	455 Kildee Church Road	Ramseur	Randolph	Ambulance And Fire Service Combined	X
Climax Fire Department	5316 Mack Lineberry Road	Climax	Randolph	Ambulance And Fire Service Combined	X
Welcome Fire And Rescue Station 73	287 North Leonard Road	Lexington	Davidson	Fire And Rescue Service	X
South Lexington Fire Department	2000 Cotton Grove Road	Lexington	Davidson	Ambulance And Fire Service Combined	X
Randolph County Emergency Medical Services-Liberty	215 West Swannanoa Avenue	Liberty	Randolph	Ambulance Services, Air Or Ground	X

Table G- 5: Nursing homes in flood areas⁵

Nursing Home Name	Address	City	County	Nursing Home Description	Facility Description	Flood Hazard Zone
Triad Telcare Inc Dba Country Club	1324 Coltrane Mill Road	Randleman	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Cross Road Retirement Community	1302 Old Cox Road	Asheboro	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Carolina House Of Asheboro	514 Vision Drive	Asheboro	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Lexington Health Care Center	17 Cornelia Street	Lexington	Davidson	Nursing Homes	Nursing Facilities	X
Clapps Convalescent Nursing Home	500 Mountain Top Drive	Asheboro	Randolph	Nursing Homes	Nursing Facilities	X
Libertywood Nursing Center	1028 Blair Street	Thomasville	Davidson	Nursing Homes	Nursing Facilities	X
Piedmont Crossing	100 Hedrick Drive	Thomasville	Davidson	Nursing Homes	Nursing Facilities	X
Alston Brook Nursing And Rehab	4748 Old Salisbury Road	Lexington	Davidson	Nursing Homes	Nursing Facilities	X
Centerclair	185 Yountz Road	Lexington	Davidson	Nursing Homes	Nursing Facilities	X

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Nursing Home Name	Address	City	County	Nursing Home Description	Facility Description	Flood Hazard Zone
Brian Center Nursing Care - Lexington	279 Brian Center Drive	Lexington	Davidson	Nursing Homes	Nursing Facilities	X
Britthaven Of Davidson	706 Pineywood Road	Thomasville	Davidson	Nursing Homes	Nursing Facilities	X
Abbotts Creek Care And Rehabilitation Center	877 Hill Everhart Road	Lexington	Davidson	Nursing Homes	Nursing Facilities	X
Mountain Vista Health Park	106 Mountain Vista Health Park Road	Denton	Davidson	Nursing Homes	Nursing Facilities	X
Mallard Ridge Assisted Living	9420 North Nc Highway 150	Clemmons	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
North Pointe Of Asheboro	1195 Pineview Road	Randleman	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Carillon Assisted Living Of Asheboro	2925 Zoo Parkway	Asheboro	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Brookstone Haven	501 Pointe South Drive	Randleman	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
The Graybrier Nursing And Rehabilitation Center	116 Lane Drive	Trinity	Randolph	Nursing Homes	Nursing Facilities	X
Universal Health Care - Ramseur	7166 Jordan Road	Ramseur	Randolph	Nursing Homes	Nursing Facilities	X
Randolph Health And Rehabilitation Center	230 East Presnell Street	Asheboro	Randolph	Nursing Homes	Nursing Facilities	X
North Pointe Of Archdale	303 Aldridge Road	Archdale	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Westwood Health And Rehabilitation Center	625 Ashland Street	Archdale	Randolph	Nursing Homes	Nursing Facilities	X
Woodland Hill Care And Rehabilitation Center	400 Vision Drive	Asheboro	Randolph	Nursing Homes	Nursing Facilities	X
Country Manor	2061 Millboro Road	Franklinville	Randolph	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Southland Homes Incorporated - Landmark Estates	255 Thomas School Road	Winston Salem	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
The Oaks Of Thomasville	915 West Cooksey Drive	Thomasville	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Hilltop Living Center	592 Hilltop Drive	Linwood	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Carolina House Of Lexington	161 Young Drive	Lexington	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	X
Brookstone Retirement Center Llc	2968 Old Salisbury Road	Lexington	Davidson	Homes For The Elderly Without Nursing Care	Homes For The Elderly (Assisted Living Facilities)	Ae

Table G- 6: Fire departments in the planning area within flood hazard zones

Fire Department Name	Station Address	City	County	Flood Hazard Zone
Arcadia-Reedy Creek-Hampton Volunteer Fire and Rescue Department, Inc.	1374 Ruff Leonard Road	Lexington	Davidson	X
Asheboro Fire Department	401 S. Church Street	Asheboro	Randolph	X
Asheboro Fire Department	2105 N. Fayetteville Street	Asheboro	Randolph	X
Central Fire Department of Davidson County, Inc.	572 Becks Church Road	Lexington	Davidson	X
Churchland Rural Fire Department, Incorporated	9752 S Hwy 150	Linwood	Davidson	X
Churchland Rural Fire Department, Incorporated	7171 S Hwy 150	Lexington	Davidson	X
Coleridge Volunteer Fire Department, Inc.	4495 NC Hwy 22 S	Ramseur	Randolph	X
Coleridge Volunteer Fire Department, Inc.	7718 Erect Road	Seagrove	Randolph	X
Denton Fire Department	101 W Newsome Street	Denton	Davidson	X
East Side Volunteer Fire Protection Association, Inc.	614 Daniel Road	Asheboro	Randolph	X
East Side Volunteer Fire Protection Association, Inc.	3033 Old Hwy 13	Asheboro	Randolph	X
East Side Volunteer Fire Protection Association, Inc.	2444 Buffalo Ford Road	Asheboro	Randolph	X
Fair Grove Fire Department, Inc.	211 Cedar Lodge Road	Thomasville	Davidson	X
Fair Grove Fire Department, Inc.	7261 Welborne	Trinity	Davidson	X
Fair Grove Fire Department, Inc.	760 Lee Road	Thomasville	Davidson	X
Farmer Volunteer Fire Department, Inc.	6881 S Old NC 49 Hwy	Denton	Randolph	X
Franklinville Fire Protection Assn. Inc.	146 W. Main St	Franklinville	Randolph	X
Franklinville Fire Protection Assn. Inc.	2452 Ramseur Julian Rd	Liberty	Randolph	X
Franklinville Fire Protection Assn. Inc.	2426 Whites Memorial Road	Franklinville	Randolph	X
Franklinville Fire Protection Assn. Inc.	1288 NC Hwy 22 South	Ramseur	Randolph	X
Guil-Rand Fire Protective Association, Inc.	10506 South Main Street	Archdale	Randolph	X
Guil-Rand Fire Protective Association, Inc.	8401 Hillsville Road	Sophia	Randolph	X
Guil-Rand Fire Protective Association, Inc.	5711 Surret Drive	Trinity	Randolph	X
Guil-Rand Fire Protective Association, Inc.	7616 Harlow Road	Archdale	Randolph	X
Guil-Rand Fire Protective Association, Inc.	6258 Welborn	Trinity	Randolph	X
Gumtree Fire & Rescue, Inc.	2466 Gumtree Rd.	Winston Salem	Davidson	X
Hasty Fire & Rescue, Inc	1306 Joe Moore Road	Thomasville	Davidson	X
Healing Springs Fire Department, Inc.	18694 NC Highway 8	Denton	Davidson	X
Holly Grove Fire Department, Inc.	2211 East Holly Grove Road	Lexington	Davidson	X
Level Cross Voluntary Fire Department, Inc.	125 Branson Mill Rd	Randleman	Randolph	X
Lexington Fire Department	200 E. Center Street	Lexington	Davidson	X
Lexington Fire Department	285 Hargrave Rd	Lexington	Davidson	X

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Fire Department Name	Station Address	City	County	Flood Hazard Zone
Lexington Fire Department	70 Biesecker Road	Lexington	Davidson	X
Liberty Fire Department	515 W. Swannanoa Ave.	Liberty	Randolph	X
Linwood Rural Fire Department, Inc.	4297 Old Linwood Road	Lexington	Davidson	X
Midway Fire & Rescue Department, Inc.	228 Midway School Road	Lexington	Davidson	X
New Hope Volunteer Fire Department of Randolph County, Inc.	6397 Volunteer Rescue Road	Denton	Randolph	X
North Lexington Triangle Fire Department, Inc.	2976 Greensboro Street Extension	Lexington	Davidson	X
Pilot Fire Department and Community Center of Davidson County, Inc.	4205 Old Lexington Road	Thomasville	Davidson	X
Ramseur Volunteer Fire Department	471 Coleridge Rd	Ramseur	Randolph	X
Randleman Fire Department	105 Hillary Street	Randleman	Randolph	X
Randleman Fire Department	6740 US Hwy 311	Sophia	Randolph	X
Reeds Fire Department, Inc.	186 Highway 150 South	Lexington	Davidson	X
Seagrove Rural Volunteer Fire Department, Inc.	281 East Main Street	Seagrove	Randolph	X
Silver Valley Fire Department, Inc.	11450 S. NC 109	Lexington	Davidson	X
Silver Valley Fire Department, Inc.	1685 Regan Road	Lexington	Davidson	X
South Davidson Fire Department, Inc.	22320 NC 109	Denton	Davidson	X
South Lexington Volunteer Fire Department, Inc.	1877 NC Highway 47	Lexington	Davidson	X
South Lexington Volunteer Fire Department, Inc.	2000 Cotton Grove Road	Lexington	Davidson	X
Southmont Fire Department, Incorporated	11030 NC Highway 8	Lexington	Davidson	X
Southmont Fire Department, Incorporated	2989 Rockercrusher Rd	Southmont	Davidson	X
Staley Volunteer Fire Department, Inc.	410 W. Railroad St	Staley	Randolph	X
Staley Volunteer Fire Department, Inc.	455 Kildee Church Rd	Ramsuer	Randolph	X
Tabernacle Volunteer Fire Department	8136 US Hwy 64 West	Trinity	Randolph	X
Tabernacle Volunteer Fire Department	4444 Slick Rock Road	Asheboro	Randolph	X
Thomasville Fire Department	712 E. Main Street	Thomasville	Davidson	X
Thomasville Fire Department	815 S HWY 109	Thomasville	Davidson	X
Thomasville Fire Department	1107 LEXINGTON AVE	Thomasville	Davidson	X
Thomasville Fire Department	7000 Ball Park Road	Thomasville	Davidson	X
Tyro Rural Fire Department, Incorporated	4645 South NC Highway 150	Lexington	Davidson	X
Ulah Volunteer Fire Protective Association, Inc.	2067 Pisgah Covered Bridge Road	Asheboro	Randolph	X
Ulah Volunteer Fire Protective Association, Inc.	1914 Hopewell Friends Road	Asheboro	Randolph	X
Ulah Volunteer Fire Protective Association, Inc.	5647 Lanier Road	Asheboro	Randolph	X
Wallburg Fire and Rescue, Inc.	121 Georgetown Road	Winston Salem	Davidson	X
Welcome Fire Department, Inc.	287 N. Leonard Road	Lexington	Davidson	X
West Lexington Volunteer Fire and Rescue Department, Inc	1600 West Center Street Extension	Lexington	Davidson	X
Westside Volunteer Fire and Rescue Department, Inc.	225 Westside Circle	Asheboro	Randolph	X

Fire Department Name	Station Address	City	County	Flood Hazard Zone
Westside Volunteer Fire and Rescue Department, Inc.	3141 Plainfield Road	Sophia	Randolph	X
Westside Volunteer Fire and Rescue Department, Inc.	3668 Old NC 49 Highway	Asheboro	Randolph	X

Table G- 7: healthcare centers in the planning area in flood hazard zones

Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Ambulatory Surgery	Asheboro Endoscopy Center	P O Box 4830		Asheboro	27204	Randolph	AS0054
X	Cardiac Rehabilitati	Randolph Hospital Cardiopulmonary Rehabilitation	364 White Oak Street		Asheboro	0	Randolph	CRP0073
X	Family Care	Caregivers of Liberty I	121 E. Raleigh Street		Liberty	27298	Randolph	FCL-076-028
X	Family Care	Caregivers of Liberty II	125 E. Raleigh Street		Liberty	27298	Randolph	FCL-076-029
X	Family Care	Carol Lee Family Care Home	319 E. Raleigh Avenue		Liberty	27298	Randolph	FCL-076-021
X	Family Care	Cedar Ridge Family Care, Inc.	2324 Fairview Farm Road		Asheboro	27203	Randolph	FCL-076-009
X	Family Care	Hudson's Family Care #2	695 Moore Road		Asheboro	27205	Randolph	FCL-076-019
X	Family Care	Hudson's Family Care Home	695 Moore Road		Asheboro	27203	Randolph	FCL-076-002
X	Family Care	Isley Family Care	P O Box 376		Ramseur	27316	Randolph	FCL-076-024
X	Family Care	Rainbow's Inn Family Care	4011 Old Courthouse Road		Sophia	27350	Randolph	FCL-076-004
X	Home Care	Advanced Health Resources	956 South Park Street		Asheboro	27203	Randolph	HC2056
X	Home Care	American HomePatient	5200 Maryland Way, Suite 400		Asheboro	27203	Randolph	HC2284
X	Home Care	CareSouth	535 South Cox Street		Asheboro	27203	Randolph	HC0929
X	Home Care	Carolina Care, LLC	5896 Highway 311		Sophia	27350	Randolph	HC1736
X	Home Care	Center of Living Home Health and Hospice, Inc.	P O Box 9		Asheboro	0	Randolph	HC0397
X	Home Care	Elite Companion Care	P.O. Box 263		High Point	27261	Randolph	HC2243
X	Home Care	Gentiva Health Services	12900 Foster Road		Overland Park	66213	Randolph	HC0128

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Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Home Care	Gentiva Health Services	12900 Foster Road		Overland Park	66213	Randolph	HC0953
X	Home Care	Home Health of Randolph Hospital	P. O. Box 1048		Asheboro	0	Randolph	HC0522
X	Home Care	Regional Consolidated Services	P O Box 1883		Asheboro	0	Randolph	HC0130
X	Home Care	Shipman Family Care, Inc.	2031 Suite E	Martin Lurther King, Jr. Dr	Greensboro	27406	Randolph	HC2254
X	Home Care	Therapeutic Alternatives, Incorporated	P O Box 814		Randleman	27317	Randolph	HC0877
X	Home For The Aged	Brookstone Haven	P. O. Box 814		Randleman	27317	Randolph	HAL-076-001
X	Home For The Aged	Carillon Assisted Living of Asheboro	2925 Zoo Parkway		Asheboro	27203	Randolph	HAL-076-005
X	Home For The Aged	Carolina House of Asheboro	514 Vision Drive		Asheboro	27203	Randolph	HAL-076-007
X	Home For The Aged	Country Manor	P.O. Box 281		Randleman	27317	Randolph	HAL-076-002
X	Home For The Aged	Cross Road Retirement Community	1302 Old Cox Road		Asheboro	27205	Randolph	HAL-076-003
X	Home For The Aged	North Pointe	PO Box 640		Asheboro	27204	Randolph	HAL-076-027
X	Home For The Aged	Triad Telcare Inc. dba Country Club	1324 Coltrane Mill Road		Randleman	27317	Randolph	HAL-076-008
X	Home For The Aged	Tru-Care of Archdale	303 Aldridge Road		Archdale	27263	Randolph	HAL-076-006
X	Hospital	Randolph Hospital, Inc.	P O Box 1048		Asheboro	0	Randolph	H0013
X	Mental Health Homes	A Touch From The Heart	P O Box 1165		Ramseur	27316	Randolph	MHL-076-062
X	Mental Health Homes	Academy Street Outpatient Services	110 West Walker Avenue	Randolph County MH/DD/SAS	Asheboro	27203	Randolph	MHL-076-004
X	Mental Health Homes	Adult Substance Abuse Program, Inc.	11519 North Main Street	Adult Substance Abuse Prog.	Archdale	27263	Randolph	MHL-076-044
X	Mental Health Homes	Alpha House - Randolph County	1006 Sunset Avenue		Asheboro	27203	Randolph	MHL-076-001
X	Mental Health Homes	Archdale House	PO Box 814	Therapeutic Alternatives, I	Randleman	27317	Randolph	MHL-076-059

Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Mental Health Homes	Archdale-Trinity Center	205 Balfour Drive		Archdale	27263	Randolph	MHL-076-017
X	Mental Health Homes	Ashe House	1107-A East Mountain Street	RHA Health Svcs Inc.	Kernersville	27284	Randolph	MHL-076-049
X	Mental Health Homes	AVB Care Center	PO Box 814	Therapeutic Alternative	Randleman	27317	Randolph	MHL-076-012
X	Mental Health Homes	Behavioral Associates of Asheboro	547 North Fayetteville Street		Asheboro	27203	Randolph	MHL-076-053
X	Mental Health Homes	Brookwood	609 B Industrial Ave.		Greensboro	27406	Randolph	MHL-076-022
X	Mental Health Homes	Caviness Care Group Home	5192 Goldstons Road		Ramseur	27316	Randolph	MHL-076-060
X	Mental Health Homes	DWI/Court Program	110 West Walker Avenue		Asheboro	27203	Randolph	MHL-076-015
X	Mental Health Homes	Forest Park House	P.O. Box 814		Randleman	27317	Randolph	MHL-076-011
X	Mental Health Homes	Goldston Substance Abuse Program, Inc.	PO Box 402		Asheboro	0	Randolph	MHL-076-028
X	Mental Health Homes	Hartsell Home	5952 Gilbert Davis Drive	Mark & Teresa Hartsell	Randleman	27317	Randolph	MHL-076-061
X	Mental Health Homes	Heath House	1342 Hwy 42 South		Asheboro	27203	Randolph	MHL-076-050
X	Mental Health Homes	Hope House	1107-A E. Mountain Street		Kernersville	27284	Randolph	MHL-076-046
X	Mental Health Homes	Hopes Care Home	PO Box 1030	Hopes Care Home	Ramseur	27316	Randolph	MHL-076-064
X	Mental Health Homes	Mainstream	933 East Salisbury Street		Asheboro	27203	Randolph	MHL-076-033
X	Mental Health Homes	Mangum House	1006 Sunset Avenue	Randolph Fellowship Homes,	Asheboro	27203	Randolph	MHL-076-007
X	Mental Health Homes	Mountainside	1691 Old Buffalo Ford Rd		Asheboro	27203	Randolph	MHL-076-056
X	Mental Health Homes	North House	PO Box 547		Asheboro	27203	Randolph	MHL-076-008
X	Mental Health Homes	Pineview Group Home	218 Pineview Road		Asheboro	27203	Randolph	MHL-076-026
X	Mental Health Homes	Providence Group Home	P.O. Box 814		Randleman	27317	Randolph	MHL-076-047

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Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Mental Health Homes	Randolph County Day Reporting Center	1520 North Fayetteville Street		Asheboro	27317	Randolph	MHL-076-030
X	Mental Health Homes	Randolph County Jail SAS Program	110 West Walker Avenue	Randolph County Area MH	Asheboro	27203	Randolph	MHL-076-041
X	Mental Health Homes	Randolph County MH Center-Youth Services	110 West Walker Avenue		Asheboro	27203	Randolph	MHL-076-016
X	Mental Health Homes	Randolph Psychosocial Rehabilitation	110 West Walker Avenue	Randolph County MH/DD/SAS	Asheboro	27203	Randolph	MHL-076-051
X	Mental Health Homes	Southview	PO Box 1669	Southview	Garner	27529	Randolph	MHL-076-054
X	Mental Health Homes	Southwest IRT	PO Box 37399	American Human Services, In Community Support Svc LLC	Raleigh	27627	Randolph	MHL-076-039
X	Mental Health Homes	The Anderson Home	400 West Market Street Ste. 310	Community Support Svc. LLC	Greensboro	27420	Randolph	MHL-076-067
X	Mental Health Homes	The Miller Home	400 West Market Street Ste. 310	Community Support Svc. LLC	Greensboro	27420	Randolph	MHL-076-066
X	Mental Health Homes	The Overlook	PO Box 1763		Garner	27529	Randolph	MHL-076-055
X	Mental Health Homes	Timberlea Group Home	5691 Mack Lineberry Road		Climax	27233	Randolph	MHL-076-023
X	Mental Health Homes	Victoria House	PO Box 814	Therapeutic Alternatives, I	Randleman	27317	Randolph	MHL-076-025
AE	Mental Health Homes	Vocational Opportunities in the Community	214 North Elm Street		Asheboro	27203	Randolph	MHL-076-005
X	Mental Health Homes	Walker Center Programs	842 E Pritchard St.		Asheboro	27203	Randolph	MHL-076-009
X	Mental Health Homes	Youth Unlimited - Millis Home	PO Box 485	Youth Unlimited Inc.	High Point	27261	Randolph	MHL-076-065
X	Mental Health Homes	Youth Unlimited Boys Home #1	PO Box 485	Youth Unlimited Inc.	High Point	27261	Randolph	MHL-076-063
X	Nursing Home Facilit	Asheboro Health and Rehabilitation Center	230 East Presnell Street	P O Box 4218	Asheboro	0	Randolph	NH0335

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Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Nursing Home Facilit	Clapp's Convalescent Nursing Home, Inc.	1383 Martin Luther King Jr., Dr.		Asheboro	0	Randolph	NH0020
X	Nursing Home Facilit	SunBridge Care & Rehabilitation for Asheboro	400 Vision Drive		Asheboro	27203	Randolph	NH0448
X	Nursing Home Facilit	The Graybrier Nursing And Retirement Center	116 Lane Drive		Trinity	0	Randolph	NH0489
X	Nursing Home Facilit	Universal Health Care/Ramseur	7166 Jordon Road		Ramseur	27316	Randolph	NH0609
X	Nursing Home Facilit	Westwood Health and Rehabilitation Center	625 Ashland Drive		Archdale	0	Randolph	NH0556
X	Nursing Pool	Gentiva Health Services	Attn: Home Care Administration	12900 Foster Street	Overland Park	66213	Randolph	NP1395
X	Nursing Pool	Uniphil Health Staffing Services, Inc.	3592 Hancock Drive		Greensboro	27410	Randolph	NP1908
X	Cardiac Rehabilitati	Piedmont Cardiac Rehabilitation Program	1010 Mendenhall Rd.		Thomasville	27360	Davidson	CRP0008
X	Family Care	Kateland Family Care Home	2959 Sowers Road		Linwood	27299	Davidson	FCL-029-003
X	Family Care	Westanna Family Care Home	2959 Sowers Road		Linwood	27299	Davidson	FCL-029-001
X	Home Care	Allheart Homecare, Inc.	103 S. Salisbury Street		Lexington	27292	Davidson	HC1612
X	Home Care	Arcadia Health Care Services	1120 Randolph Street,	Suite 34	Thomasville	27360	Davidson	HC2042
X	Home Care	At Home Total Care	4530 Park Road, Suite 420 A		Charlotte	28209	Davidson	HC1390
X	Home Care	CareSouth	P. O. Box 786		Lexington	27293	Davidson	HC1104
X	Home Care	Continuum Home Care of Davidson	706 Piney Wood Road		Thomasville	27360	Davidson	HC1204
X	Home Care	Davidson County DSS	P O Box 788		Lexington	0	Davidson	HC0652
X	Home Care	Davidson County Home Health Agency	P O Box 439		Lexington	0	Davidson	HC0495
X	Home Care	Easter Seals North Carolina - High Point	1004 N. Main St., #103		High Point	27262	Davidson	HC1667
X	Home Care	FirstHealth Home Medical Equipment and Supplies	181-C Westgate Drive		West End	27376	Davidson	HC1141
X	Home Care	Home Sweet Home Inc.	505 Linwood Road		Lexington	27292	Davidson	HC2195
X	Home Care	Liberty Home Care	1007 Lexington Avenue		Thomasville	27360	Davidson	HC0124
X	Home Care	Piedmont Home Care	P. O. Box 1624		Lexington	0	Davidson	HC0521

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Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Home Care	Total Care, Inc.	8411 North Carolina Hwy 109		Winston Salem	27107	Davidson	HC0230
X	Home For The Aged	Brookstone Rest Home and Retirement Center	2968 Old Salisbury Road		Lexington	27295	Davidson	HAL-029-001
X	Home For The Aged	Carolina House of Lexington	161 Young Drive		Lexington	27292	Davidson	HAL-029-006
X	Home For The Aged	Hilltop Living Center	592 Hilltop Drive		Linwood	27299	Davidson	HAL-029-002
X	Home For The Aged	Landmark Estates	2959 Sowers Road		Linwood	27299	Davidson	HAL-029-003
X	Home For The Aged	The Oaks of Thomasville	915 Salem Street		Thomasville	27360	Davidson	HAL-029-004
X	Hospice	Hospice of Davidson County, Inc.	P O Box 1941		Lexington	27293	Davidson	HOS0372
X	Hospital	Lexington Memorial Hospital	P O Box 1817		Lexington	0	Davidson	H0027
X	Hospital	Thomasville Medical Center	P O Box 789		Thomasville	27360	Davidson	H0112
X	Mental Health Homes	Arlington House	One Industrial Drive	Ambleside, Inc.	Snow Hill	28580	Davidson	MHL-029-062
X	Mental Health Homes	Augusta House	670-C Radio Drive		Lexington	27292	Davidson	MHL-029-080
X	Mental Health Homes	Community Assisted Residential Environment 1	2661 Nantucket Drive	Shandra Cromartie	Winston-Salem	27107	Davidson	MHL-029-095
X	Mental Health Homes	Connie and Garland Davis Home	303 Stephanie Drive		Lexington	27295	Davidson	MHL-029-038
X	Mental Health Homes	Converse IRT	P.O. Box 37399		Raleigh	27627	Davidson	MHL-029-076
X	Mental Health Homes	Davidson #1	6 Vance Circle		Lexington	27292	Davidson	MHL-029-026
X	Mental Health Homes	Davidson #2	6 Vance Circle		Lexington	27292	Davidson	MHL-029-027
X	Mental Health Homes	Davidson #3	6 Vance Circle		Lexington	27292	Davidson	MHL-029-028
X	Mental Health Homes	Davidson #4	6 Vance Circle		Lexington	27295	Davidson	MHL-029-029
X	Mental Health Homes	Davidson Alcoholic Care-Men's Division	P.O. Box 1824		Lexington	0	Davidson	MHL-029-006
X	Mental Health Homes	Davidson Alcoholic Care-Women's Facility	P.O. Box 1824		Lexington	27293	Davidson	MHL-029-007
X	Mental Health Homes	Davidson Assessment & Counseling Services	110-C Cotton Grove Road	Davidson Assessment & Couns	Lexington	27292	Davidson	MHL-029-021

Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Mental Health Homes	Davidson Co. Area Program for MH/DD/SAS-Lexington C	220 East First Avenue Extension		Lexington	27292	Davidson	MHL-029-032
X	Mental Health Homes	Davidson Co. Area Program for MH/DD/SAS-Thomasville	205 Old Lexington Road		Thomasville	27360	Davidson	MHL-029-004
X	Mental Health Homes	Davidson House	P.O. Box 37399		Raleigh	27627	Davidson	MHL-029-011
X	Mental Health Homes	Davidson's Day Reporting Center	1404 Piedmont Drive, Box 9		Lexington	27295	Davidson	MHL-029-049
X	Mental Health Homes	Donlin Counseling Services	P.O. Box 2265		North Wilkesboro	28659	Davidson	MHL-029-088
X	Mental Health Homes	Eppley Care Facility	104 Midway Lane		Thomasville	27360	Davidson	MHL-029-093
X	Mental Health Homes	Fairview House	One Industrial Drive	Ambleside, Inc.	Snow Hill	28580	Davidson	MHL-029-054
X	Mental Health Homes	Hargrave Home	2200 Silas Creek Parkway, Ste. 8B		Winston Salem	27103	Davidson	MHL-029-022
X	Mental Health Homes	Hasty House	PO Box 37399	American Human Svcs Inc	Raleigh	27627	Davidson	MHL-029-047
X	Mental Health Homes	Holly Grove	PO Box 44105	Preferred Alternatives, Inc	Fayetteville	28309	Davidson	MHL-029-044
X	Mental Health Homes	Incentive's, Inc.	2 Salem St.	Ste # 208	Thomasville	27360	Davidson	MHL-029-089
X	Mental Health Homes	Lexington House	P.O. Box 37399		Raleigh	27627	Davidson	MHL-029-070
X	Mental Health Homes	McLaurin Home	1219 Thomason St.		Lexington	27292	Davidson	MHL-029-091
X	Mental Health Homes	North Point Home	208 Oakhill Drive		Lexington	27295	Davidson	MHL-029-094
X	Mental Health Homes	Oak IRT	PO Box 37399	American Human Svcs. Inc.	Raleigh	27627	Davidson	MHL-029-092
X	Mental Health Homes	Soul Salvation Counseling Ministry	10 Forsyth Street		Thomasville	27360	Davidson	MHL-029-064
X	Mental Health Homes	Southmont	P.O. Box 1356		Aberdeen	28315	Davidson	MHL-029-068
X	Mental Health Homes	Steve Moore Counseling Center	27 East Center Street		Lexington	27292	Davidson	MHL-029-084
X	Mental Health Homes	The Green Center of Growth and Development	202-B North Main Street	Brenda M. Green	Lexington	27292	Davidson	MHL-029-090

Appendix G – Community Vulnerability

Flood Hazard Zone	Facility Type	Facility Name	Facility Address	Address 2	City	Zip Code	County	License Number
X	Mental Health Homes	The Green Center of Growth and Development	25 West Guilford Street, Ste. 11		Thomasville	27360	Davidson	MHL-029-048
X	Mental Health Homes	The Workshop of Davidson-Group Home #1-Women	PO Box 906	The Workshop of Davidson	Lexington	27293	Davidson	MHL-029-024
X	Mental Health Homes	Thomasville House	P.O. Box 814		Randleman	27317	Davidson	MHL-029-042
X	Mental Health Homes	Thomasville IRT	1430 Hasty School Road		Thomasville	27361	Davidson	MHL-029-087
X	Mental Health Homes	Woodhaven Group Home	PO Box 44105	Preferred Alternatives Inc.	Fayetteville	28309	Davidson	MHL-029-033
X	Mental Health Homes	Yost Home	2200 Silas Creek Pkwy-Ste. 8B		Winston Salem	27103	Davidson	MHL-029-035
X	Nursing Home Facilit	Britthaven of Davidson	706 Pineywood Road		Thomasville	0	Davidson	NH0187
X	Nursing Home Facilit	Centerclair	185 Yountz Road		Lexington	27292	Davidson	NH0252
X	Nursing Home Facilit	Golden Age, Inc.	Cow Palace Road	201 Cow Palace Road	Lexington	27295	Davidson	NH0094
AE	Nursing Home Facilit	Lexington Health Care Center	17 Cornelia Drive		Lexington	0	Davidson	NH0527
X	Nursing Home Facilit	LibertyWood Nursing Center	1028 Blair Street		Thomasville	0	Davidson	NH0292
X	Nursing Home Facilit	Mountain Vista Health Park	P.O. Box 1547		Denton	0	Davidson	NH0259
X	Nursing Home Facilit	Piedmont Center	100 Hedrick Drive		Thomasville	0	Davidson	NH0390
X	Nursing Home Facilit	SunBridge Care & Rehabilitation for Lexington	877 Hill Everhart Rd.		Lexington	27295	Davidson	NH0099

Table G- 8: Law enforcement locations in the flood hazard zones

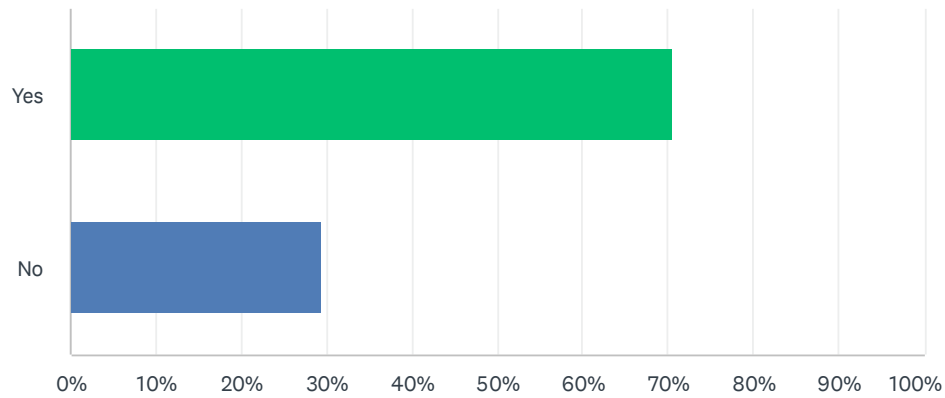
Law Enforcement Location Name	Address	City	Zip Code	County	Flood Hazard Zone
Davidson County Sheriffs Department / Detention Center	110 West Center Street	Lexington	27292	Davidson	X
Randolph County Sheriffs Department Substation	402 Balfour Drive	Archdale	27263	Randolph	X
City Of Liberty Police Department	451 West Swannanoa Avenue	Liberty	27298	Randolph	X
Town Of Ramseur Police Department	741 Liberty Street	Ramseur	27316	Randolph	X
Asheboro Police Department	205 East Academy Street	Asheboro	27203	Randolph	X
City Of Randleman Police Department	100 Hilliary Street	Randleman	27317	Randolph	X
Lexington Police Department	106 North Main Street	Lexington	27292	Davidson	X
Randolph Community College Police Department	629 Industrial Park Avenue	Asheboro	27205	Randolph	X
Davidson County Community College Security	297 Davidson County Community College Road	Thomasville	27360	Davidson	X
Randolph County Sheriffs Department	727 Mcdowell Road	Asheboro	27205	Randolph	X
City Of Thomasville Police Department	7 West Guilford Street	Thomasville	27360	Davidson	X
City Of Archdale Police Department	305 Balfour Drive	Archdale	27263	Randolph	X
Seagrove Police Department - Headquarters	122 East Main Street	Seagrove	27341	Randolph	X
North Carolina State Highway Patrol Troop D District Vi	2754 United States Highway 220 Business Road South	Asheboro	27205	Randolph	X
North Carolina State Highway Patrol Troop E District I	2314 South Main Street	Lexington	27292	Davidson	X
City Of Denton Police Department	101 West Newsom Avenue	Denton	27239	Davidson	X

Table G- 9: EOCs in the planning area

County	Emergency Operation Center Name	Address	City	Flood Hazard Zones
Davidson	Davidson County Emergency Management	301 E Center St	Lexington, NC 27292	X
Randolph	Randolph County Emergency Management	152 N Fayetteville St	Asheboro, NC 27203	X

Q1 Have you ever experienced or been impacted by a natural disaster?

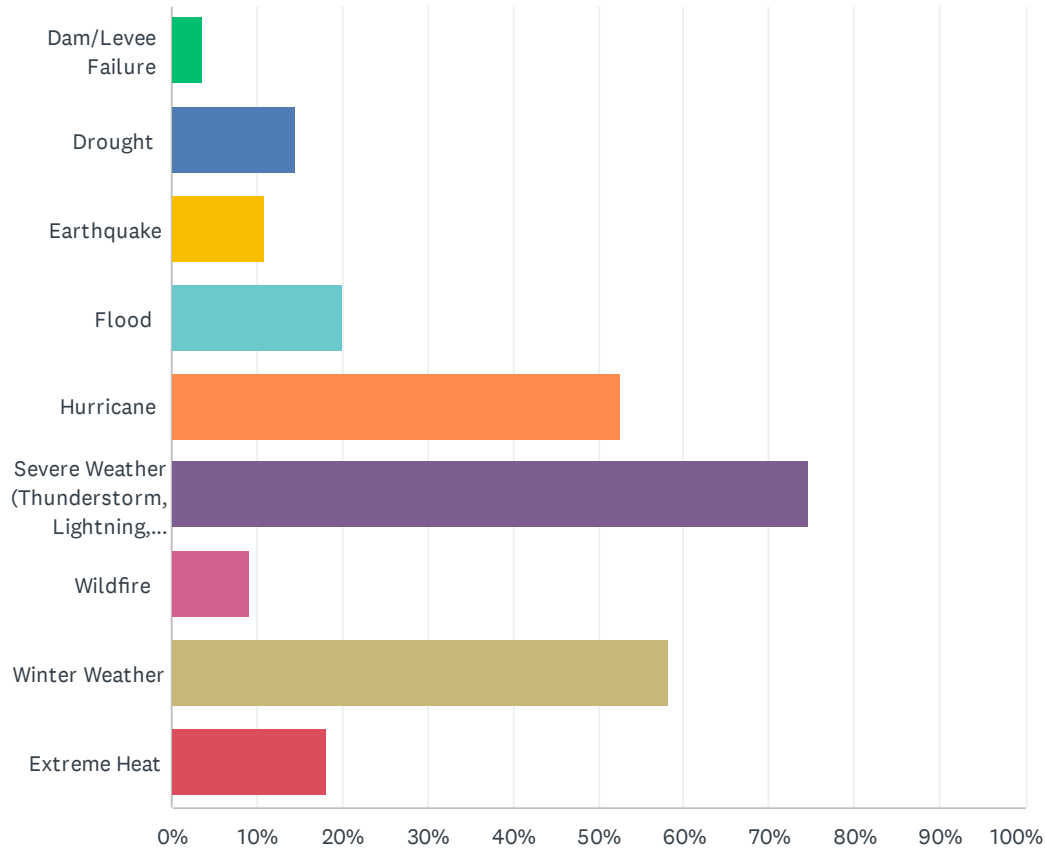
Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	70.67%	53
No	29.33%	22
TOTAL		75

Q2 If yes, Which of these natural hazards have you experienced or been impacted by? (Check all that apply.)

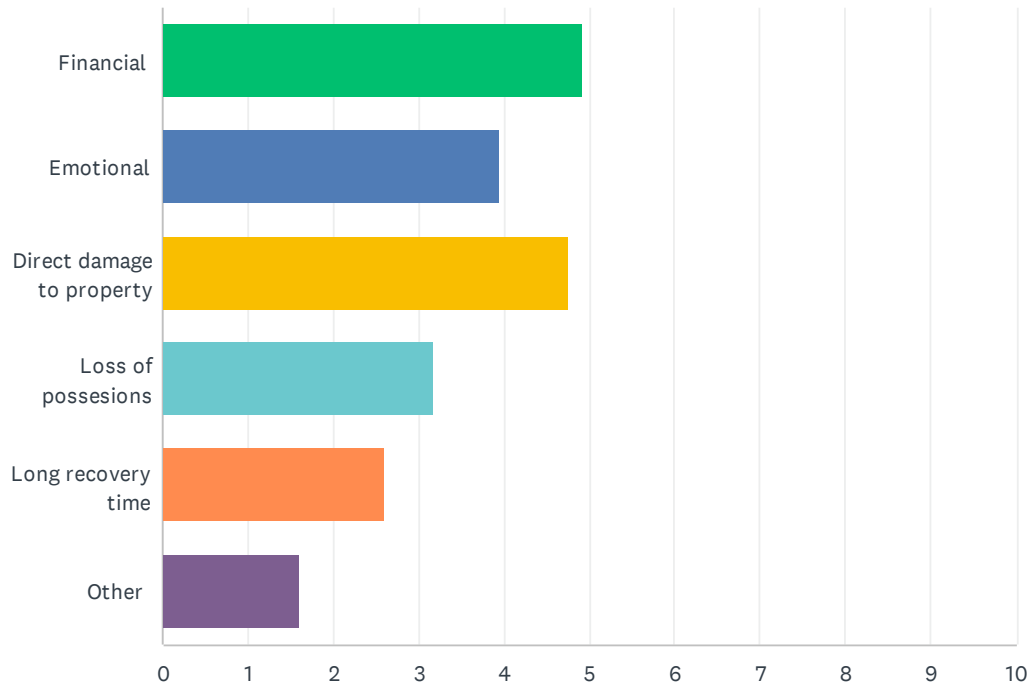
Answered: 55 Skipped: 20



ANSWER CHOICES	RESPONSES	
Dam/Levee Failure	3.64%	2
Drought	14.55%	8
Earthquake	10.91%	6
Flood	20.00%	11
Hurricane	52.73%	29
Severe Weather (Thunderstorm, Lightning, Hail)	74.55%	41
Wildfire	9.09%	5
Winter Weather	58.18%	32
Extreme Heat	18.18%	10
Total Respondents: 55		

Q3 What was the most difficult part for you in recovering from past disasters that you have experienced? (1 being most difficult and 6 being least difficult.)

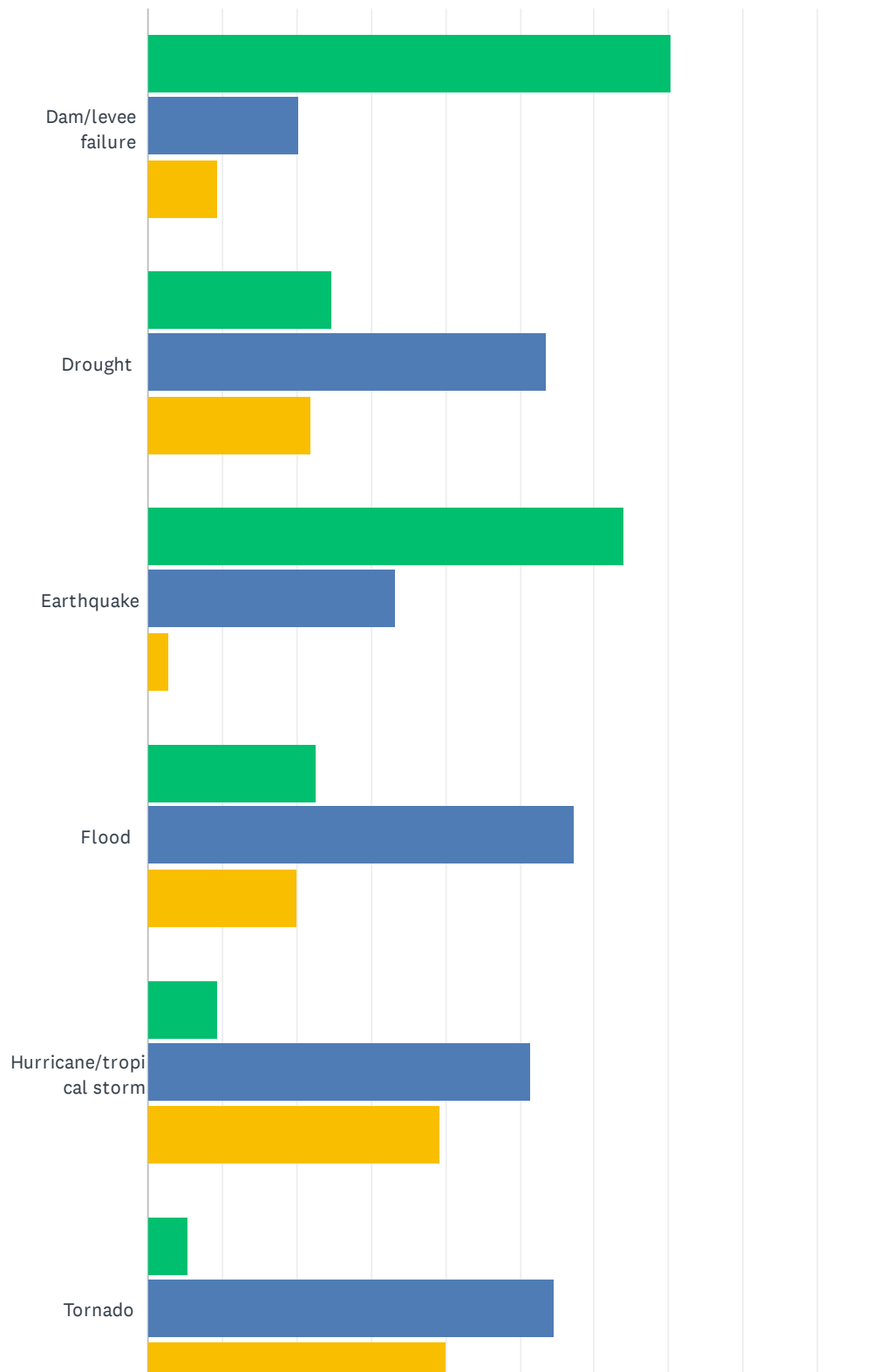
Answered: 64 Skipped: 11

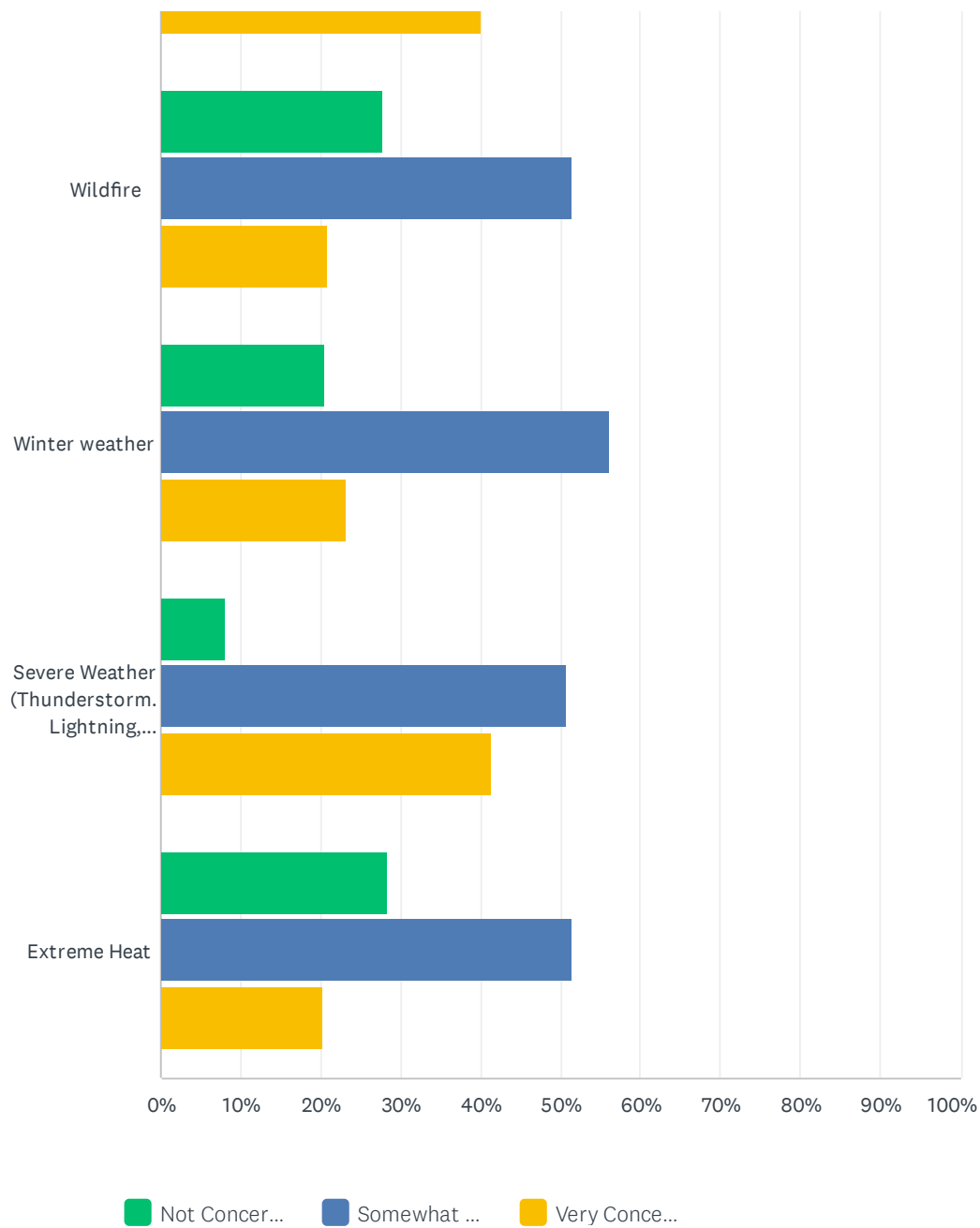


	1	2	3	4	5	6	TOTAL	SCORE
Financial	37.50% 24	28.13% 18	25.00% 16	7.81% 5	1.56% 1	0.00% 0	64	4.92
Emotional	15.63% 10	23.44% 15	20.31% 13	25.00% 16	12.50% 8	3.13% 2	64	3.95
Direct damage to property	32.81% 21	28.13% 18	26.56% 17	7.81% 5	3.13% 2	1.56% 1	64	4.75
Loss of possessions	1.56% 1	9.38% 6	21.88% 14	42.19% 27	21.88% 14	3.13% 2	64	3.17
Long recovery time	4.69% 3	9.38% 6	4.69% 3	17.19% 11	51.56% 33	12.50% 8	64	2.61
Other	7.81% 5	1.56% 1	1.56% 1	0.00% 0	9.38% 6	79.69% 51	64	1.59

Q4 How concerned are you about the possibility of your community being impacted by each of these natural hazards? (Check the corresponding circle for each natural hazard.)

Answered: 75 Skipped: 0



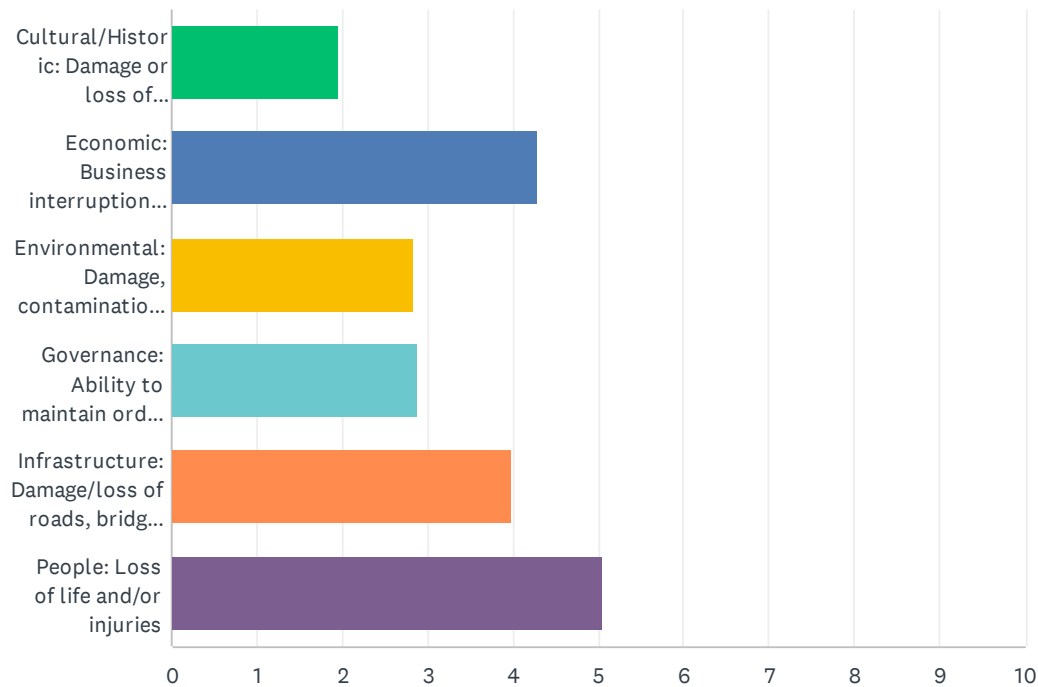


Appendix H: Public Survey

	NOT CONCERNED	SOMEWHAT CONCERNED	VERY CONCERNED	TOTAL	WEIGHTED AVERAGE
Dam/levee failure	70.27% 52	20.27% 15	9.46% 7	74	1.39
Drought	24.66% 18	53.42% 39	21.92% 16	73	1.97
Earthquake	63.89% 46	33.33% 24	2.78% 2	72	1.39
Flood	22.67% 17	57.33% 43	20.00% 15	75	1.97
Hurricane/tropical storm	9.46% 7	51.35% 38	39.19% 29	74	2.30
Tornado	5.33% 4	54.67% 41	40.00% 30	75	2.35
Wildfire	27.78% 20	51.39% 37	20.83% 15	72	1.93
Winter weather	20.55% 15	56.16% 41	23.29% 17	73	2.03
Severe Weather (Thunderstorm. Lightning, Hail)	8.00% 6	50.67% 38	41.33% 31	75	2.33
Extreme Heat	28.38% 21	51.35% 38	20.27% 15	74	1.92

Q5 In your opinion, which of the following categories are most susceptible to natural hazards in your community? (Rank the community assets in order of vulnerability, 1 being most vulnerable and 6 being least vulnerable.) Please note, the list will automatically re-order itself as you make your selections. You can also drag and drop the items on the list to reorder them.

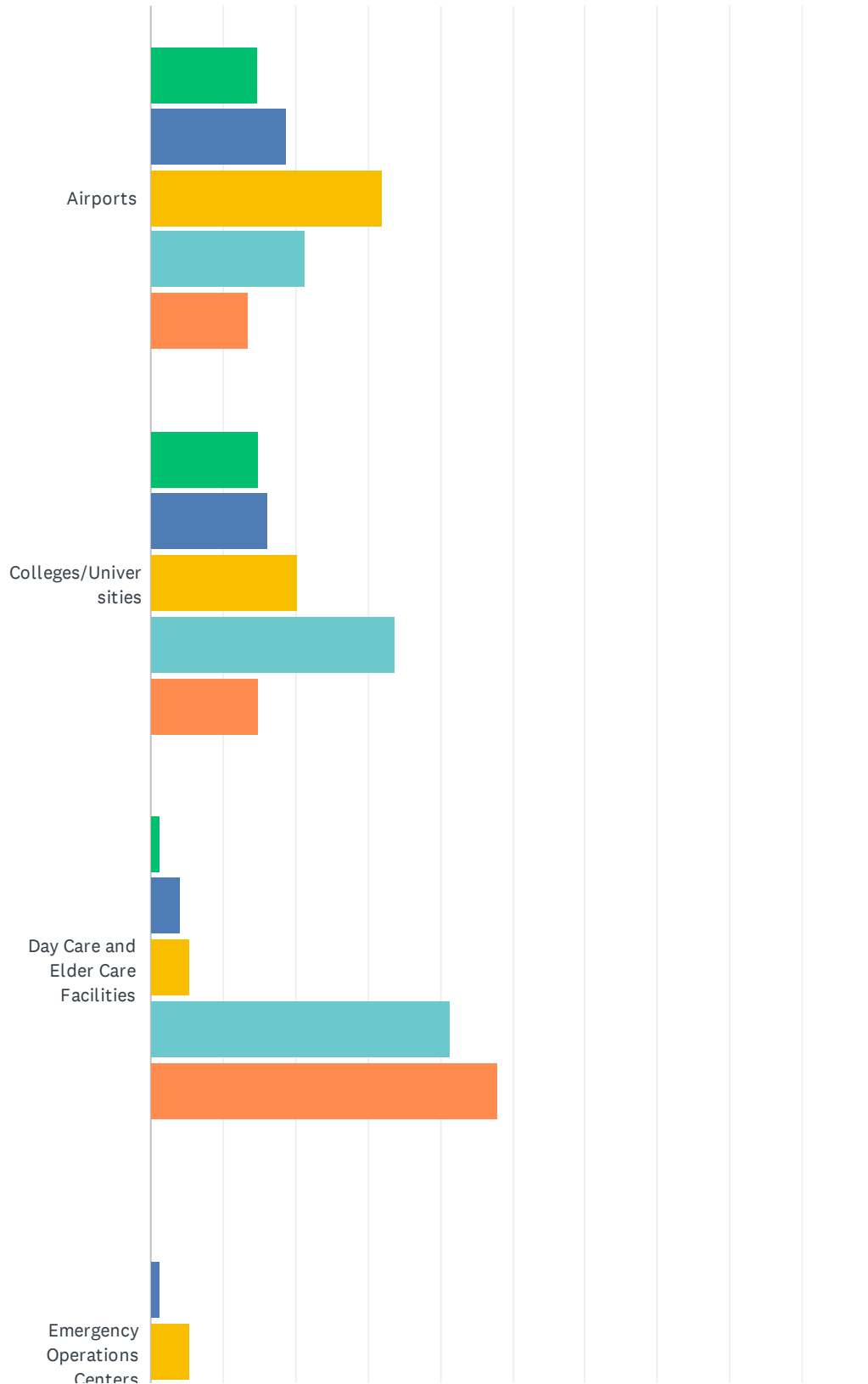
Answered: 75 Skipped: 0

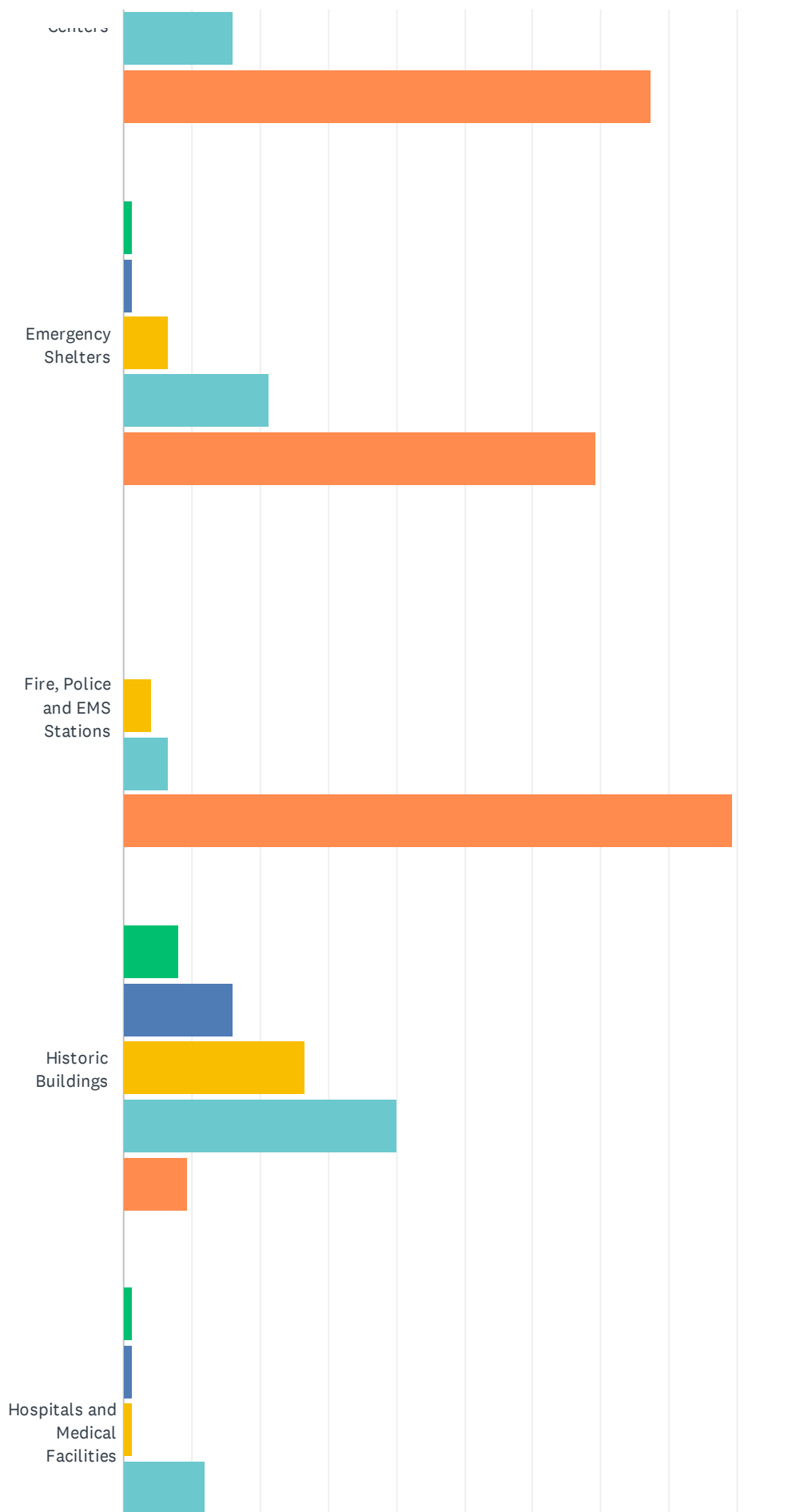


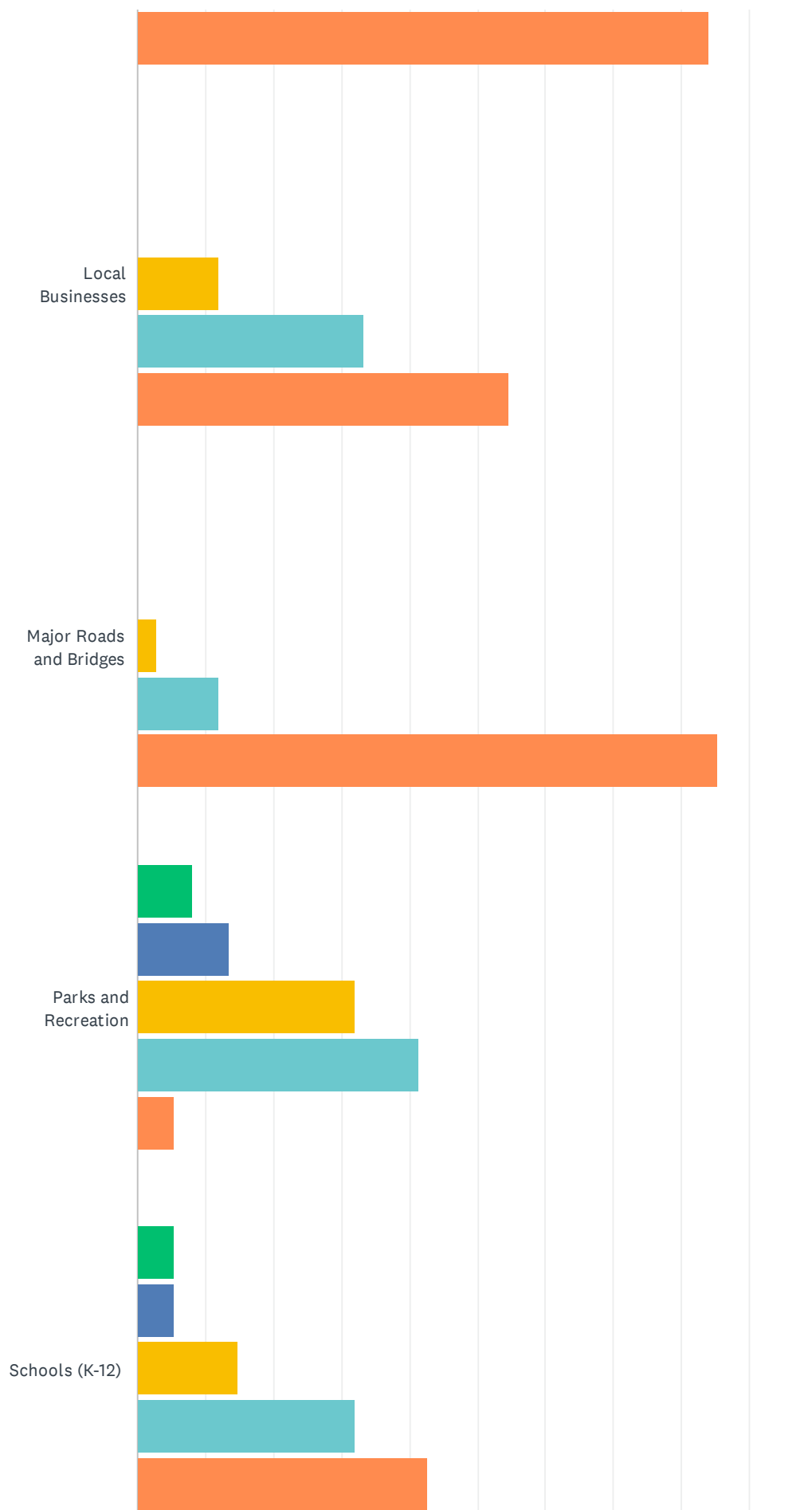
	1	2	3	4	5	6	TOTAL	SCORE
Cultural/Historic: Damage or loss of libraries, museums, historic properties, etc.	4.00% 3	2.67% 2	5.33% 4	12.00% 9	25.33% 19	50.67% 38	75	1.96
Economic: Business interruptions/closures, job losses, etc.	16.00% 12	26.67% 20	30.67% 23	22.67% 17	4.00% 3	0.00% 0	75	4.28
Environmental: Damage, contamination or loss of forests, wetlands, waterways, etc.	5.33% 4	9.33% 7	12.00% 9	24.00% 18	36.00% 27	13.33% 10	75	2.84
Governance: Ability to maintain order and/or provide public amenities and services	2.67% 2	16.00% 12	12.00% 9	26.67% 20	21.33% 16	21.33% 16	75	2.88
Infrastructure: Damage/loss of roads, bridges, utilities, schools, etc.	8.00% 6	36.00% 27	30.67% 23	8.00% 6	6.67% 5	10.67% 8	75	3.99
People: Loss of life and/or injuries	64.00% 48	9.33% 7	9.33% 7	6.67% 5	6.67% 5	4.00% 3	75	5.05

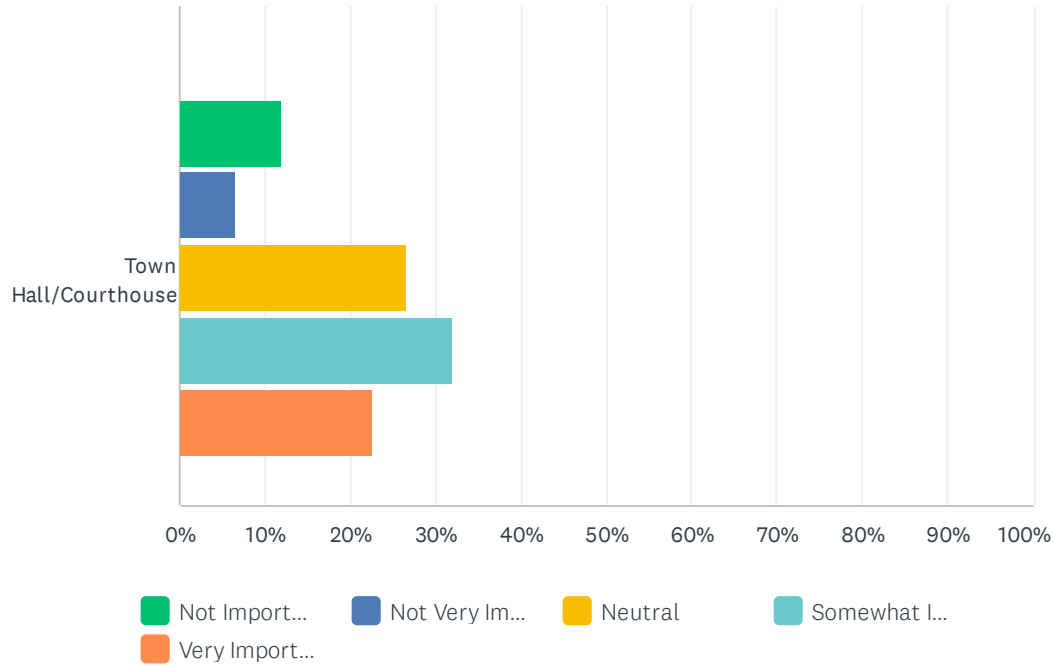
Q6 How important is each of the following specific community assets to you? (Check the appropriate circle for each asset.)

Answered: 75 Skipped: 0





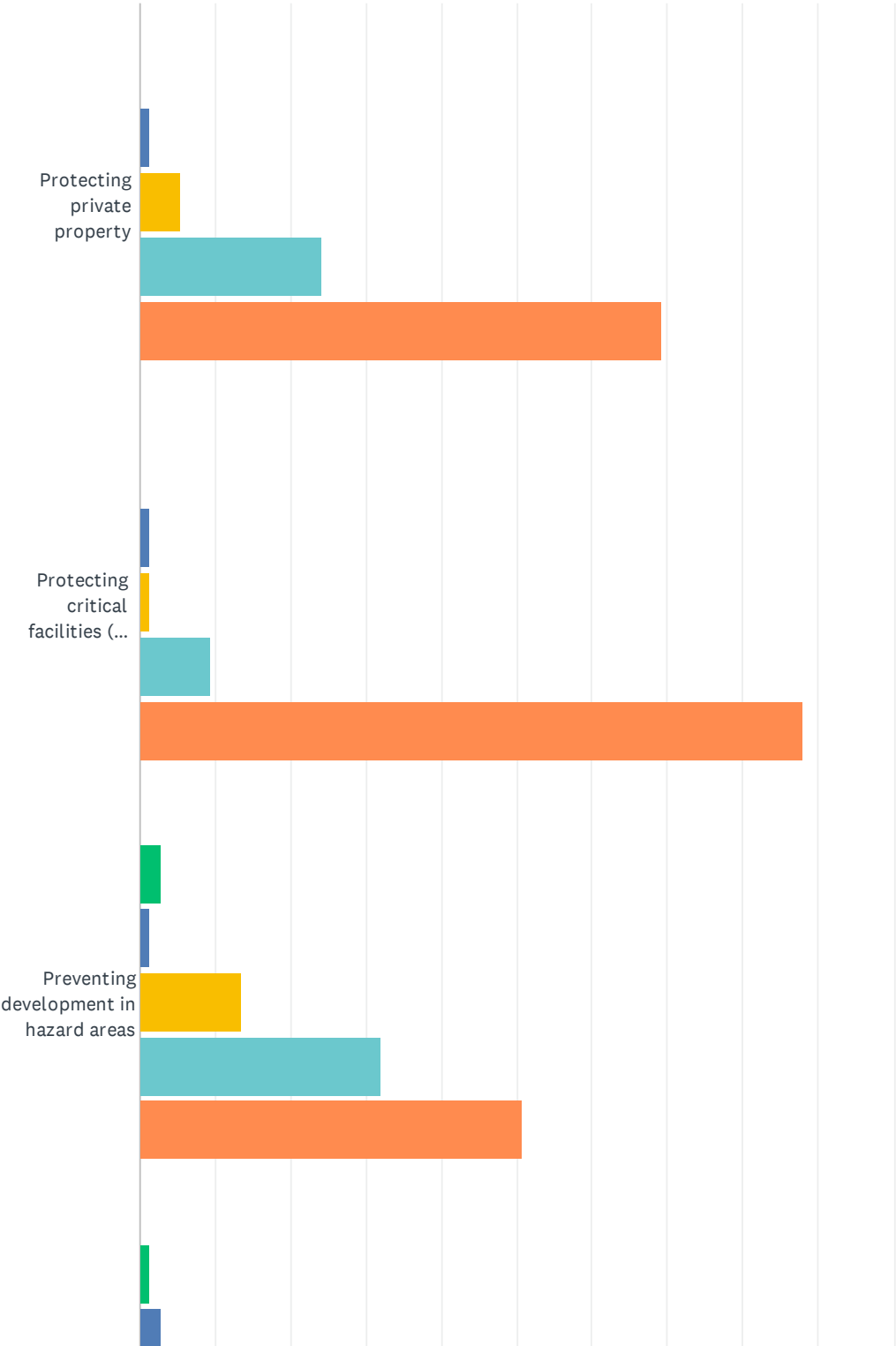


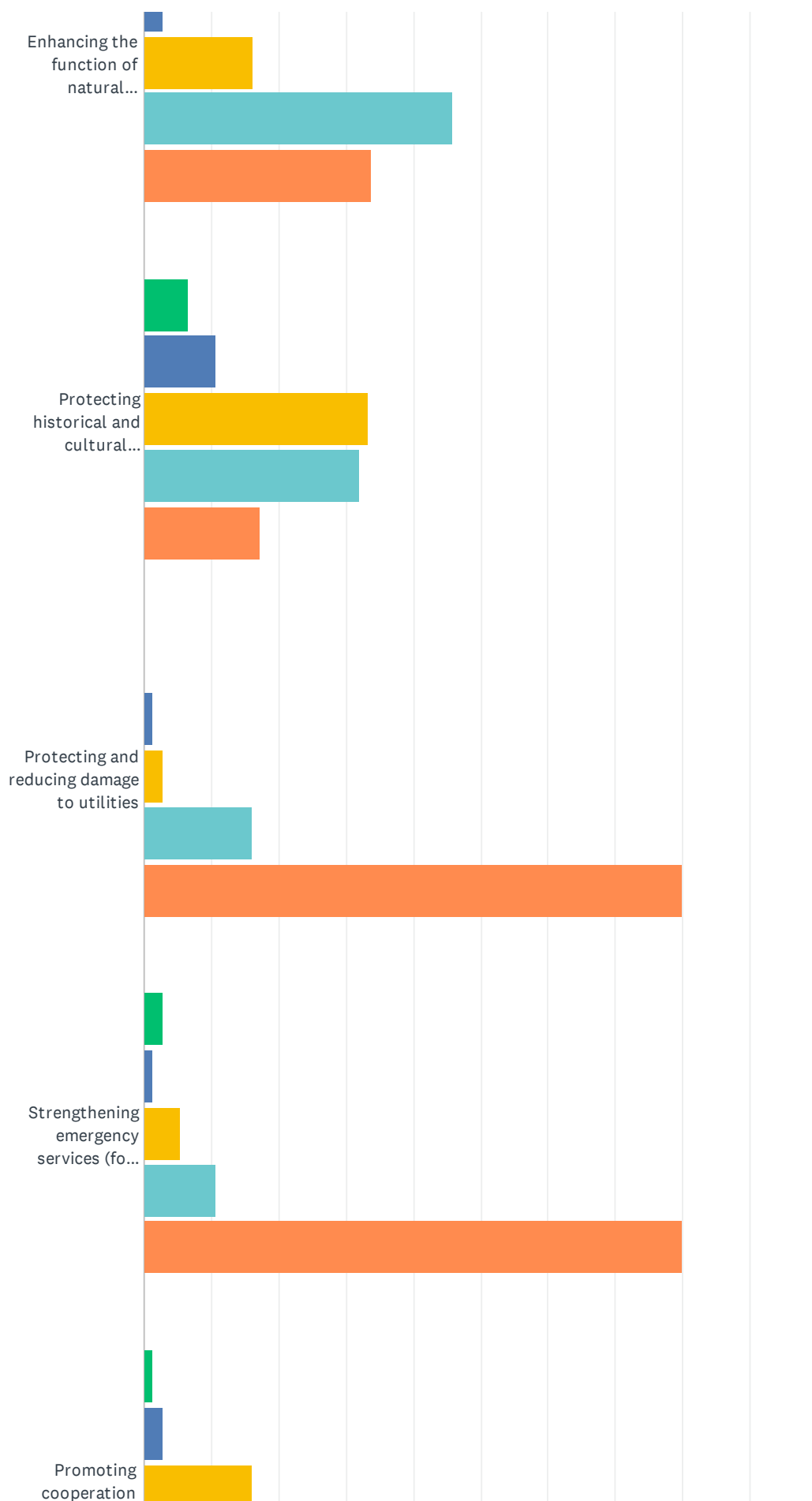


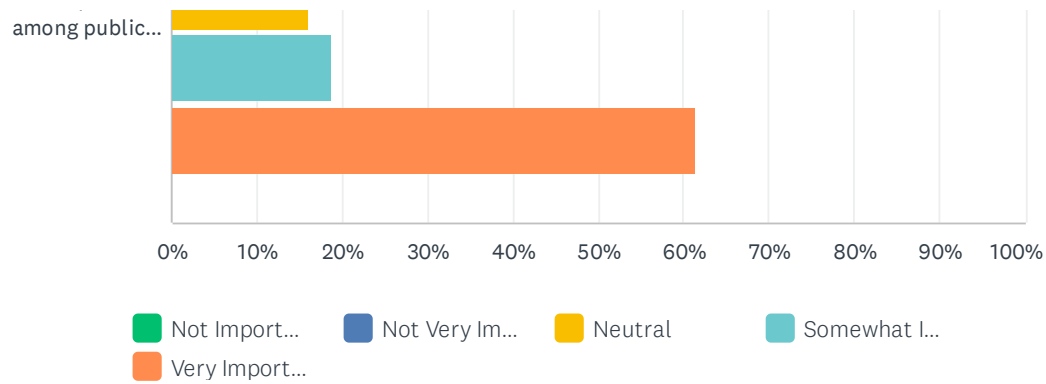
	NOT IMPORTANT	NOT VERY IMPORTANT	NEUTRAL	SOMEWHAT IMPORTANT	VERY IMPORTANT	TOTAL	WEIGHTED AVERAGE
Airports	14.67% 11	18.67% 14	32.00% 24	21.33% 16	13.33% 10	75	3.00
Colleges/Universities	14.86% 11	16.22% 12	20.27% 15	33.78% 25	14.86% 11	74	3.18
Day Care and Elder Care Facilities	1.33% 1	4.00% 3	5.33% 4	41.33% 31	48.00% 36	75	4.31
Emergency Operations Centers	0.00% 0	1.33% 1	5.33% 4	16.00% 12	77.33% 58	75	4.69
Emergency Shelters	1.33% 1	1.33% 1	6.67% 5	21.33% 16	69.33% 52	75	4.56
Fire, Police and EMS Stations	0.00% 0	0.00% 0	4.00% 3	6.67% 5	89.33% 67	75	4.85
Historic Buildings	8.00% 6	16.00% 12	26.67% 20	40.00% 30	9.33% 7	75	3.27
Hospitals and Medical Facilities	1.33% 1	1.33% 1	1.33% 1	12.00% 9	84.00% 63	75	4.76
Local Businesses	0.00% 0	0.00% 0	12.00% 9	33.33% 25	54.67% 41	75	4.43
Major Roads and Bridges	0.00% 0	0.00% 0	2.67% 2	12.00% 9	85.33% 64	75	4.83
Parks and Recreation	8.00% 6	13.33% 10	32.00% 24	41.33% 31	5.33% 4	75	3.23
Schools (K-12)	5.33% 4	5.33% 4	14.67% 11	32.00% 24	42.67% 32	75	4.01
Town Hall/Courthouse	12.00% 9	6.67% 5	26.67% 20	32.00% 24	22.67% 17	75	3.47

Q7 Natural hazards can have a significant impact on a community, but planning for these types of events can help lessen the impacts. Please tell us how important each statement is to you by checking the appropriate circle for each.

Answered: 75 Skipped: 0



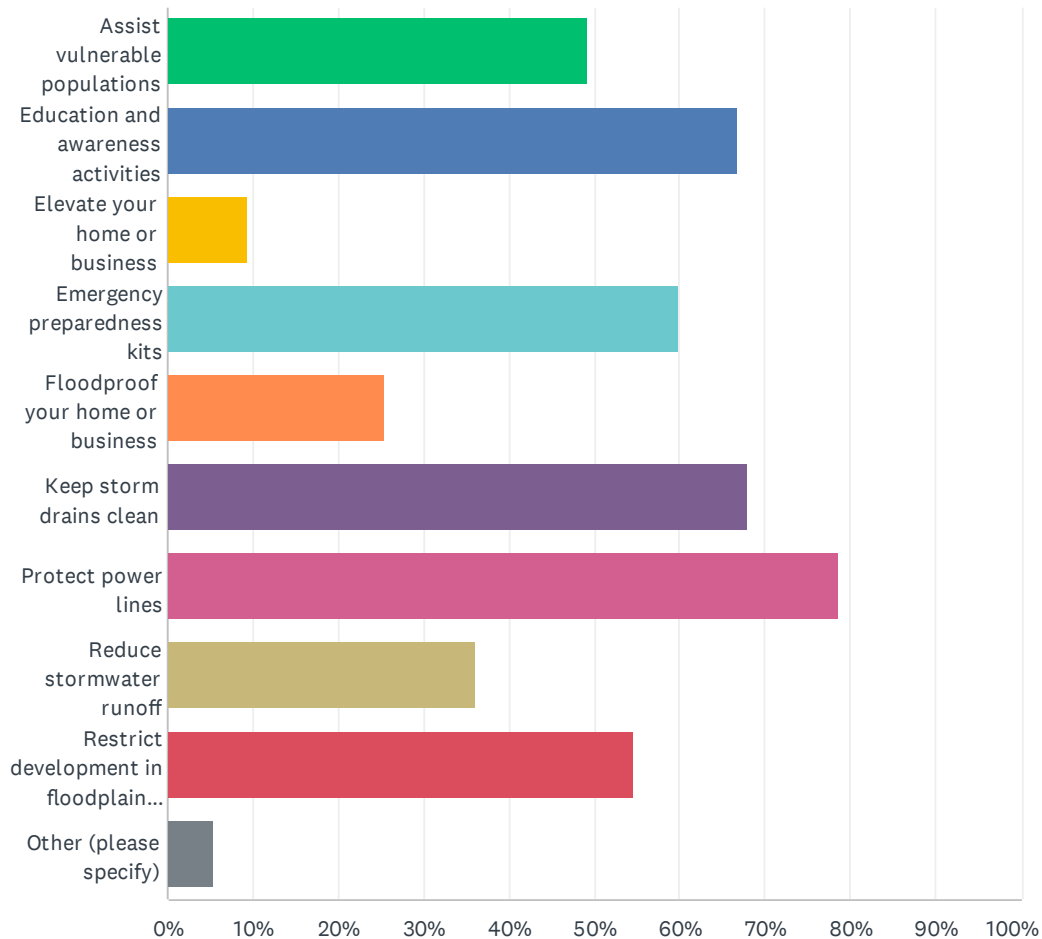




	NOT IMPORTANT	NOT VERY IMPORTANT	NEUTRAL	SOMEWHAT IMPORTANT	VERY IMPORTANT	TOTAL	WEIGHTED AVERAGE
Protecting private property	0.00% 0	1.33% 1	5.33% 4	24.00% 18	69.33% 52	75	4.61
Protecting critical facilities (for example, hospitals, police stations, fire stations, etc.)	0.00% 0	1.33% 1	1.33% 1	9.33% 7	88.00% 66	75	4.84
Preventing development in hazard areas	2.67% 2	1.33% 1	13.33% 10	32.00% 24	50.67% 38	75	4.27
Enhancing the function of natural features (for example, streams, wetlands, etc.)	1.35% 1	2.70% 2	16.22% 12	45.95% 34	33.78% 25	74	4.08
Protecting historical and cultural landmarks	6.67% 5	10.67% 8	33.33% 25	32.00% 24	17.33% 13	75	3.43
Protecting and reducing damage to utilities	0.00% 0	1.33% 1	2.67% 2	16.00% 12	80.00% 60	75	4.75
Strengthening emergency services (for example, police, fire, ambulance)	2.67% 2	1.33% 1	5.33% 4	10.67% 8	80.00% 60	75	4.64
Promoting cooperation among public agencies, citizens, non-profit organizations, and businesses	1.33% 1	2.67% 2	16.00% 12	18.67% 14	61.33% 46	75	4.36

Q8 What are some steps that you and/or your local government could take to reduce or eliminate the risk of future natural hazard damages in your neighborhood?

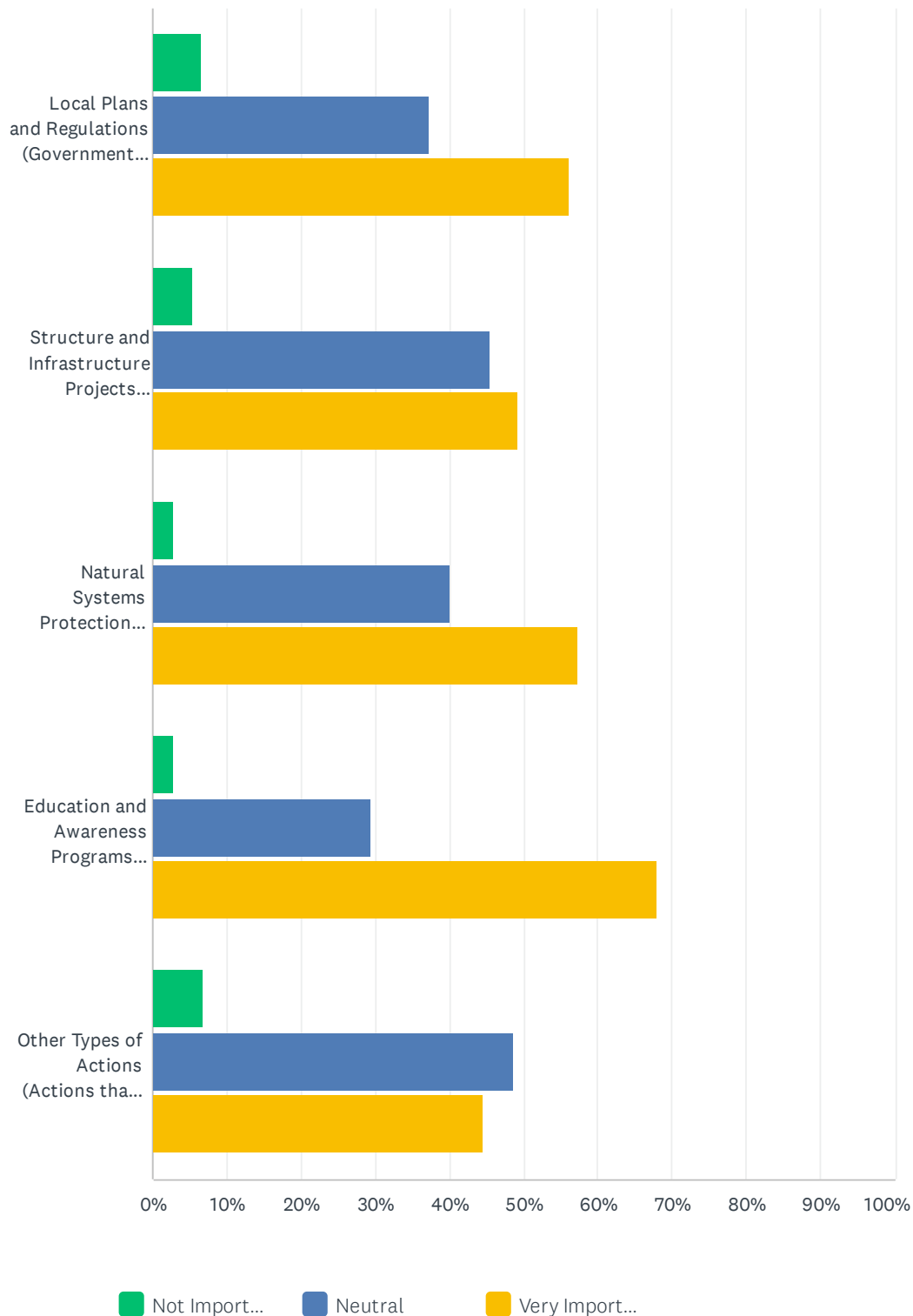
Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
Assist vulnerable populations	49.33%	37
Education and awareness activities	66.67%	50
Elevate your home or business	9.33%	7
Emergency preparedness kits	60.00%	45
Floodproof your home or business	25.33%	19
Keep storm drains clean	68.00%	51
Protect power lines	78.67%	59
Reduce stormwater runoff	36.00%	27
Restrict development in floodplain areas	54.67%	41
Other (please specify)	5.33%	4
Total Respondents: 75		

Q9 A number of community-wide activities can reduce risk from natural hazards. Please tell us how important you think each one is for your community to consider pursuing.

Answered: 75 Skipped: 0

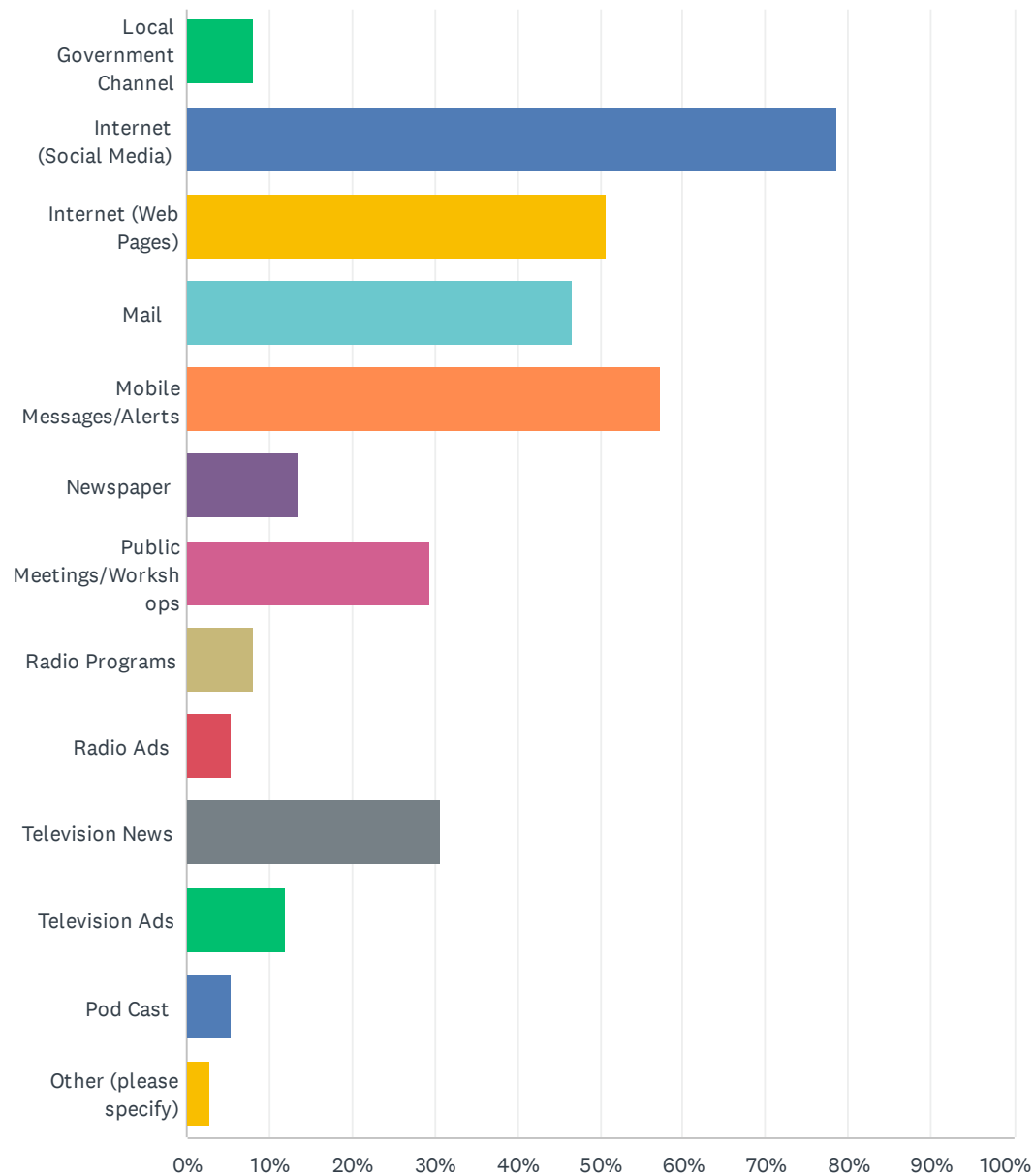


Appendix H: Public Survey

	NOT IMPORTANT	NEUTRAL	VERY IMPORTANT	TOTAL	WEIGHTED AVERAGE
Local Plans and Regulations (Government policies or codes that influence the way land and buildings are developed and built.)	6.67% 5	37.33% 28	56.00% 42	75	2.49
Structure and Infrastructure Projects (Modifying existing structures and infrastructure to protect them from a hazard or remove them from a hazard area.)	5.33% 4	45.33% 34	49.33% 37	75	2.44
Natural Systems Protection (Actions that minimize damage and losses and also preserve or restore the functions of natural systems.)	2.67% 2	40.00% 30	57.33% 43	75	2.55
Education and Awareness Programs (Actions that inform and educate citizens, elected officials and property owners about hazards and potential ways to mitigate them.)	2.67% 2	29.33% 22	68.00% 51	75	2.65
Other Types of Actions (Actions that are related to mitigation in ways that make sense to the local government that do not fall into one of the categories above.)	6.76% 5	48.65% 36	44.59% 33	74	2.38

Q10 What are the most effective ways for you to receive information about how to make your home and neighborhood more resistant to natural hazards?

Answered: 75 Skipped: 0

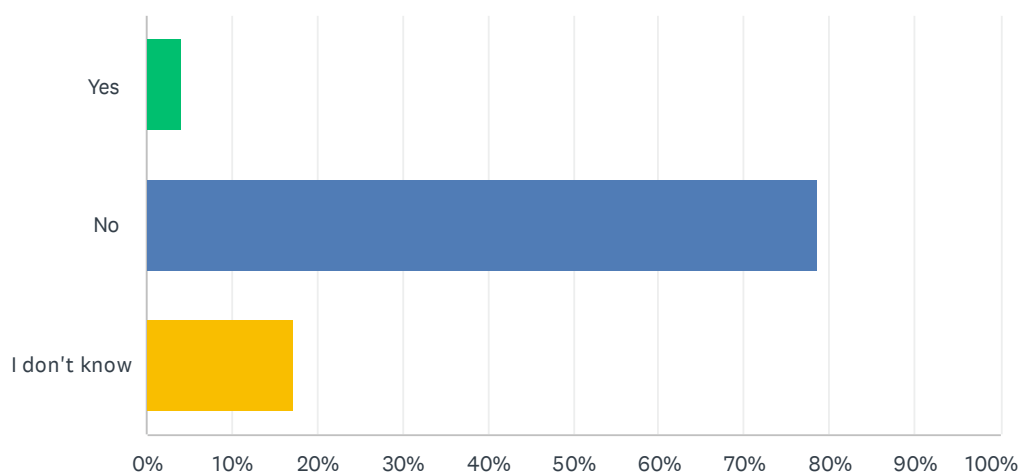


Appendix H: Public Survey

ANSWER CHOICES	RESPONSES	
Local Government Channel	8.00%	6
Internet (Social Media)	78.67%	59
Internet (Web Pages)	50.67%	38
Mail	46.67%	35
Mobile Messages/Alerts	57.33%	43
Newspaper	13.33%	10
Public Meetings/Workshops	29.33%	22
Radio Programs	8.00%	6
Radio Ads	5.33%	4
Television News	30.67%	23
Television Ads	12.00%	9
Pod Cast	5.33%	4
Other (please specify)	2.67%	2
Total Respondents: 75		

Q11 Is your home located in a floodplain?

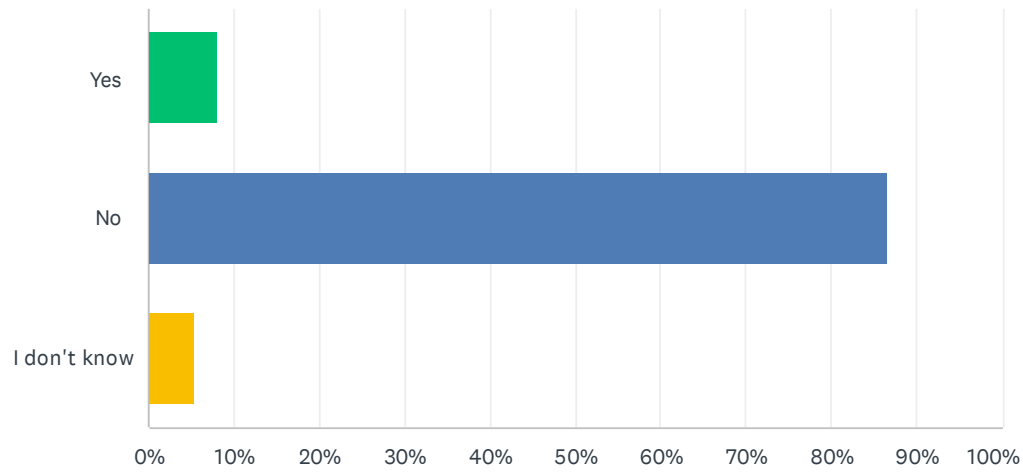
Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	4.00%	3
No	78.67%	59
I don't know	17.33%	13
TOTAL		75

Q12 Do you have flood insurance?

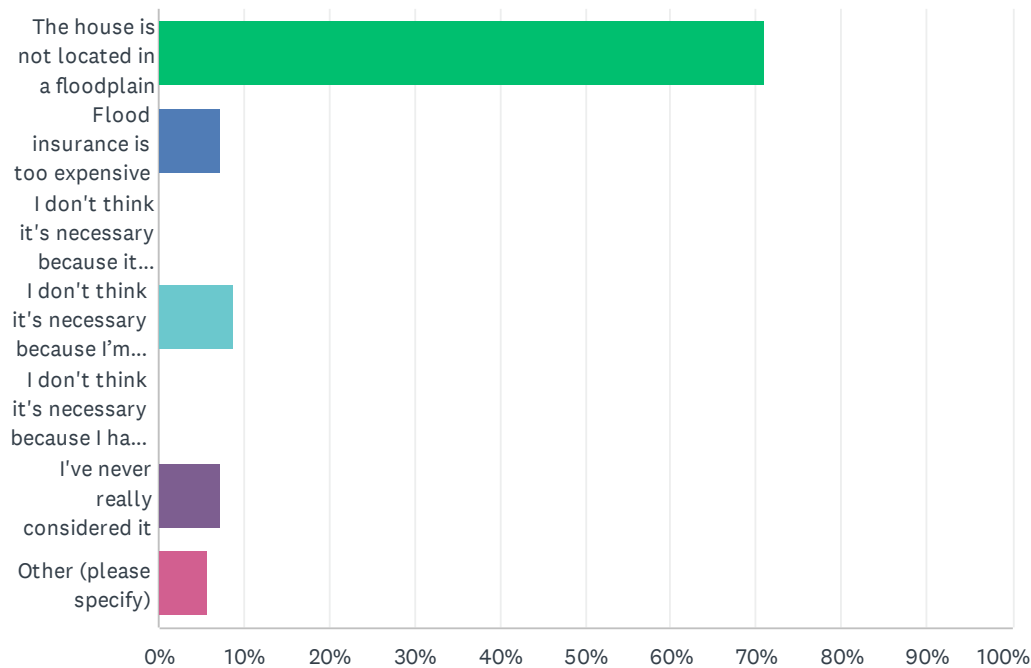
Answered: 75 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	8.00%	6
No	86.67%	65
I don't know	5.33%	4
TOTAL		75

Q13 If “No,” why not?

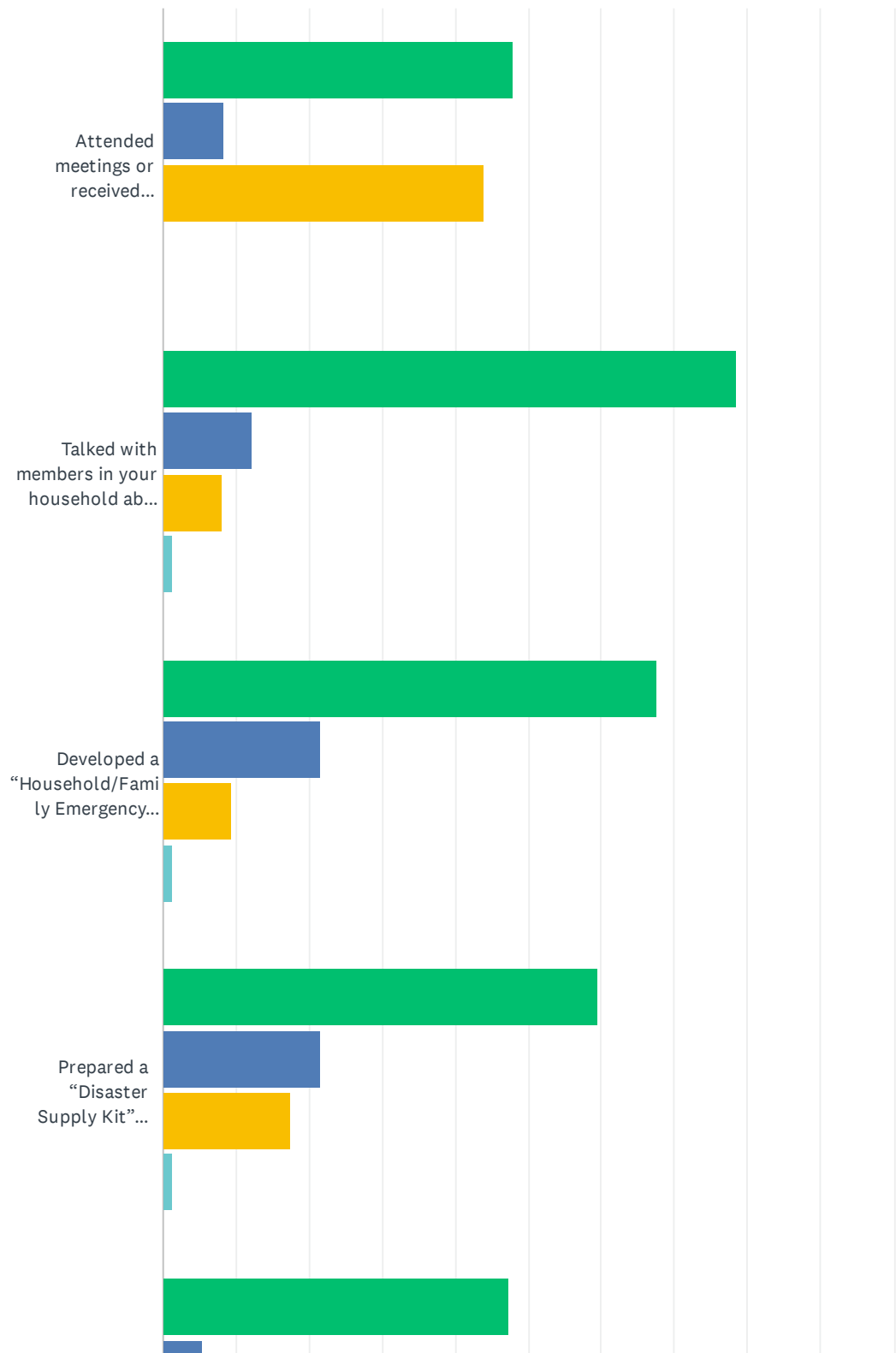
Answered: 69 Skipped: 6

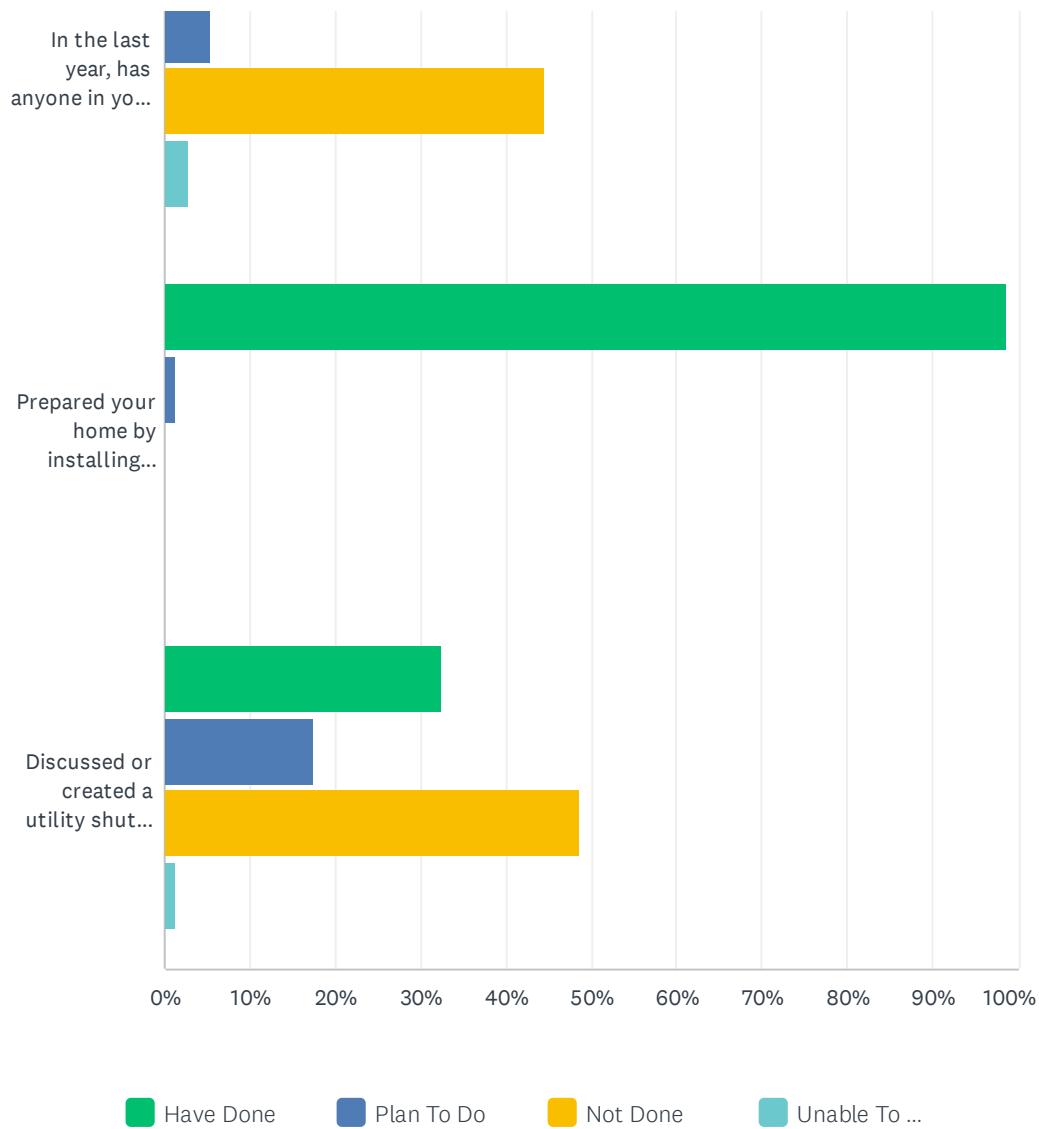


ANSWER CHOICES	RESPONSES	
The house is not located in a floodplain	71.01%	49
Flood insurance is too expensive	7.25%	5
I don't think it's necessary because it never floods	0.00%	0
I don't think it's necessary because I'm elevated or otherwise protected	8.70%	6
I don't think it's necessary because I have homeowners insurance	0.00%	0
I've never really considered it	7.25%	5
Other (please specify)	5.80%	4
TOTAL		69

Q14 In the following list, please check the activities that you have done in your household, plan to do in the near future, have not done, or are unable to do. (Please check one response for each preparedness activity.)

Answered: 74 Skipped: 1

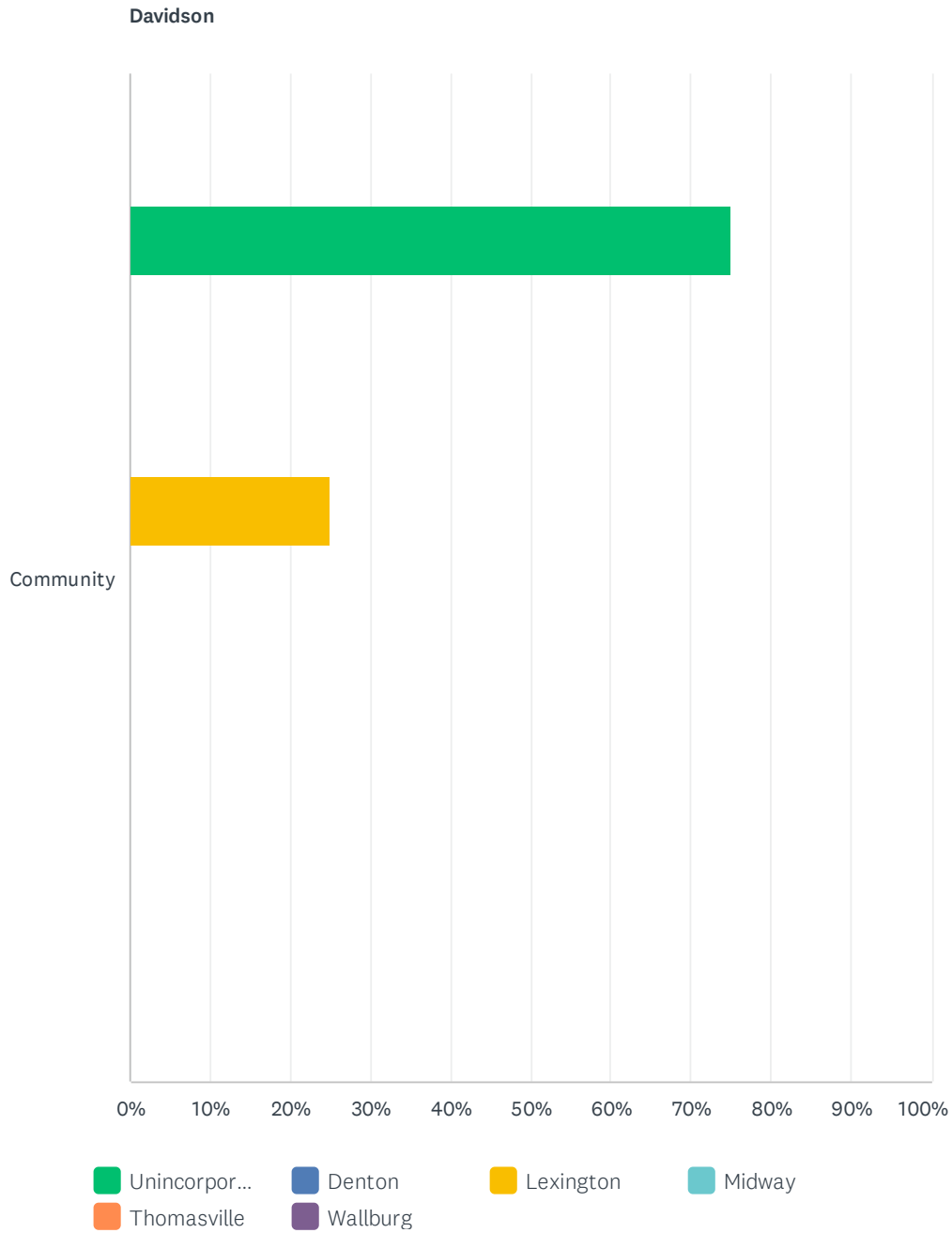




	HAVE DONE	PLAN TO DO	NOT DONE	UNABLE TO DO	TOTAL
Attended meetings or received written information on natural disasters or emergency preparedness?	47.95% 35	8.22% 6	43.84% 32	0.00% 0	73
Talked with members in your household about what to do in case of a natural disaster or emergency?	78.38% 58	12.16% 9	8.11% 6	1.35% 1	74
Developed a "Household/Family Emergency Plan" in order to decide what everyone would do in the event of a disaster?	67.57% 50	21.62% 16	9.46% 7	1.35% 1	74
Prepared a "Disaster Supply Kit" (stored extra food, water, batteries or other emergency supplies)?	59.46% 44	21.62% 16	17.57% 13	1.35% 1	74
In the last year, has anyone in your household been trained in First Aid or Cardio-Pulmonary Resuscitation (CPR)?	47.30% 35	5.41% 4	44.59% 33	2.70% 2	74
Prepared your home by installing smoke detectors on each level of the house?	98.65% 73	1.35% 1	0.00% 0	0.00% 0	74
Discussed or created a utility shutoff procedure in the event of a natural disaster?	32.43% 24	17.57% 13	48.65% 36	1.35% 1	74

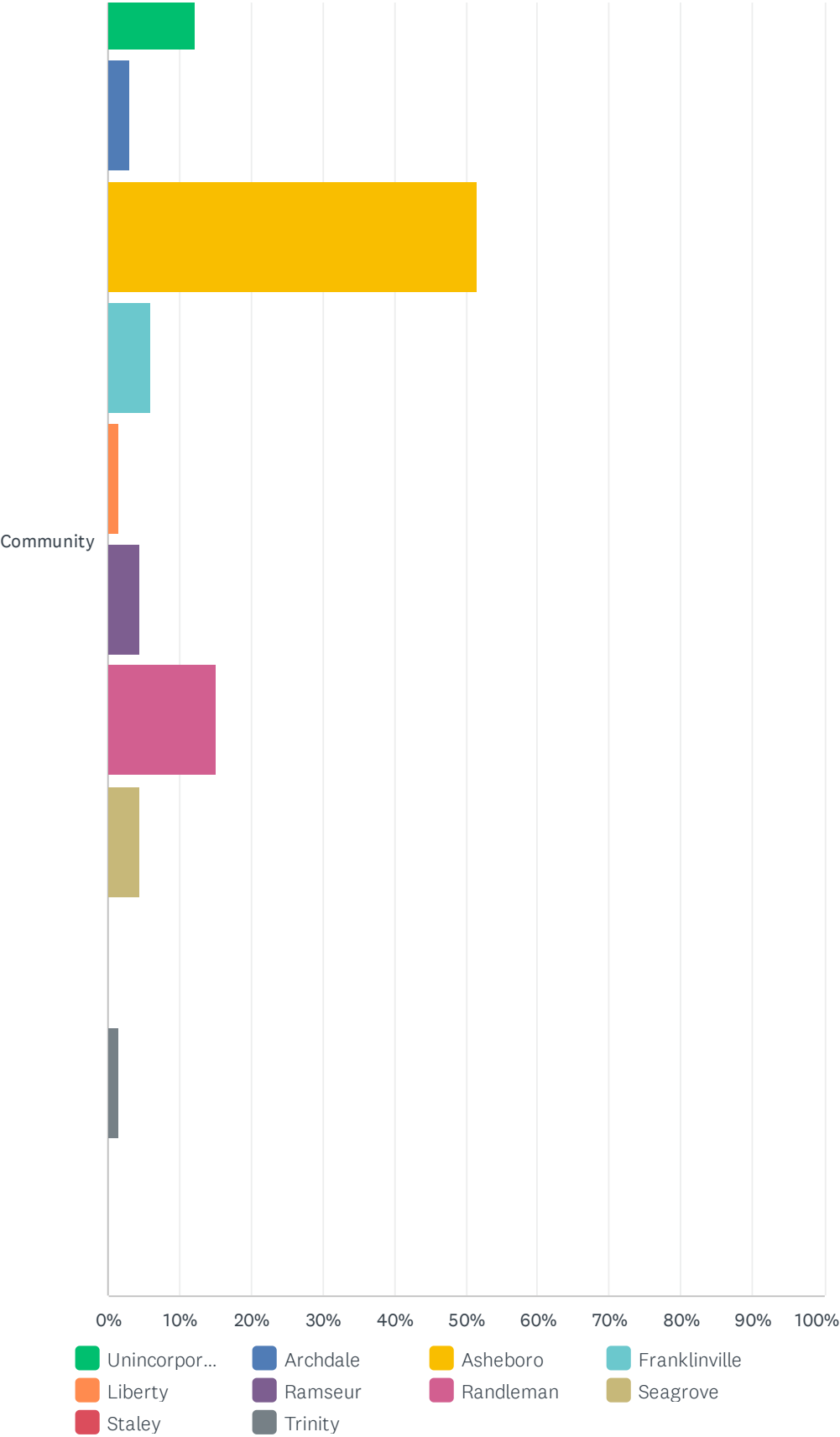
Q15 In which community do you live?

Answered: 69 Skipped: 6



Randolph



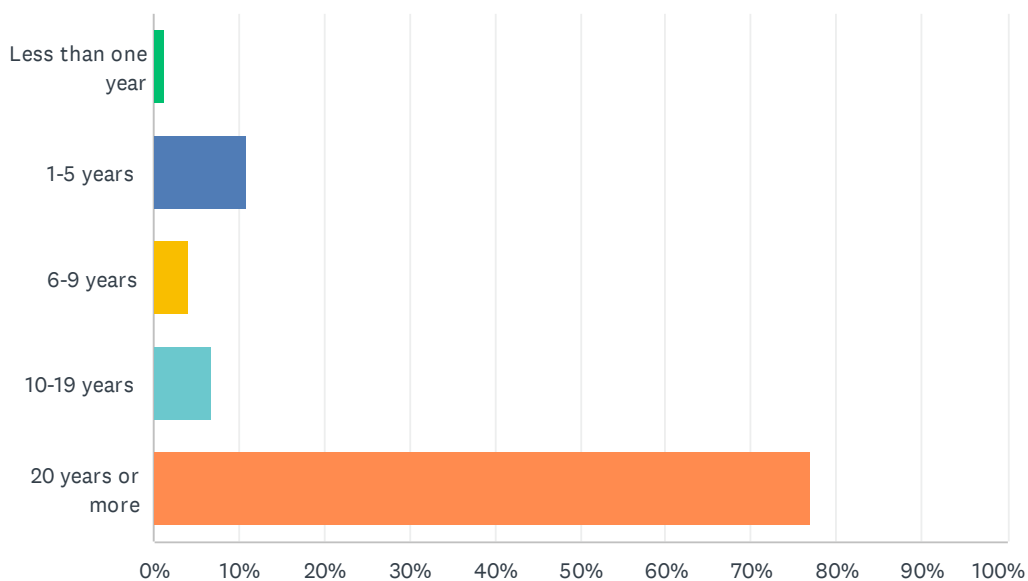


Appendix H: Public Survey

Davidson							
	UNINCORPORATED	DENTON	LEXINGTON	MIDWAY	THOMASVILLE	WALLBURG	TOTAL
Community	75.00%	0.00%	25.00%	0.00%	0.00%	0.00%	
	6	0	2	0	0	0	8
Randolph							
	UNINCORPORATED	ARCHDALE	ASHEBORO	FRANKLINVILLE	LIBERTY	RAMSEUR	RANDLEMAN
Community	12.12%	3.03%	51.52%	6.06%	1.52%	4.55%	15.15%
	8	2	34	4	1	3	10

Q16 How long have you lived in the Davidson-Randolph region?

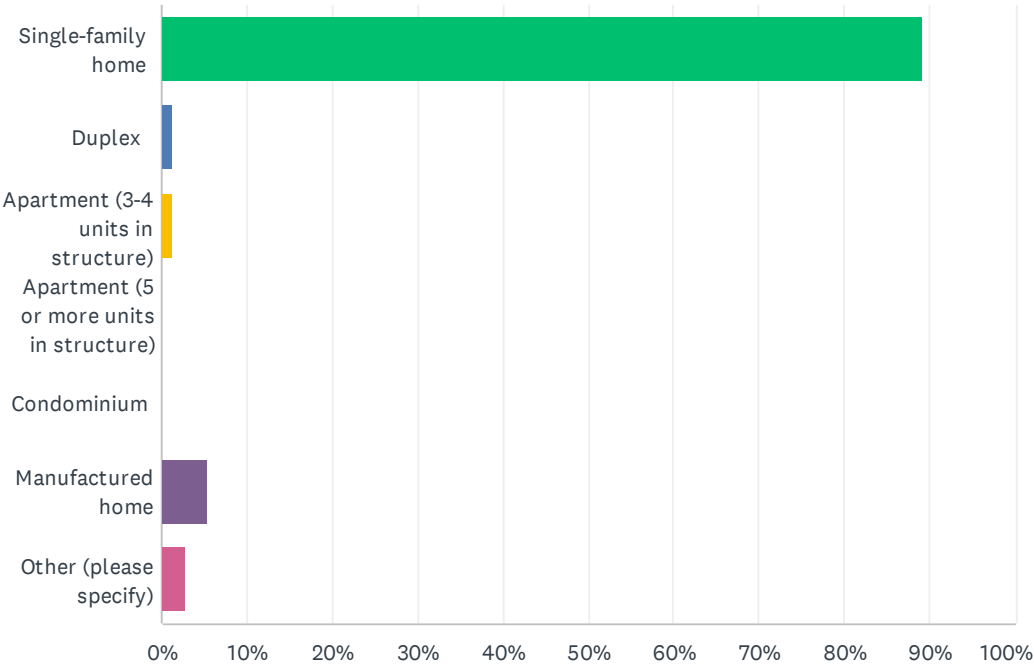
Answered: 74 Skipped: 1



ANSWER CHOICES	RESPONSES	
Less than one year	1.35%	1
1-5 years	10.81%	8
6-9 years	4.05%	3
10-19 years	6.76%	5
20 years or more	77.03%	57
TOTAL		74

Q17 What type of building do you live in?

Answered: 74 Skipped: 1



ANSWER CHOICES	RESPONSES	
Single-family home	89.19%	66
Duplex	1.35%	1
Apartment (3-4 units in structure)	1.35%	1
Apartment (5 or more units in structure)	0.00%	0
Condominium	0.00%	0
Manufactured home	5.41%	4
Other (please specify)	2.70%	2
TOTAL		74

Davidson-Randolph Social Equity Questionnaire

1. **County/Jurisdiction:** What county or jurisdiction are you representing today?

ID ↑	Name	Responses
1	anonymous	Town of Liberty
2	anonymous	Davidson
3	anonymous	Davidson county
4	anonymous	Town of Denton
5	anonymous	City of Asheboro
6	anonymous	Randolph County

2. **Identifying Communities and Populations Lacking Resources:** Which neighborhoods or groups of people do not have enough resources to prepare for disasters and become stronger against them?

ID ↑	Name	Responses
1	anonymous	Western neighborhoods of Liberty where we have low income families
2	anonymous	Vulnerable population
3	anonymous	Lower income
4	anonymous	Yes
5	anonymous	Information/communication to Spanish speaking residents could be improved. Direct outreach to low income census blocks would make sense.
6	anonymous	low income and elderly rural communities throughout our county

3. **Identifying Gaps:** What resources are missing that prevent these communities from getting the help that they need to plan for and reduce risks from natural, weather-related disasters?

ID ↑	Name	Responses
1	anonymous	Funds
2	anonymous	people/man power/funding
3	anonymous	Public information
4	anonymous	Not knowing what help is available.
5	anonymous	Probably information in a way to ensure an understanding of hazard risk
6	anonymous	public education

4. **Disproportionate Benefit to Wealthy Areas:** Do wealthier communities or neighborhoods get more support than under-resourced ones when it comes to preparing for disasters?

● Yes 1
● No 5



5. Barriers to Preparedness: What barriers make it harder for underserved communities to stay safe during disasters?

ID ↑	Name	Responses
1	anonymous	Unable to purchase extra supplies
2	anonymous	communication, outreach, building trust
3	anonymous	Access to personal resources
4	anonymous	Community involvement to reach all age groups.
5	anonymous	Not certain
6	anonymous	transportation, funds for preparedness items.

6. Non-traditional Resources: What other things (i.e., resources or partnerships) besides money and the usual supports, can we use to make communities more prepared against natural disasters?

ID ↑	Name	Responses
1	anonymous	Marketing Resources to reach all the citizens
2	anonymous	communication, outreach, building trust
3	anonymous	Public outreach
4	anonymous	Public education
5	anonymous	Continuous and consistent messaging about hazard risks
6	anonymous	the ability to start very local (municipality) and peer to peer education if necessary

7. Specific Concerns: What issues do we need to consider when planning for disasters, preparing for support, and distributing resources in our area?

ID ↑	Name	Responses
1	anonymous	Best way to push out information about resources available
2	anonymous	equity
3	anonymous	Public outreach
4	anonymous	Need unique ways to get the response from the community. The more that are involved, the more the info will spread through the town
5	anonymous	A clear hazard communications plan and strategy is essential
6	anonymous	specific communication - municipalities know what EM expects from them and what they can expect from EM.

8. Engagement Strategies: How can we get everyone in the community involved in disaster planning?

ID ↑	Name	Responses
1	anonymous	make it worth their time and show the importance of disaster planning
2	anonymous	outreach, community involvement
3	anonymous	Communication and public outreach
4	anonymous	We have quarterly newsletters, reach out to churches, and having public interest meetings.
5	anonymous	Use all available communication tools. Social media, press releases, traditional print and non print media, radio/tv spots.
6	anonymous	Partner with stakeholders (business, NGOs, faith based) to reach out to the entire community